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# BULLETIN

RESEARCH AND DEVELOPMENT  
IN THE REPUBLIC OF SERBIA, 2015

**615**

# Research and development in the Republic of Serbia, 2015

Belgrade, 2016

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Published by: Statistical Office of the Republic of Serbia, Belgrade, 5 Milana Rakića St

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## Preface

The Statistical Office of the Republic of Serbia publishes the results of the regular annual statistical survey on research and development organizations entitled "Annual Report on Research and Development – Form IR". The results refer to 2015, the territory of the Republic of Serbia, Srbija – sever, Srbija – jug and to the regions: Beogradski region, Region Vojvodine, Region Sumadije and Zapadne Srbije, and Region Juzne i Istocne Srbije.

R&D organizations and their activity are classified according to the type, size class and scientific field. Employees in the R&D activity are shown by occupation, scientific qualifications, type of employment and working hours, as well as by full-time equivalent (FTE). The data on research personnel, by age, have been published annually since 2007. In tables on research projects, finalised and non-finalised works are shown by type, ordering party and scientific field, while published works, inventions and patents are presented by publishing destination, i.e. sale, and by scientific field. The bulletin contains a tabulated presentation of funds for R&D work by origin, costs by source and use, as well as a presentation of investments in the R&D activity

Statistical data in this bulletin are available on the level of scientific fields in which R&D organizations are classified, i.e. on the level of the scientific field of R&D works or inventions. All the data are available on the level of scientific field, both for R&D organizations and R&D projects.

The survey data have been published since 1965 in statistical bulletins of the Federal Statistical Office, and since 2002 by the Statistical Office of the Republic of Serbia.

Belgrade, 2016

the Director  
Miladin Kovačević, PhD



## Table of content

Preface .....	3
Methodological explanations .....	7
1.1. R&D organization by sectors and fields of science, 2015 .....	14
2.1. Employees engaged in R&D activities, by sectors, fields of science and sex, 2015 (head count) .....	15
2.2. Employees engaged in R&D activities by sectors, fields of sciences and sex, expressed in full-time equivalent, 2015 .....	18
3.1. Full-time and part-time researchers, by academic titles, sectors, field of science and sex, 2015 (head count) .....	21
3.2. Full-time and part-time researchers, by academic titles, sectors, fields of science and sex, expressed in full-time equivalent, 2015 .....	27
4.1. Full-time and part-time researchers and assistant researchers, by age and sex, 2015 .....	33
5.1. Full-time and part-time assistant researchers, by academic titles, sectors, fields of science and sex, 2015 (head count) .....	38
5.2. Full-time and part-time assistant researchers, by academic titles, sectors, fields of science in full-time equivalent, 2015 .....	40
6.1. Engaged on the basis of work on contract and author contract (head count), 2015 .....	42
6.2. Engaged on the basis of work on contract and author contract, expressed in full-time equivalent, 2015 .....	44
7.1. Research works (projects and studies), by sectors and territories, 2015 .....	46
7.2. Research works (projects and studies), by sectors and fields of science, 2015 .....	47
8.1. R&D works, by ordering parties, fields of science and type of research, 2015 .....	50
9.1. Published R&D works, inventions and patents, by fields of science, 2015 .....	56
10.1. Inventions and patent by R&D intensity, 2015 .....	58
11.1. Gross domestic expenditure for R&D, by sectors and fields of science, 2015 .....	59
12.1. Sources of funds spent on R&D activities, 2015 .....	62
12.2. Sources of funds for R&D, 2015 .....	65
13.1. Gross domestic expenditure on R&D by groupings of activities, 2015 .....	68
Annexes .....	77



## METHODOLOGICAL EXPLANATIONS

### Legal basis

The survey "Annual Report on Research and Development" is carried out on the basis of the Law on Official Statistics ("Official Journal of the RS", number 104/2009).

### Methodological basis

#### Objective and scope of the statistical survey

The R&D activity, as an activity of particular importance for the Republic of Serbia, is an integral part of the international, scientific, education and cultural world. R&D is an activity of particular importance for the complete development of the Republic of Serbia based on knowledge, and combined with tertiary education is the principle factor and catalyst of economic and social growth.

R&D is a systematic creative work undertaken in view of discovering new stock of knowledge, in order to raise the general civilization level of the society and to use the knowledge in all social fields. The Annual Report on Research and Experimental Development (hereinafter: R&D) provides data on the scientific potential:

- number of organizations and units engaged in the R&D activity: by type, scientific field and section of economic activity;
- personnel: by sex, educational attainment, occupation, type of employment, working hours, full-time equivalent (FTE) and age;
- funds (receipts, expenditure and investments): by type of research, funding sources and use;
- results of R&D work: R&D works (finalised works, on-going works and published works): by type of research, ordering party and scientific party;
- inventions and patents: by scientific fields and R&D intensity.

#### Reporting units, statistical units

The population of the research and unit of observation of the statistical survey are all organisations engaged in the R&D activity, whether the latter is the principal activity or not.

#### Survey coverage

The reporting units of the survey are:

- R&D institutes and institutes of national interest for the Republic of Serbia; independent R&D organisations, business entities and institutions which principal or predominant activity is R&D.
- R&D units incorporated in enterprises or institutions.
- Tertiary educational institutions (faculties and arts academies), which activity, pursuant to the Law, is education and R&D-related, have been covered by this survey since 1978;



- Non-profit organisations – associations engaged in this activity. Excluded are R&D organisations created by the Ministry of the Interior and Ministry of Defence. The new Law on the R&D Activity anticipates the monitoring of these organisations.

### Method, timetable and sources for data collection

The survey is conducted annually and the questionnaires are sent to reporting units the first week of April. Three questionnaires are used for that purpose, the first relating to business entities and centres of extraordinary values (technology and business incubators, science and technology parks), the second to faculties and institutes, and the third to non-profit organisations – associations. The reporting units fill in the R&D questionnaire in May of the current year, and data refer to the previous (reference) year, i.e. they are shown as of the end of the reference year. Data on the R&D activity are collected on full coverage: all faculties/academies, whatever the ownership, all R&D institutes, business entities and non-profit organisations/associations. All data on the number of R&D organisations and employees are shown as of 31 December of the reference year, while those on R&D works, receipts and expenditure refer to the whole year.

The main data sources are: human resources records on employees appointed to R&D, accounting records on realised receipts and calculated investments in R&D, as well as records of specialised services on the result of R&D activities – projects, works, patents pending, etc.

### List and definitions of main concepts - indicators

**Type of R&D organisation:** R&D organisations are institutions and other legal entities, as well as units incorporated in business entities and institutions, which activity is completely or predominantly R&D-related. All the organisations are classified into:

- independent R&D institutes;
- Centre of extraordinary values: the status of the centre can be acquired by an institute, i.e. tertiary education institution or their organisational part(s) if they have achieved in a five-year period ultimate and internationally recognised scientific and professional results in a specific scientific discipline based on what they have an extended international scientific, technical and technological co-operation.
- Tertiary education institution
- R&D units of business entities; - tertiary education institutions;
- Non-profit organisations/associations.

**Sector of performance** is determined according to the division of the economic activity in which R&D is performed. There are five sectors:

- Business sector covers business entities and organisations which primary activity is the market production of goods and services, and their sale at economically significant prices.
- This sector includes also private non-profit organisations, as well as incorporated R&D units.
- Government sector includes organisations, department offices and other bodies furnishing common services, other than tertiary education, which cannot be provided under market conditions and reflects the economical and social policy of the society. By definition, this sector covers: activities of the administration, defence and public order; health, education, culture, recreation and other social services; promotion of economic growth and living standard, and technological development. The legal, executive and institutional structure should be included in this sector, whether these are funded from regular or extraordinary budget.

- Non-profit sector covers non-market, private non-profit organisation serving households free of charge or at low cost. These organisations may be created by citizens' associations in order to provide goods and services to the members of the association or for general purposes. This sector includes professional associations, humanitarian organisations, trade associations, consumers' associations, etc.
- Tertiary education sector covers universities, faculties and academies, whatever their funding sources and legal status. This sector includes R&D institutes and clinics operating under the direct control of or administered by the tertiary education organisation.
- Sector "abroad" covers organisations and individuals located beyond the political boundaries of the country, as well as related land owned by these organisations. It also includes all international organisations, including their facilities on the national territory.

### Personnel:

- **Researcher** is a person with at least tertiary educational attainment, i.e. having at least completed undergraduate academic studies and who is engaged in R&D work and holding the title pursuant to the Law. Depending on realised results in R&D, the researcher can acquire the research title: researcher-apprentice and researcher-associate, and the scientific title: senior scientific associate and scientific advisor.
- **Assistant-researchers** do not hold any research title; work directly with researchers in carrying out professional or technical works relative to R&D (laboratory technicians, engineers and technicians of technical sciences, designers, librarians, information assistant, computer experts, language editors, etc.).
- **Administrators** carry out exclusively or predominantly organisational, clerical, legal, administrative or financial work (treasurer, secretaries, jurists, etc.).
- Other personnel carry out supporting activities in R&D organisations (employed in workshops, on agricultural land, couriers, switchboard operators, maintenance workers, drivers, suppliers, etc.).
- Excluded are personnel engaged in protection and security, restaurants, hygiene maintenance, and related (guards, desk clerks, charwomen, etc.).

**R&D projects and studies:** shown are works completed from 1<sup>st</sup> January to 31<sup>st</sup> December, whatever their beginning. Works not being ordered by ordering parties are excluded.

- **Basic research** is a creative, systematic activity focused on acquiring new knowledge on the origin and causes of phenomena and facts, without any particular application or use in view. The results of a basic research are often formulated as general principles, theories or rules.

- **Applied research** is undertaken whether to establish a possibility to use the results of a research, having in mind its practical application, or to find new methods or ways that facilitate the achievement of a particular objective set in advance. This survey starts from existing knowledge and examines it thoroughly in view of solving specific issues.

- **Experimental (development) research** is a creative systematic activity based on the results of the basic and applied research, and practical knowledge directed towards introducing new materials, products, devices, processes and methods.

**Inventions and patents:** an invention is a new technological solution to a specific problem that involves inventiveness and applicability. A patent is the right that protects an invention. Patent and patent rights are acquired after recognition and registration of a granted right in the corresponding register.

**Industry classification according to R&D intensity (based on OECD standards):** high technology, medium-high technology, medium-low technology and low technology.

### **Level of data representativeness**

All data are available for R&D organisations, scientific fields, type of research, type of employment and personnel's working hours, level of certain activity classes (2010 CA) and according to the territorial principle (up to NSTJ 2 level).

### **Survey organisation**

The Statistical Office of the Republic of Serbia, with the help of the Ministry of Education, Science and Technological Development, prepares and carries out the survey on R&D organisations.

The Office defines and produces uniform methodological basis and tools for the survey, compiles address records of reporting units, prints the questionnaires and other materials for the carrying out of the survey, sends the questionnaires to the reporting units, collects the questionnaires, controls the coverage, response accuracy and data completeness, transmit data electronically, makes calculation and logical controls, processes the data and publishes the results for the Republic of Serbia in the "Statistical Yearbook of Serbia", as well as in this bulletin.

### **Harmonisation with international recommendations, standards and practice**

The methodology for this survey is harmonised with international standards to the greatest possible extent (as much as allowed by our laws), methodological recommendations from the Frascati Manual, with the exception of some financial indicators, which are difficult to present due to differences in financing the R&D work of our country in relation to most of EU member countries and other international organisations.

## **SURVEY TOOLS**

### **Questionnaires and instructions for filling the questionnaires**

- questionnaires: IR-1, IR-2 and IR-3;
- instructions for filling in the questionnaires;
- Questionnaires are available on the website of the Statistical Office of the Republic of Serbia [www.stat.gov.rs](http://www.stat.gov.rs).

### **List of nomenclatures and classifications used in the survey**

- Classification of Activities – CA ("Official Journal of the RS", number 54/2010)
- Nomenclature of statistical territorial units NSTJ ("Official Journal of the RS", number 109/09 and 46/10)
- Fields of Science and Technology Classification, OECD 2006, Frascati Manual
- International Standard Classification of Education 2011 (the classifications and nomenclature are available on the website of the Statistical Office of the Republic of Serbia, [www.stat.gov.rs](http://www.stat.gov.rs))

### **Previous editions**

Data on R&D organizations for previous years are available in the bulletins of the Federal Statistical Office, and since 2002 they have been published by the Statistical Office of the Republic of Serbia.



### Symbols

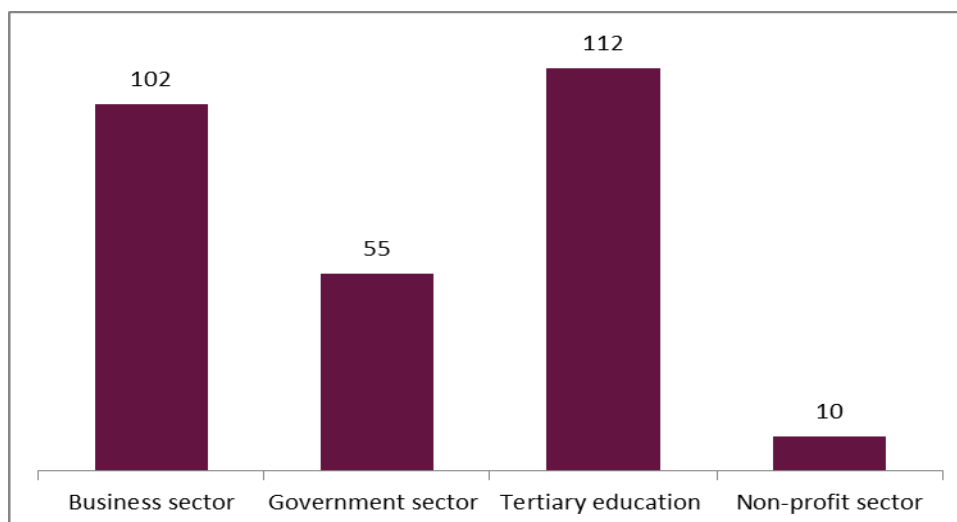
- = nil
- ... = data not available
- 1) = footnote
- n = average
- ( ) = incomplete, i.e. insufficiently checked data



# **Research and Development in the Republic of Serbia, 2015**

## 1.1. R&amp;D organization by sectors and fields of science, 2015

	Total	Business sector	Government sector	Tertiary education	Non-profit sector
<b>REPUBLIC OF SERBIA</b>	<b>279</b>	<b>102</b>	<b>55</b>	<b>112</b>	<b>10</b>
Natural sciences	43	13	11	18	1
Engineering and technology	103	68	10	22	3
Medical and health sciences	16	5	3	7	1
Agricultural sciences	28	10	11	6	1
Social sciences	66	6	9	47	4
Humanities	23	-	11	12	-
<b>SRBIJA – SEVER</b>	<b>210</b>	<b>66</b>	<b>53</b>	<b>81</b>	<b>10</b>
Natural sciences	37	9	11	16	1
Engineering and technology	66	42	9	12	3
Medical and health sciences	14	5	3	5	1
Agricultural sciences	23	7	10	5	1
Social sciences	50	3	9	34	4
Humanities	20	-	11	9	-
<b>Beogradski region</b>	<b>169</b>	<b>55</b>	<b>48</b>	<b>58</b>	<b>8</b>
Natural sciences	32	7	11	14	-
Engineering and technology	51	35	6	7	3
Medical and health sciences	12	5	3	3	1
Agricultural sciences	18	6	8	4	-
Social sciences	37	2	9	22	4
Humanities	19	-	11	8	-
<b>Region Vojvodine</b>	<b>41</b>	<b>11</b>	<b>5</b>	<b>23</b>	<b>2</b>
Natural sciences	5	2	-	2	1
Engineering and technology	15	7	3	5	-
Medical and health sciences	2	-	-	2	-
Agricultural sciences	5	1	2	1	1
Social sciences	13	1	-	12	-
Humanities	1	-	-	1	-
<b>SRBIJA – JUG</b>	<b>69</b>	<b>36</b>	<b>2</b>	<b>31</b>	<b>-</b>
Natural sciences	6	4	-	2	-
Engineering and technology	37	26	1	10	-
Medical and health sciences	2	-	-	2	-
Agricultural sciences	5	3	1	1	-
Social sciences	16	3	-	13	-
Humanities	3	-	-	3	-
<b>Region Šumadije i Zapadne Srbije</b>	<b>37</b>	<b>21</b>	<b>1</b>	<b>15</b>	<b>-</b>
Natural sciences	5	4	-	1	-
Engineering and technology	17	13	-	4	-
Medical and health sciences	1	-	-	1	-
Agricultural sciences	4	2	1	1	-
Social sciences	9	2	-	7	-
Humanities	1	-	-	1	-
<b>Region Južne i Istočne Srbije</b>	<b>32</b>	<b>15</b>	<b>1</b>	<b>16</b>	<b>-</b>
Natural sciences	1	-	-	1	-
Engineering and technology	20	13	1	6	-
Medical and health sciences	1	-	-	1	-
Agricultural sciences	1	1	-	-	-
Social sciences	7	1	-	6	-
Humanities	2	-	-	2	-
<b>Region Kosovo i Metohija</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>



## 2.1. Employees engaged in R&amp;D activities, by sectors, fields of science and sex, 2015 (head count)

	Total		Researchers		Assistant-researchers		Technicians		Management		Other personnel	
	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
<b>REPUBLIC OF SERBIA</b>	<b>23629</b>	<b>11695</b>	<b>16338</b>	<b>8044</b>	<b>1920</b>	<b>915</b>	<b>3115</b>	<b>1571</b>	<b>568</b>	<b>211</b>	<b>1688</b>	<b>954</b>
Natural sciences	5384	2747	4035	2061	347	157	430	195	89	35	483	299
Engineering and technology	7261	2817	4314	1648	701	236	1281	506	259	70	706	357
Medical and health sciences	2804	1709	2388	1422	149	100	174	133	60	41	33	13
Agricultural sciences	2451	1221	1167	577	320	150	612	323	62	24	290	147
Social sciences	3961	2155	3022	1549	237	150	490	319	83	36	129	101
Humanities	1768	1046	1412	787	166	122	128	95	15	5	47	37
<b>Business sector</b>	<b>3334</b>	<b>1134</b>	<b>1465</b>	<b>495</b>	<b>784</b>	<b>271</b>	<b>623</b>	<b>191</b>	<b>212</b>	<b>59</b>	<b>250</b>	<b>118</b>
Natural sciences	982	242	640	151	148	45	121	30	33	4	40	12
Engineering and technology	2058	728	765	309	503	141	454	142	157	46	179	90
Medical and health sciences	95	64	-	-	83	56	4	1	6	5	2	2
Agricultural sciences	121	47	24	8	23	9	34	13	12	4	28	13
Social sciences	78	53	36	27	27	20	10	5	4	-	1	1
<b>Government sector</b>	<b>5591</b>	<b>2972</b>	<b>3236</b>	<b>1851</b>	<b>413</b>	<b>192</b>	<b>1108</b>	<b>521</b>	<b>146</b>	<b>48</b>	<b>688</b>	<b>360</b>
Natural sciences	1990	1204	1543	953	75	38	101	50	18	8	253	155
Engineering and technology	1476	610	603	275	110	44	461	180	65	9	237	102
Medical and health sciences	210	149	141	103	6	6	22	18	28	17	13	5
Agricultural sciences	1201	604	351	203	204	92	451	216	29	11	166	82
Social sciences	307	165	247	119	11	7	38	30	2	1	9	8
Humanities	407	240	351	198	7	5	35	27	4	2	10	8
<b>Tertiary education</b>	<b>14680</b>	<b>7575</b>	<b>11630</b>	<b>5694</b>	<b>721</b>	<b>450</b>	<b>1377</b>	<b>855</b>	<b>204</b>	<b>102</b>	<b>748</b>	<b>474</b>
Natural sciences	2412	1301	1852	957	124	74	208	115	38	23	190	132
Engineering and technology	3714	1473	2942	1062	88	51	361	182	35	15	288	163
Medical and health sciences	2499	1496	2247	1319	60	38	148	114	26	19	18	6
Agricultural sciences	1129	570	792	366	93	49	127	94	21	9	96	52
Social sciences	3565	1929	2736	1401	197	121	440	282	73	33	119	92
Humanities	1361	806	1061	589	159	117	93	68	11	3	37	29
<b>Non-profit sector</b>	<b>24</b>	<b>14</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>
Engineering and technology	13	6	4	2	-	-	5	2	2	-	2	2
Social sciences	11	8	3	2	2	2	2	2	4	2	-	-
<b>SRBIJA – SEVER</b>	<b>19742</b>	<b>9747</b>	<b>13401</b>	<b>6587</b>	<b>1686</b>	<b>801</b>	<b>2724</b>	<b>1331</b>	<b>497</b>	<b>185</b>	<b>1434</b>	<b>843</b>
Natural sciences	4952	2508	3658	1847	334	151	398	180	84	32	478	298
Engineering and technology	5857	2272	3425	1328	576	188	1123	418	218	57	515	281
Medical and health sciences	2094	1312	1754	1070	109	76	138	112	60	41	33	13
Agricultural sciences	2307	1150	1094	544	307	145	584	304	60	23	262	134
Social sciences	3297	1804	2487	1279	219	136	412	267	60	27	119	95
Humanities	1235	701	983	519	141	105	69	50	15	5	27	22
<b>Business sector</b>	<b>2993</b>	<b>1020</b>	<b>1375</b>	<b>455</b>	<b>713</b>	<b>248</b>	<b>544</b>	<b>161</b>	<b>175</b>	<b>50</b>	<b>186</b>	<b>106</b>
Natural sciences	970	239	636	148	148	45	116	30	33	4	37	12
Engineering and technology	1808	658	693	277	453	132	400	125	122	37	140	87
Medical and health sciences	95	64	-	-	83	56	4	1	6	5	2	2
Agricultural sciences	54	16	10	3	12	5	14	-	12	4	6	4
Social sciences	66	43	36	27	17	10	10	5	2	-	1	1
<b>Government sector</b>	<b>5367</b>	<b>2843</b>	<b>3173</b>	<b>1808</b>	<b>388</b>	<b>180</b>	<b>1081</b>	<b>499</b>	<b>144</b>	<b>47</b>	<b>581</b>	<b>309</b>
Natural sciences	1990	1204	1543	953	75	38	101	50	18	8	253	155
Engineering and technology	1282	500	559	245	87	33	437	159	65	9	134	54
Medical and health sciences	210	149	141	103	6	6	22	18	28	17	13	5
Agricultural sciences	1171	585	332	190	202	91	448	215	27	10	162	79
Social sciences	307	165	247	119	11	7	38	30	2	1	9	8
Humanities	407	240	351	198	7	5	35	27	4	2	10	8
<b>Tertiary education</b>	<b>11358</b>	<b>5870</b>	<b>8846</b>	<b>4320</b>	<b>583</b>	<b>371</b>	<b>1092</b>	<b>667</b>	<b>172</b>	<b>86</b>	<b>665</b>	<b>426</b>
Natural sciences	1992	1065	1479	746	111	68	181	100	33	20	188	131
Engineering and technology	2754	1108	2169	804	36	23	281	132	29	11	239	138
Medical and health sciences	1789	1099	1613	967	20	14	112	93	26	19	18	6
Agricultural sciences	1082	549	752	351	93	49	122	89	21	9	94	51
Social sciences	2913	1588	2201	1131	189	117	362	230	52	24	109	86
Humanities	828	461	632	321	134	100	34	23	11	3	17	14
<b>Non-profit sector</b>	<b>24</b>	<b>14</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>
Engineering and technology	13	6	4	2	-	-	5	2	2	-	2	2
Social sciences	11	8	3	2	2	2	2	2	4	2	-	-



**2.1. Employees engaged in R&D activities, by sectors, fields of science and sex, 2015 (head count)**  
 (continued)

	Total		Researchers		Assistant-researchers		Technicians		Management		Other personnel	
	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Beogradski region</b>	<b>13737</b>	<b>6850</b>	<b>9142</b>	<b>4632</b>	<b>1296</b>	<b>607</b>	<b>1851</b>	<b>861</b>	<b>363</b>	<b>116</b>	<b>1085</b>	<b>634</b>
Natural sciences	3865	2064	2764	1501	289	137	350	164	63	21	399	241
Engineering and technology	3946	1470	2106	817	509	159	839	281	161	32	331	181
Medical and health sciences	1357	860	1105	691	106	74	74	58	39	24	33	13
Agricultural sciences	1404	715	748	384	185	92	245	136	43	17	183	86
Social sciences	1983	1062	1478	736	66	40	280	177	46	18	113	91
Humanities	1182	679	941	503	141	105	63	45	11	4	26	22
<b>Business sector</b>	<b>2129</b>	<b>775</b>	<b>768</b>	<b>309</b>	<b>652</b>	<b>234</b>	<b>437</b>	<b>120</b>	<b>121</b>	<b>31</b>	<b>151</b>	<b>81</b>
Natural sciences	472	148	180	66	124	43	116	30	25	3	27	6
Engineering and technology	1457	509	545	213	419	121	296	84	77	19	120	72
Medical and health sciences	95	64	-	-	83	56	4	1	6	5	2	2
Agricultural sciences	42	12	7	3	11	5	12	-	11	4	1	-
Social sciences	63	42	36	27	15	9	9	5	2	-	1	1
<b>Government sector</b>	<b>4601</b>	<b>2462</b>	<b>2947</b>	<b>1687</b>	<b>265</b>	<b>126</b>	<b>755</b>	<b>344</b>	<b>132</b>	<b>43</b>	<b>502</b>	<b>262</b>
Natural sciences	1990	1204	1543	953	75	38	101	50	18	8	253	155
Engineering and technology	1122	410	461	189	75	29	395	133	64	9	127	50
Medical and health sciences	210	149	141	103	6	6	22	18	28	17	13	5
Agricultural sciences	565	294	204	125	91	41	164	86	16	6	90	36
Social sciences	307	165	247	119	11	7	38	30	2	1	9	8
Humanities	407	240	351	198	7	5	35	27	4	2	10	8
<b>Tertiary education</b>	<b>6983</b>	<b>3599</b>	<b>5420</b>	<b>2632</b>	<b>377</b>	<b>245</b>	<b>652</b>	<b>393</b>	<b>104</b>	<b>40</b>	<b>430</b>	<b>289</b>
Natural sciences	1403	712	1041	482	90	56	133	84	20	10	119	80
Engineering and technology	1354	545	1096	413	15	9	143	62	18	4	82	57
Medical and health sciences	1052	647	964	588	17	12	48	39	5	2	18	6
Agricultural sciences	797	409	537	256	83	46	69	50	16	7	92	50
Social sciences	1602	847	1192	588	38	22	231	140	38	15	103	82
Humanities	775	439	590	305	134	100	28	18	7	2	16	14
<b>Non-profit sector</b>	<b>24</b>	<b>14</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>2</b>
Engineering and technology	13	6	4	2	-	-	5	2	2	-	2	2
Social sciences	11	8	3	2	2	2	2	2	4	2	-	-
<b>Region Vojvodine</b>	<b>6005</b>	<b>2897</b>	<b>4259</b>	<b>1955</b>	<b>390</b>	<b>194</b>	<b>873</b>	<b>470</b>	<b>134</b>	<b>69</b>	<b>349</b>	<b>209</b>
Natural sciences	1087	444	894	346	45	14	48	16	21	11	79	57
Engineering and technology	1911	802	1319	511	67	29	284	137	57	25	184	100
Medical and health sciences	737	452	649	379	3	2	64	54	21	17	-	-
Agricultural sciences	903	435	346	160	122	53	339	168	17	6	79	48
Social sciences	1314	742	1009	543	153	96	132	90	14	9	6	4
Humanities	53	22	42	16	-	-	6	5	4	1	1	-
<b>Business sector</b>	<b>864</b>	<b>245</b>	<b>607</b>	<b>146</b>	<b>61</b>	<b>14</b>	<b>107</b>	<b>41</b>	<b>54</b>	<b>19</b>	<b>35</b>	<b>25</b>
Natural sciences	498	91	456	82	24	2	-	-	8	1	10	6
Engineering and technology	351	149	148	64	34	11	104	41	45	18	20	15
Agricultural sciences	12	4	3	-	1	-	2	-	1	-	5	4
Social sciences	3	1	-	-	2	1	1	-	-	-	-	-
<b>Government sector</b>	<b>766</b>	<b>381</b>	<b>226</b>	<b>121</b>	<b>123</b>	<b>54</b>	<b>326</b>	<b>155</b>	<b>12</b>	<b>4</b>	<b>79</b>	<b>47</b>
Engineering and technology	160	90	98	56	12	4	42	26	1	-	7	4
Agricultural sciences	606	291	128	65	111	50	284	129	11	4	72	43
<b>Tertiary education</b>	<b>4375</b>	<b>2271</b>	<b>3426</b>	<b>1688</b>	<b>206</b>	<b>126</b>	<b>440</b>	<b>274</b>	<b>68</b>	<b>46</b>	<b>235</b>	<b>137</b>
Natural sciences	589	353	438	264	21	12	48	16	13	10	69	51
Engineering and technology	1400	563	1073	391	21	14	138	70	11	7	157	81
Medical and health sciences	737	452	649	379	3	2	64	54	21	17	-	-
Agricultural sciences	285	140	215	95	10	3	53	39	5	2	2	1
Social sciences	1311	741	1009	543	151	95	131	90	14	9	6	4
Humanities	53	22	42	16	-	-	6	5	4	1	1	-
<b>SRBIJA – JUG</b>	<b>3887</b>	<b>1948</b>	<b>2937</b>	<b>1457</b>	<b>234</b>	<b>114</b>	<b>391</b>	<b>240</b>	<b>71</b>	<b>26</b>	<b>254</b>	<b>111</b>
Natural sciences	432	239	377	214	13	6	32	15	5	3	5	1
Engineering and technology	1404	545	889	320	125	48	158	88	41	13	191	76
Medical and health sciences	710	397	634	352	40	24	36	21	-	-	-	-
Agricultural sciences	144	71	73	33	13	5	28	19	2	1	28	13
Social sciences	664	351	535	270	18	14	78	52	23	9	10	6
Humanities	533	345	429	268	25	17	59	45	-	-	20	15

## 2.1. Employees engaged in R&D activities, by sectors, fields of science and sex, 2015 (head count) (continued)

	Total		Researchers		Assistant-researchers		Technicians		Management		Other personnel	
	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Business sector</b>	<b>341</b>	<b>114</b>	<b>90</b>	<b>40</b>	<b>71</b>	<b>23</b>	<b>79</b>	<b>30</b>	<b>37</b>	<b>9</b>	<b>64</b>	<b>12</b>
Natural sciences	12	3	4	3	-	-	5	-	-	-	3	-
Engineering and technology	250	70	72	32	50	9	54	17	35	9	39	3
Agricultural sciences	67	31	14	5	11	4	20	13	-	-	22	9
Social sciences	12	10	-	-	10	10	-	-	2	-	-	-
<b>Government sector</b>	<b>224</b>	<b>129</b>	<b>63</b>	<b>43</b>	<b>25</b>	<b>12</b>	<b>27</b>	<b>22</b>	<b>2</b>	<b>1</b>	<b>107</b>	<b>51</b>
Engineering and technology	194	110	44	30	23	11	24	21	-	-	103	48
Agricultural science	30	19	19	13	2	1	3	1	2	1	4	3
<b>Tertiary education</b>	<b>3322</b>	<b>1705</b>	<b>2784</b>	<b>1374</b>	<b>138</b>	<b>79</b>	<b>285</b>	<b>188</b>	<b>32</b>	<b>16</b>	<b>83</b>	<b>48</b>
Natural sciences	420	236	373	211	13	6	27	15	5	3	2	1
Engineering and technology	960	365	773	258	52	28	80	50	6	4	49	25
Medical and health sciences	710	397	634	352	40	24	36	21	-	-	-	-
Agricultural sciences	47	21	40	15	-	-	5	5	-	-	2	1
Social sciences	652	341	535	270	8	4	78	52	21	9	10	6
Humanities	533	345	429	268	25	17	59	45	-	-	20	15
<b>Region Šumadije i Zapadne Srbije</b>	<b>1575</b>	<b>813</b>	<b>1212</b>	<b>622</b>	<b>97</b>	<b>43</b>	<b>191</b>	<b>110</b>	<b>39</b>	<b>18</b>	<b>36</b>	<b>20</b>
Natural sciences	230	134	175	109	13	6	32	15	5	3	5	1
Engineering and technology	396	125	282	86	35	10	41	13	23	7	15	9
Medical and health sciences	355	196	292	161	27	14	36	21	-	-	-	-
Agricultural sciences	78	40	59	28	2	1	9	6	2	1	6	4
Social sciences	324	184	252	132	4	2	49	37	9	7	10	6
Humanities	192	134	152	106	16	10	24	18	-	-	-	-
<b>Business sector</b>	<b>137</b>	<b>45</b>	<b>38</b>	<b>18</b>	<b>30</b>	<b>8</b>	<b>42</b>	<b>12</b>	<b>23</b>	<b>7</b>	<b>4</b>	<b>-</b>
Natural sciences	12	3	4	3	-	-	5	-	-	-	3	-
Engineering and technology	124	42	34	15	30	8	36	12	23	7	1	-
Agricultural sciences	1	-	-	-	-	-	1	-	-	-	-	-
<b>Government sector</b>	<b>30</b>	<b>19</b>	<b>19</b>	<b>13</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>3</b>
Agricultural sciences	30	19	19	13	2	1	3	1	2	1	4	3
<b>Tertiary education</b>	<b>1408</b>	<b>749</b>	<b>1155</b>	<b>591</b>	<b>65</b>	<b>34</b>	<b>146</b>	<b>97</b>	<b>14</b>	<b>10</b>	<b>28</b>	<b>17</b>
Natural sciences	218	131	171	106	13	6	27	15	5	3	2	1
Engineering and technology	272	83	248	71	5	2	5	1	-	-	14	9
Medical and health sciences	355	196	292	161	27	14	36	21	-	-	-	-
Agricultural sciences	47	21	40	15	-	-	5	5	-	-	2	1
Social sciences	324	184	252	132	4	2	49	37	9	7	10	6
Humanities	192	134	152	106	16	10	24	18	-	-	-	-
<b>Region Južne i Istočne Srbije</b>	<b>2312</b>	<b>1135</b>	<b>1725</b>	<b>835</b>	<b>137</b>	<b>71</b>	<b>200</b>	<b>130</b>	<b>32</b>	<b>8</b>	<b>218</b>	<b>91</b>
Natural sciences	202	105	202	105	-	-	-	-	-	-	-	-
Engineering and technology	1008	420	607	234	90	38	117	75	18	6	176	67
Medical and health sciences	355	201	342	191	13	10	-	-	-	-	-	-
Agricultural sciences	66	31	14	5	11	4	19	13	-	-	22	9
Social sciences	340	167	283	138	14	12	29	15	14	2	-	-
Humanities	341	211	277	162	9	7	35	27	-	-	20	15
<b>Business sector</b>	<b>204</b>	<b>69</b>	<b>52</b>	<b>22</b>	<b>41</b>	<b>15</b>	<b>37</b>	<b>18</b>	<b>14</b>	<b>2</b>	<b>60</b>	<b>12</b>
Engineering and technology	126	28	38	17	20	1	18	5	12	2	38	3
Agricultural sciences	66	31	14	5	11	4	19	13	-	-	22	9
Social sciences	12	10	-	-	10	10	-	-	2	-	-	-
<b>Government sector</b>	<b>194</b>	<b>110</b>	<b>44</b>	<b>30</b>	<b>23</b>	<b>11</b>	<b>24</b>	<b>21</b>	<b>-</b>	<b>-</b>	<b>103</b>	<b>48</b>
Engineering and technology	194	110	44	30	23	11	24	21	-	-	103	48
<b>Tertiary education</b>	<b>1914</b>	<b>956</b>	<b>1629</b>	<b>783</b>	<b>73</b>	<b>45</b>	<b>139</b>	<b>91</b>	<b>18</b>	<b>6</b>	<b>55</b>	<b>31</b>
Natural sciences	202	105	202	105	-	-	-	-	-	-	-	-
Engineering and technology	688	282	525	187	47	26	75	49	6	4	35	16
Medical and health sciences	355	201	342	191	13	10	-	-	-	-	-	-
Social sciences	328	157	283	138	4	2	29	15	12	2	-	-
Humanities	341	211	277	162	9	7	35	27	-	-	20	15
<b>Region Kosovo i Metohija</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>

**2.2. Full-time and part-time employees engaged in R&D activities by sectors, fields of sciences and sex, expressed in full-time equivalent, 2015**

	Total		Researchers		Assistant-researchers		Technicians		Management		Other personnel	
	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
<b>REPUBLIC OF SERBIA</b>	<b>21572.8</b>	<b>10688.5</b>	<b>14656.7</b>	<b>7201.2</b>	<b>1743.5</b>	<b>847.1</b>	<b>2973.9</b>	<b>1506.8</b>	<b>542.9</b>	<b>199.4</b>	<b>1655.9</b>	<b>934.1</b>
Natural sciences	5107.8	2637.0	3832.2	1976.5	306.7	143.3	403.7	186.7	83.8	32.8	481.4	297.7
Engineering and technology	6688.2	2600.6	3902.1	1489.8	623.7	220.8	1233.7	486.4	246.7	62.8	682.0	340.8
Medical and health sciences	2054.7	1265.3	1680.1	1002.5	127.6	87.6	154.3	121.5	59.8	40.8	33.0	13.0
Agricultural sciences	2385.9	1191.7	1127.3	558.4	318.4	149.2	593.5	314.6	60.7	24.0	286.0	145.5
Social sciences	3631.7	1975.1	2748.7	1403.8	209.9	130.1	467.9	306.2	77.8	34.0	127.4	101.0
Humanities	1704.5	1018.8	1366.3	770.2	157.2	116.1	120.8	91.4	14.1	5.0	46.1	36.1
<b>Business sector</b>	<b>3089.7</b>	<b>1065.7</b>	<b>1405.5</b>	<b>478.0</b>	<b>667.0</b>	<b>239.3</b>	<b>575.9</b>	<b>181.3</b>	<b>196.3</b>	<b>51.3</b>	<b>245.0</b>	<b>115.8</b>
Natural sciences	907.0	222.2	627.9	150.2	108.5	32.1	100.7	24.7	29.9	3.2	40.0	12.0
Engineering and technology	1915.4	694.9	721.8	296.6	438.4	133.0	434.6	138.2	146.6	39.3	174.0	87.8
Medical and health sciences	92.7	62.7	-	-	81.6	55.2	3.3	0.7	5.8	4.8	2.0	2.0
Agricultural sciences	113.8	46.2	24.0	8.0	21.4	8.2	28.4	13.0	12.0	4.0	28.0	13.0
Social sciences	60.8	39.7	31.8	23.2	17.1	10.8	8.9	4.7	2.0	-	1.0	1.0
<b>Government sector</b>	<b>5379.6</b>	<b>2876.4</b>	<b>3048.9</b>	<b>1767.4</b>	<b>412.1</b>	<b>191.8</b>	<b>1090.2</b>	<b>511.5</b>	<b>145.0</b>	<b>48.0</b>	<b>683.4</b>	<b>357.7</b>
Natural sciences	1972.0	1195.3	1527.4	946.4	75.0	38.0	100.2	49.2	18.0	8.0	251.4	153.7
Engineering and technology	1321.2	546.5	451.7	211.5	110.0	44.0	457.5	180.0	65.0	9.0	237.0	102.0
Medical and health sciences	194.1	138.3	126.3	93.2	5.8	5.8	21.0	17.3	28.0	17.0	13.0	5.0
Agricultural sciences	1184.0	594.5	350.5	202.5	204.0	92.0	438.5	208.0	28.0	11.0	163.0	81.0
Social sciences	303.6	163.6	244.3	117.6	10.3	7.0	38.0	30.0	2.0	1.0	9.0	8.0
Humanities	404.7	238.2	348.7	196.2	7.0	5.0	35.0	27.0	4.0	2.0	10.0	8.0
<b>Tertiary education</b>	<b>13080.8</b>	<b>6733.2</b>	<b>10196.0</b>	<b>4952.6</b>	<b>662.4</b>	<b>414.0</b>	<b>1300.8</b>	<b>810.0</b>	<b>196.1</b>	<b>98.1</b>	<b>725.5</b>	<b>458.6</b>
Natural sciences	2228.8	1219.5	1676.9	879.9	123.2	73.2	202.8	112.8	35.9	21.6	190.0	132.0
Engineering and technology	3438.6	1353.2	2724.6	979.7	75.3	43.8	336.6	166.2	33.1	14.5	269.0	149.0
Medical and health sciences	1767.9	1064.3	1553.8	909.3	40.2	26.6	130.0	103.5	26.0	19.0	18.0	6.0
Agricultural sciences	1088.1	551.0	752.8	347.9	93.0	49.0	126.6	93.6	20.7	9.0	95.0	51.5
Social sciences	3257.6	1764.6	2470.4	1261.8	180.5	110.3	419.0	269.5	70.3	31.0	117.4	92.0
Humanities	1299.8	780.6	1017.6	574.0	150.2	111.1	85.8	64.4	10.1	3.0	36.1	28.1
<b>Non-profit sector</b>	<b>22.7</b>	<b>13.2</b>	<b>6.2</b>	<b>3.2</b>	<b>2.0</b>	<b>2.0</b>	<b>7.0</b>	<b>4.0</b>	<b>5.5</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>
Engineering and technology	13.0	6.0	4.0	2.0	-	-	5.0	2.0	2.0	-	2.0	2.0
Social sciences	9.7	7.2	2.2	1.2	2.0	2.0	2.0	2.0	3.5	2.0	-	-
<b>SRBIJA – SEVER</b>	<b>18140.6</b>	<b>8978.2</b>	<b>12087.5</b>	<b>5929.9</b>	<b>1545.8</b>	<b>755.4</b>	<b>2621.8</b>	<b>1289.4</b>	<b>480.7</b>	<b>178.9</b>	<b>1404.8</b>	<b>824.6</b>
Natural sciences	4680.4	2399.7	3459.8	1764.2	293.7	137.3	371.7	171.7	78.8	29.8	476.4	296.7
Engineering and technology	5422.6	2117.3	3119.8	1211.7	507.4	177.5	1089.4	406.5	212.7	55.3	493.3	266.3
Medical and health sciences	1567.7	988.3	1236.8	752.7	101.8	70.8	136.3	111.0	59.8	40.8	33.0	13.0
Agricultural sciences	2241.9	1120.7	1054.3	525.4	305.4	144.2	565.5	295.6	58.7	23.0	258.0	132.5
Social sciences	3040.1	1672.4	2266.5	1169.1	201.9	125.1	397.1	258.2	56.6	25.0	118.0	95.0
Humanities	1188.0	679.8	950.4	506.8	135.6	100.5	61.8	46.4	14.1	5.0	26.1	21.1
<b>Business sector</b>	<b>2777.1</b>	<b>971.9</b>	<b>1323.9</b>	<b>444.4</b>	<b>604.0</b>	<b>224.3</b>	<b>500.3</b>	<b>152.1</b>	<b>167.1</b>	<b>47.3</b>	<b>181.8</b>	<b>103.8</b>
Natural sciences	895.0	219.2	623.9	147.2	108.5	32.1	95.7	24.7	29.9	3.2	37.0	12.0
Engineering and technology	1684.0	637.1	658.2	271.0	388.4	124.0	384.0	122.0	117.6	35.3	135.8	84.8
Medical and health sciences	92.7	62.7	-	-	81.6	55.2	3.3	0.7	5.8	4.8	2.0	2.0
Agricultural sciences	46.8	15.2	10.0	3.0	10.4	4.2	8.4	-	12.0	4.0	6.0	4.0
Social sciences	58.6	37.7	31.8	23.2	15.1	8.8	8.9	4.7	1.8	-	1.0	1.0
<b>Government sector</b>	<b>5155.6</b>	<b>2747.4</b>	<b>2985.9</b>	<b>1724.4</b>	<b>387.1</b>	<b>179.8</b>	<b>1063.2</b>	<b>489.5</b>	<b>143.0</b>	<b>47.0</b>	<b>576.4</b>	<b>306.7</b>
Natural sciences	1972.0	1195.3	1527.4	946.4	75.0	38.0	100.2	49.2	18.0	8.0	251.4	153.7
Engineering and technology	1127.2	436.5	407.7	181.5	87.0	33.0	433.5	159.0	65.0	9.0	134.0	54.0
Medical and health sciences	194.1	138.3	126.3	93.2	5.8	5.8	21.0	17.3	28.0	17.0	13.0	5.0
Agricultural sciences	1154.0	575.5	331.5	189.5	202.0	91.0	435.5	207.0	26.0	10.0	159.0	78.0
Social sciences	303.6	163.6	244.3	117.6	10.3	7.0	38.0	30.0	2.0	1.0	9.0	8.0
Humanities	404.7	238.2	348.7	196.2	7.0	5.0	35.0	27.0	4.0	2.0	10.0	8.0
<b>Tertiary education</b>	<b>10185.2</b>	<b>5245.7</b>	<b>7771.5</b>	<b>3757.9</b>	<b>552.7</b>	<b>349.3</b>	<b>1051.3</b>	<b>643.8</b>	<b>165.1</b>	<b>82.6</b>	<b>644.6</b>	<b>412.1</b>
Natural sciences	1813.4	985.2	1308.5	670.6	110.2	67.2	175.8	97.8	30.9	18.6	188.0	131.0
Engineering and technology	2598.4	1037.7	2049.9	757.2	32.0	20.5	266.9	123.5	28.1	11.0	221.5	125.5
Medical and health sciences	1280.9	787.3	1110.5	659.5	14.4	9.8	112.0	93.0	26.0	19.0	18.0	6.0
Agricultural sciences	1041.1	530.0	712.8	332.9	93.0	49.0	121.6	88.6	20.7	9.0	93.0	50.5
Social sciences	2668.2	1463.9	1988.2	1027.1	174.5	107.3	348.2	221.5	49.3	22.0	108.0	86.0
Humanities	783.3	441.6	601.7	310.6	128.6	95.5	26.8	19.4	10.1	3.0	16.1	13.1
<b>Non-profit sector</b>	<b>22.7</b>	<b>13.2</b>	<b>6.2</b>	<b>3.2</b>	<b>2.0</b>	<b>2.0</b>	<b>7.0</b>	<b>4.0</b>	<b>5.5</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>
Engineering and technology	13.0	6.0	4.0	2.0	-	-	5.0	2.0	2.0	-	2.0	2.0
Social sciences	9.7	7.2	2.2	1.2	2.0	2.0	2.0	2.0	3.5	2.0	-	-

## 2.2. Full-time and part-time employees engaged in R&D activities by sectors, fields of sciences and sex, expressed in full-time equivalent, 2015 (continued)

	Total		Researchers		Assistant-researchers		Technicians		Management		Other personnel	
	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Beogradski region</b>	<b>12810.9</b>	<b>6429.9</b>	<b>8454.2</b>	<b>4296.7</b>	<b>1172.1</b>	<b>571.3</b>	<b>1770.6</b>	<b>832.4</b>	<b>352.7</b>	<b>111.9</b>	<b>1061.3</b>	<b>617.6</b>
Natural sciences	3646.6	1980.6	2616.2	1442.6	250.8	123.8	323.7	155.7	58.5	18.8	397.4	239.7
Engineering and technology	3574.0	1327.1	1859.6	711.3	441.1	149.2	806.2	269.5	157.3	30.3	309.8	166.8
Medical and health sciences	1208.7	754.0	965.8	591.4	98.8	68.8	72.3	57.0	38.8	23.8	33.0	13.0
Agricultural sciences	1358.4	695.7	710.3	365.9	183.4	91.2	239.0	135.6	42.7	17.0	183.0	86.0
Social sciences	1888.2	1014.7	1393.9	694.7	62.4	37.8	273.6	173.2	45.3	18.0	113.0	91.0
Humanities	1135.0	657.8	908.4	490.8	135.6	100.5	55.8	41.4	10.1	4.0	25.1	21.1
<b>Business sector</b>	<b>1928.4</b>	<b>728.1</b>	<b>727.8</b>	<b>298.9</b>	<b>545.3</b>	<b>211.0</b>	<b>394.0</b>	<b>111.1</b>	<b>114.5</b>	<b>28.3</b>	<b>146.8</b>	<b>78.8</b>
Natural sciences	410.2	128.7	178.8	65.7	86.1	30.1	95.7	24.7	22.6	2.2	27.0	6.0
Engineering and technology	1335.1	488.8	510.2	207.0	355.1	113.7	280.7	81.0	73.3	17.3	115.8	69.8
Medical and health sciences	92.7	62.7	-	-	81.6	55.2	3.3	0.7	5.8	4.8	2.0	2.0
Agricultural sciences	34.8	11.2	7.0	3.0	9.4	4.2	6.4	-	11.0	4.0	1.0	-
Social sciences	55.6	36.7	31.8	23.2	13.1	7.8	7.9	4.7	1.8	-	1.0	1.0
<b>Government sector</b>	<b>4406.7</b>	<b>2375.4</b>	<b>2760.5</b>	<b>1603.4</b>	<b>264.1</b>	<b>125.8</b>	<b>749.7</b>	<b>342.5</b>	<b>132.0</b>	<b>43.0</b>	<b>500.4</b>	<b>260.7</b>
Natural sciences	1972.0	1195.3	1527.4	946.4	75.0	38.0	100.2	49.2	18.0	8.0	251.4	153.7
Engineering and technology	967.8	346.5	310.3	125.5	75.0	29.0	391.5	133.0	64.0	9.0	127.0	50.0
Medical and health sciences	194.1	138.3	126.3	93.2	5.8	5.8	21.0	17.3	28.0	17.0	13.0	5.0
Agricultural sciences	564.5	293.5	203.5	124.5	91.0	41.0	164.0	86.0	16.0	6.0	90.0	36.0
Social sciences	303.6	163.6	244.3	117.6	10.3	7.0	38.0	30.0	2.0	1.0	9.0	8.0
Humanities	404.7	238.2	348.7	196.2	7.0	5.0	35.0	27.0	4.0	2.0	10.0	8.0
<b>Tertiary education</b>	<b>6453.1</b>	<b>3313.2</b>	<b>4959.7</b>	<b>2391.2</b>	<b>360.7</b>	<b>232.5</b>	<b>619.9</b>	<b>374.8</b>	<b>100.7</b>	<b>38.6</b>	<b>412.1</b>	<b>276.1</b>
Natural sciences	1264.4	656.6	910.0	430.5	89.7	55.7	127.8	81.8	17.9	8.6	119.0	80.0
Engineering and technology	1258.1	485.8	1035.1	376.8	11.0	6.5	129.0	53.5	18.0	4.0	65.0	45.0
Medical and health sciences	921.9	553.0	839.5	498.2	11.4	7.8	48.0	39.0	5.0	2.0	18.0	6.0
Agricultural sciences	759.1	391.0	499.8	238.4	83.0	46.0	68.6	49.6	15.7	7.0	92.0	50.0
Social sciences	1519.3	807.2	1115.6	552.7	37.0	21.0	225.7	136.5	38.0	15.0	103.0	82.0
Humanities	730.3	419.6	559.7	294.6	128.6	95.5	20.8	14.4	6.1	2.0	15.1	13.1
<b>Non-profit sector</b>	<b>22.7</b>	<b>13.2</b>	<b>6.2</b>	<b>3.2</b>	<b>2.0</b>	<b>2.0</b>	<b>7.0</b>	<b>4.0</b>	<b>5.5</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>
Engineering and technology	13.0	6.0	4.0	2.0	-	-	5.0	2.0	2.0	-	2.0	2.0
Social sciences	9.7	7.2	2.2	1.2	2.0	2.0	2.0	2.0	3.5	2.0	-	-
<b>Region Vojvodine</b>	<b>5329.8</b>	<b>2548.3</b>	<b>3633.4</b>	<b>1633.2</b>	<b>373.7</b>	<b>184.1</b>	<b>851.2</b>	<b>457.0</b>	<b>128.0</b>	<b>67.0</b>	<b>343.5</b>	<b>207.0</b>
Natural sciences	1033.8	419.1	843.6	321.6	42.9	13.5	48.0	16.0	20.3	11.0	79.0	57.0
Engineering and technology	1848.6	790.2	1260.2	500.4	66.3	28.3	283.2	137.0	55.4	25.0	183.5	99.5
Medical and health sciences	359.0	234.3	271.0	161.3	3.0	2.0	64.0	54.0	21.0	17.0	-	-
Agricultural sciences	883.5	425.0	344.0	159.5	122.0	53.0	326.5	160.0	16.0	6.0	75.0	46.5
Social sciences	1151.9	657.7	872.6	474.4	139.5	87.3	123.5	85.0	11.3	7.0	5.0	4.0
Humanities	53.0	22.0	42.0	16.0	-	-	6.0	5.0	4.0	1.0	1.0	-
<b>Business sector</b>	<b>848.7</b>	<b>243.8</b>	<b>596.1</b>	<b>145.5</b>	<b>58.7</b>	<b>13.3</b>	<b>106.3</b>	<b>41.0</b>	<b>52.6</b>	<b>19.0</b>	<b>35.0</b>	<b>25.0</b>
Natural sciences	484.8	90.5	445.1	81.5	22.4	2.0	-	-	7.3	1.0	10.0	6.0
Engineering and technology	348.9	148.3	148.0	64.0	33.3	10.3	103.3	41.0	44.3	18.0	20.0	15.0
Agricultural sciences	12.0	4.0	3.0	-	1.0	-	2.0	-	1.0	-	5.0	4.0
Social sciences	3.0	1.0	-	-	2.0	1.0	1.0	-	-	-	-	-
<b>Сектор државе</b>	<b>748.9</b>	<b>372.0</b>	<b>225.4</b>	<b>121.0</b>	<b>123.0</b>	<b>54.0</b>	<b>313.5</b>	<b>147.0</b>	<b>11.0</b>	<b>4.0</b>	<b>76.0</b>	<b>46.0</b>
Engineering and technology	159.4	90.0	97.4	56.0	12.0	4.0	42.0	26.0	1.0	-	7.0	4.0
Agricultural sciences	589.5	282.0	128.0	65.0	111.0	50.0	271.5	121.0	10.0	4.0	69.0	42.0
<b>Tertiary education</b>	<b>3732.2</b>	<b>1932.5</b>	<b>2811.9</b>	<b>1366.7</b>	<b>192.0</b>	<b>116.8</b>	<b>431.4</b>	<b>269.0</b>	<b>64.4</b>	<b>44.0</b>	<b>232.5</b>	<b>136.0</b>
Natural sciences	549.0	328.6	398.5	240.1	20.5	11.5	48.0	16.0	13.0	10.0	69.0	51.0
Engineering and technology	1340.3	551.9	1014.8	380.4	21.0	14.0	137.9	70.0	10.1	7.0	156.5	80.5
Medical and health sciences	359.0	234.3	271.0	161.3	3.0	2.0	64.0	54.0	21.0	17.0	-	-
Agricultural sciences	282.0	139.0	213.0	94.5	10.0	3.0	53.0	39.0	5.0	2.0	1.0	0.5
Social sciences	1148.9	656.7	872.6	474.4	137.5	86.3	122.5	85.0	11.3	7.0	5.0	4.0
Humanities	53.0	22.0	42.0	16.0	-	-	6.0	5.0	4.0	1.0	1.0	-
<b>SRBIJA – JUG</b>	<b>3432.2</b>	<b>1710.3</b>	<b>2569.1</b>	<b>1271.3</b>	<b>197.7</b>	<b>91.7</b>	<b>352.1</b>	<b>217.4</b>	<b>62.2</b>	<b>20.5</b>	<b>251.1</b>	<b>109.5</b>
Natural sciences	427.4	237.3	372.4	212.3	13.0	6.0	32.0	15.0	5.0	3.0	5.0	1.0
Engineering and technology	1265.6	483.3	782.3	278.1	116.3	43.3	144.3	79.9	34.0	7.5	188.7	74.5
Medical and health sciences	487.0	277.0	443.3	249.8	25.8	16.8	18.0	10.5	-	-	-	-
Agricultural sciences	144.0	71.0	73.0	33.0	13.0	5.0	28.0	19.0	2.0	1.0	28.0	13.0
Social sciences	591.7	302.7	482.3	234.7	8.0	5.0	70.8	48.0	21.2	9.0	9.4	6.0
Humanities	516.5	339.0	415.9	263.4	21.6	15.6	59.0	45.0	-	-	20.0	15.0

## 2.2. Full-time and part-time employees engaged in R&D activities by sectors, fields of sciences and sex, expressed in full-time equivalent, 2015 (continued)

	Total		Researchers		Assistant-researchers		Technicians		Management		Other personnel	
	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Business sector</b>	<b>312.6</b>	<b>93.8</b>	<b>81.6</b>	<b>33.6</b>	<b>63.0</b>	<b>15.0</b>	<b>75.6</b>	<b>29.2</b>	<b>29.2</b>	<b>4.0</b>	<b>63.2</b>	<b>12.0</b>
Natural sciences	12.0	3.0	4.0	3.0	-	-	5.0	-	-	-	3.0	-
Engineering and technology	231.4	57.8	63.6	25.6	50.0	9.0	50.6	16.2	29.0	4.0	38.2	3.0
Agricultural sciences	67.0	31.0	14.0	5.0	11.0	4.0	20.0	13.0	-	-	22.0	9.0
Social sciences	2.2	2.0	-	-	2.0	2.0	-	-	0.2	-	-	-
<b>Government sector</b>	<b>224.0</b>	<b>129.0</b>	<b>63.0</b>	<b>43.0</b>	<b>25.0</b>	<b>12.0</b>	<b>27.0</b>	<b>22.0</b>	<b>2.0</b>	<b>1.0</b>	<b>107.0</b>	<b>51.0</b>
Engineering and technology	194.0	110.0	44.0	30.0	23.0	11.0	24.0	21.0	-	-	103.0	48.0
Agricultural sciences	30.0	19.0	19.0	13.0	2.0	1.0	3.0	1.0	2.0	1.0	4.0	3.0
<b>Tertiary education</b>	<b>2895.6</b>	<b>1487.5</b>	<b>2424.5</b>	<b>1194.7</b>	<b>109.7</b>	<b>64.7</b>	<b>249.5</b>	<b>166.2</b>	<b>31.0</b>	<b>15.5</b>	<b>80.9</b>	<b>46.5</b>
Natural sciences	415.4	234.3	368.4	209.3	13.0	6.0	27.0	15.0	5.0	3.0	2.0	1.0
Engineering and technology	840.2	315.5	674.7	222.5	43.3	23.3	69.7	42.7	5.0	3.5	47.5	23.5
Medical and health sciences	487.0	277.0	443.3	249.8	25.8	16.8	18.0	10.5	-	-	-	-
Agricultural sciences	47.0	21.0	40.0	15.0	-	-	5.0	5.0	-	-	2.0	1.0
Social sciences	589.5	300.7	482.3	234.7	6.0	3.0	70.8	48.0	21.0	9.0	9.4	6.0
Humanities	516.5	339.0	415.9	263.4	21.6	15.6	59.0	45.0	-	-	20.0	15.0
<b>Region Šumadije i Zapadne Srbije</b>	<b>1223.6</b>	<b>631.1</b>	<b>910.1</b>	<b>467.1</b>	<b>79.4</b>	<b>34.4</b>	<b>168.0</b>	<b>98.2</b>	<b>33.0</b>	<b>13.0</b>	<b>33.1</b>	<b>18.5</b>
Natural sciences	225.6	132.5	170.6	107.5	13.0	6.0	32.0	15.0	5.0	3.0	5.0	1.0
Engineering and technology	312.0	89.1	211.3	57.9	35.0	10.0	36.0	11.7	17.0	2.0	12.7	7.5
Medical and health sciences	134.1	77.4	103.4	60.2	12.8	6.8	18.0	10.5	-	-	-	-
Agricultural sciences	78.0	40.0	59.0	28.0	2.0	1.0	9.0	6.0	2.0	1.0	6.0	4.0
Social sciences	291.6	162.7	220.2	110.7	4.0	2.0	49.0	37.0	9.0	7.0	9.4	6.0
Humanities	182.3	129.4	145.7	102.8	12.6	8.6	24.0	18.0	-	-	-	-
<b>Business sector</b>	<b>120.0</b>	<b>32.8</b>	<b>30.3</b>	<b>11.6</b>	<b>30.0</b>	<b>8.0</b>	<b>39.5</b>	<b>11.2</b>	<b>17.0</b>	<b>2.0</b>	<b>3.2</b>	<b>-</b>
Natural sciences	12.0	3.0	4.0	3.0	-	-	5.0	-	-	-	3.0	-
Engineering and technology	107.0	29.8	26.3	8.6	30.0	8.0	33.5	11.2	17.0	2.0	0.2	-
Agricultural sciences	1.0	-	-	-	-	-	1.0	-	-	-	-	-
<b>Government sector</b>	<b>30.0</b>	<b>19.0</b>	<b>19.0</b>	<b>13.0</b>	<b>2.0</b>	<b>1.0</b>	<b>3.0</b>	<b>1.0</b>	<b>2.0</b>	<b>1.0</b>	<b>4.0</b>	<b>3.0</b>
Agricultural sciences	30.0	19.0	19.0	13.0	2.0	1.0	3.0	1.0	2.0	1.0	4.0	3.0
<b>Tertiary education</b>	<b>1073.6</b>	<b>579.3</b>	<b>860.8</b>	<b>442.5</b>	<b>47.4</b>	<b>25.4</b>	<b>125.5</b>	<b>86.0</b>	<b>14.0</b>	<b>10.0</b>	<b>25.9</b>	<b>15.5</b>
Natural sciences	213.6	129.5	166.6	104.5	13.0	6.0	27.0	15.0	5.0	3.0	2.0	1.0
Engineering and technology	205.0	59.3	185.0	49.3	5.0	2.0	2.5	0.5	-	-	12.5	7.5
Medical and health sciences	134.1	77.4	103.4	60.2	12.8	6.8	18.0	10.5	-	-	-	-
Agricultural sciences	47.0	21.0	40.0	15.0	-	-	5.0	5.0	-	-	2.0	1.0
Social sciences	291.6	162.7	220.2	110.7	4.0	2.0	49.0	37.0	9.0	7.0	9.4	6.0
Humanities	182.3	129.4	145.7	102.8	12.6	8.6	24.0	18.0	-	-	-	-
<b>Region Južne i Istočne Srbije</b>	<b>2208.6</b>	<b>1079.2</b>	<b>1659.0</b>	<b>804.2</b>	<b>118.3</b>	<b>57.3</b>	<b>184.1</b>	<b>119.2</b>	<b>29.2</b>	<b>7.5</b>	<b>218.0</b>	<b>91.0</b>
Natural sciences	201.8	104.8	201.8	104.8	-	-	-	-	-	-	-	-
Engineering and technology	953.6	394.2	571.0	220.2	81.3	33.3	108.3	68.2	17.0	5.5	176.0	67.0
Medical and health sciences	352.9	199.6	339.9	189.6	13.0	10.0	-	-	-	-	-	-
Agricultural sciences	66.0	31.0	14.0	5.0	11.0	4.0	19.0	13.0	-	-	22.0	9.0
Social sciences	300.1	140.0	262.1	124.0	4.0	3.0	21.8	11.0	12.2	2.0	-	-
Humanities	334.2	209.6	270.2	160.6	9.0	7.0	35.0	27.0	-	-	20.0	15.0
<b>Business sector</b>	<b>192.6</b>	<b>61.0</b>	<b>51.3</b>	<b>22.0</b>	<b>33.0</b>	<b>7.0</b>	<b>36.1</b>	<b>18.0</b>	<b>12.2</b>	<b>2.0</b>	<b>60.0</b>	<b>12.0</b>
Engineering and technology	124.4	28.0	37.3	17.0	20.0	1.0	17.1	5.0	12.0	2.0	38.0	3.0
Agricultural sciences	66.0	31.0	14.0	5.0	11.0	4.0	19.0	13.0	-	-	22.0	9.0
Social sciences	2.2	2.0	-	-	2.0	2.0	-	-	0.2	-	-	-
<b>Government sector</b>	<b>194.0</b>	<b>110.0</b>	<b>44.0</b>	<b>30.0</b>	<b>23.0</b>	<b>11.0</b>	<b>24.0</b>	<b>21.0</b>	<b>-</b>	<b>-</b>	<b>103.0</b>	<b>48.0</b>
Engineering and technology	194.0	110.0	44.0	30.0	23.0	11.0	24.0	21.0	-	-	103.0	48.0
<b>Tertiary education</b>	<b>1822.0</b>	<b>908.2</b>	<b>1563.7</b>	<b>752.2</b>	<b>62.3</b>	<b>39.3</b>	<b>124.0</b>	<b>80.2</b>	<b>17.0</b>	<b>5.5</b>	<b>55.0</b>	<b>31.0</b>
Natural sciences	201.8	104.8	201.8	104.8	-	-	-	-	-	-	-	-
Engineering and technology	635.2	256.2	489.7	173.2	38.3	21.3	67.2	42.2	5.0	3.5	35.0	16.0
Medical and health sciences	352.9	199.6	339.9	189.6	13.0	10.0	-	-	-	-	-	-
Social sciences	297.9	138.0	262.1	124.0	2.0	1.0	21.8	11.0	12.0	2.0	-	-
Humanities	334.2	209.6	270.2	160.6	9.0	7.0	35.0	27.0	-	-	20.0	15.0
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...	...	...	...	...

**3.1. Full-time and part-time researchers, by academic titles, sectors, field of science and sex, 2015**  
 (head count)

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>REPUBLIC OF SERBIA</b>	<b>16338</b>	<b>8044</b>	<b>10176</b>	<b>4862</b>	<b>1818</b>	<b>1037</b>	<b>352</b>	<b>180</b>	<b>3992</b>	<b>1965</b>
Natural sciences	4035	2061	2299	1224	437	274	118	91	1181	472
Engineering and technology	4314	1648	2454	855	320	138	190	66	1350	589
Medical and health sciences	2388	1422	1675	954	219	153	22	13	472	302
Agricultural sciences	1167	577	871	409	90	43	3	3	203	122
Social sciences	3022	1549	2045	961	469	279	14	4	494	305
Humanities	1412	787	832	459	283	150	5	3	292	175
<b>Business sector</b>	<b>1465</b>	<b>495</b>	<b>256</b>	<b>95</b>	<b>119</b>	<b>59</b>	<b>47</b>	<b>16</b>	<b>1043</b>	<b>325</b>
Natural sciences	640	151	40	14	46	22	-	-	554	115
Computer and information sciences	473	92	-	-	-	-	-	-	473	92
Chemical sciences	42	24	15	6	27	18	-	-	-	-
Earth and related environmental sciences	3	1	3	1	-	-	-	-	-	-
Other natural sciences	122	34	22	7	19	4	-	-	81	23
Engineering and technology	765	309	184	66	58	26	47	16	476	201
Civil engineering	3	1	-	-	-	-	-	-	3	1
Electrical engineering, electronic engineering and information engineering	269	91	62	15	32	13	14	5	161	58
Mechanical engineering	93	24	31	13	5	3	19	5	38	3
Chemical engineering	227	125	32	19	14	7	-	-	181	99
Materials engineering	51	22	23	10	2	-	8	3	18	9
Medical engineering	18	5	8	2	1	-	-	-	9	3
Environmental engineering	45	15	19	4	3	2	2	-	21	9
Environmental biotechnology	1	1	-	-	-	-	-	-	1	1
Other technologies and engineering	58	25	9	3	1	1	4	3	44	18
Agricultural sciences	24	8	15	4	7	4	-	-	2	-
Agriculture, forestry and fishery	3	2	-	-	2	2	-	-	1	-
Agricultural biotechnology	20	6	15	4	5	2	-	-	-	-
Other agricultural sciences	1	-	-	-	-	-	-	-	1	-
Social sciences	36	27	17	11	8	7	-	-	11	9
Economics and business	15	10	9	5	6	5	-	-	-	-
Other social sciences	21	17	8	6	2	2	-	-	11	9
<b>Government sector</b>	<b>3236</b>	<b>1851</b>	<b>2107</b>	<b>1160</b>	<b>549</b>	<b>352</b>	<b>189</b>	<b>121</b>	<b>391</b>	<b>218</b>
Natural sciences	1543	953	1001	593	228	175	115	89	199	96
Mathematics	262	149	186	89	76	60	-	-	-	-
Physical sciences	678	360	387	197	31	16	115	89	145	58
Earth and related environmental sciences	35	21	15	5	20	16	-	-	-	-
Biological sciences	404	336	305	255	80	70	-	-	19	11
Other natural sciences	164	87	108	47	21	13	-	-	35	27
Engineering and technology	603	275	359	152	90	38	72	30	82	55
Civil engineering	24	17	15	10	6	4	-	-	3	3
Electrical engineering, electronic engineering and information engineering	333	115	207	73	29	4	68	27	29	11
Materials engineering	41	20	22	8	9	4	-	-	10	8
Environmental biotechnology	115	66	71	37	26	14	1	1	17	14
Industrial biotechnology	29	18	20	10	2	1	2	2	5	5
Other technologies and engineering	61	39	24	14	18	11	1	-	18	14
Medical and health sciences	141	103	87	62	43	32	1	1	10	8
Basic medicine	45	30	30	20	15	10	-	-	-	-
Other medical sciences	96	73	57	42	28	22	1	1	10	8
Agricultural sciences	351	203	272	159	41	20	1	1	37	23
Agriculture, forestry and fishery	14	9	10	8	4	1	-	-	-	-
Veterinary sciences	51	27	35	19	16	8	-	-	-	-
Agricultural biotechnology	201	114	159	89	15	7	1	1	26	17
Other agricultural sciences	85	53	68	43	6	4	-	-	11	6
Social sciences	247	119	166	73	52	30	-	-	29	16
Psychology	37	19	29	14	1	-	-	-	7	5
Economics and business	49	27	27	12	15	11	-	-	7	4
Sociology	22	7	17	5	-	-	-	-	5	2
Law	26	16	14	8	10	8	-	-	2	-
Political science	85	28	58	16	24	10	-	-	3	2
Other social science	28	22	21	18	2	1	-	-	5	3
Humanities	351	198	222	121	95	57	-	-	34	20
History and archeology	175	75	119	51	37	15	-	-	19	9
Languages and literature	96	71	43	31	38	29	-	-	15	11
Art (art, history of arts, performing arts, music)	26	13	15	7	11	6	-	-	-	-
Other humanities	54	39	45	32	9	7	-	-	-	-
<b>Tertiary education</b>	<b>11630</b>	<b>5694</b>	<b>7812</b>	<b>3606</b>	<b>1144</b>	<b>623</b>	<b>116</b>	<b>43</b>	<b>2558</b>	<b>1422</b>
Natural sciences	1852	957	1258	617	163	77	3	2	428	261
Mathematics	946	523	604	323	27	13	2	1	313	186
Computer and information sciences	271	121	189	83	64	32	-	-	18	6
Physical sciences	82	25	60	17	22	8	-	-	-	-
Chemical sciences	144	74	118	58	12	7	-	-	14	9
Earth and related environmental sciences	94	51	60	29	6	3	-	-	28	19
Biological sciences	165	102	116	66	-	-	-	-	49	36
Other natural sciences	150	61	111	41	32	14	1	1	6	5
Engineering and technology	2942	1062	1911	637	168	72	71	20	792	333
Civil engineering	330	129	173	70	42	21	-	-	115	38
Electrical engineering, electronic engineering and information engineering	1300	381	770	212	73	25	-	-	457	144
Mechanical engineering	401	85	275	50	14	5	71	20	41	10
Chemical engineering	360	236	274	168	7	4	-	-	79	64
Environmental engineering	201	87	161	49	8	5	-	-	32	33
Other technologies and engineering	350	144	258	88	24	12	-	-	68	44



**3.1. Full-time and part-time researchers, by academic titles, sectors, field of science and sex, 2015**  
 (head count) (continued)

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
Medical and health sciences	2247	1319	1588	892	176	121	21	12	462	294
Basic medicine	1292	731	944	511	121	83	16	9	211	128
Other medical sciences	955	588	644	381	55	38	5	3	251	166
Agricultural sciences	792	366	584	246	42	19	2	2	164	99
Agriculture, forestry and fishery	374	167	267	110	28	12	1	1	78	44
Veterinary sciences	121	60	83	38	-	-	-	-	38	22
Agricultural biotechnology	23	4	20	3	3	1	-	-	-	-
Other agricultural sciences	274	135	214	95	11	6	1	1	48	33
Social sciences	2736	1401	1861	876	407	241	14	4	454	280
Psychology	81	46	58	25	-	-	-	-	23	21
Economics and business	875	439	633	275	92	64	-	-	150	100
Educational sciences	730	363	352	173	184	90	2	1	192	99
Law	384	152	315	113	10	7	10	3	49	29
Political sciences	137	61	88	32	41	24	2	-	6	5
Media and communications	33	20	27	17	6	3	-	-	-	-
Other social sciences	496	320	388	241	74	53	-	-	34	26
Humanities	1061	589	610	338	188	93	5	3	258	155
Languages and literature	362	244	214	139	53	28	-	-	95	77
Philosophy, ethics and religion	447	220	298	134	65	34	-	-	84	52
Art (arts, history of arts, performing arts, music)	199	102	59	43	67	31	5	3	68	25
Other humanities	53	23	39	22	3	-	-	-	11	1
<b>Non-profit sector</b>	<b>7</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>3</b>	-	-	-	-
Engineering and technology	4	2	-	-	4	2	-	-	-	-
Other technologies and engineering	4	2	-	-	4	2	-	-	-	-
Social sciences	3	2	1	1	2	1	-	-	-	-
Economic and business	2	1	1	1	1	-	-	-	-	-
Law	1	1	-	-	1	1	-	-	-	-
<b>SRBIJA – SEVER</b>	<b>13401</b>	<b>6587</b>	<b>8248</b>	<b>3968</b>	<b>1535</b>	<b>890</b>	<b>330</b>	<b>168</b>	<b>3288</b>	<b>1561</b>
Natural sciences	3658	1847	2048	1086	433	272	116	90	1061	399
Engineering and technology	3425	1328	1887	671	221	97	188	65	1129	495
Medical and health sciences	1754	1070	1209	697	205	146	6	4	334	223
Agricultural sciences	1094	544	812	381	83	40	3	3	196	120
Social sciences	2487	1279	1644	782	429	248	14	4	400	245
Humanities	983	519	648	351	164	87	3	2	168	79
<b>Business sector</b>	<b>1375</b>	<b>455</b>	<b>228</b>	<b>86</b>	<b>109</b>	<b>56</b>	<b>46</b>	<b>15</b>	<b>992</b>	<b>298</b>
Natural sciences	636	148	39	14	46	22	-	-	551	112
Computer and information sciences	473	92	-	-	-	-	-	-	473	92
Chemical sciences	42	24	15	6	27	18	-	-	-	-
Earth and related environmental sciences	3	1	3	1	-	-	-	-	-	-
Other natural sciences	118	31	21	7	19	4	-	-	78	20
Engineering and technology	693	277	167	60	52	25	46	15	428	177
Civil engineering	3	1	-	-	-	-	-	-	3	1
Electrical engineering, electronic engineering and information engineering	239	80	54	11	28	13	14	5	143	51
Mechanical engineering	93	24	31	13	5	3	19	5	38	3
Chemical engineering	227	125	32	19	14	7	-	-	181	99
Materials engineering	49	21	23	10	2	-	8	3	16	8
Environmental engineering	45	15	19	4	3	2	2	-	21	9
Environmental biotechnology	1	1	-	-	-	-	-	-	1	1
Other technologies and engineering	36	10	8	3	-	-	3	2	25	5
Agricultural sciences	10	3	5	1	3	2	-	-	2	-
Agriculture, forestry and fisheries	3	2	-	-	2	2	-	-	1	-
Agricultural biotechnology	6	1	5	1	1	-	-	-	-	-
Other agricultural sciences	1	-	-	-	-	-	-	-	1	-
Social sciences	36	27	17	11	8	7	-	-	11	9
Economics and business	15	10	9	5	6	5	-	-	-	-
Other social sciences	21	17	8	6	2	2	-	-	11	9
<b>Government sector</b>	<b>3173</b>	<b>1808</b>	<b>2075</b>	<b>1139</b>	<b>537</b>	<b>344</b>	<b>188</b>	<b>121</b>	<b>373</b>	<b>204</b>
Natural sciences	1543	953	1001	593	228	175	115	89	199	96
Mathematics	262	149	186	89	76	60	-	-	-	-
Physical sciences	678	360	387	197	31	16	115	89	145	58
Earth and related environmental sciences	35	21	15	5	20	16	-	-	-	-
Biological sciences	404	336	305	255	80	70	-	-	19	11
Other natural sciences	164	87	108	47	21	13	-	-	35	27
Engineering and technology	559	245	345	143	79	31	71	30	64	41
Civil engineering	24	17	15	10	6	4	-	-	3	3
Electrical engineering, electronic engineering and information engineering	333	115	207	73	29	4	68	27	29	11
Materials engineering	41	20	22	8	9	4	-	-	10	8
Environmental biotechnology	115	66	71	37	26	14	1	1	17	14
Industrial biotechnology	29	18	20	10	2	1	2	2	5	5
Other technologies and engineering	17	9	10	5	7	4	-	-	-	-
Medical and health sciences	141	103	87	62	43	32	1	1	10	8
Basic medicines	45	30	30	20	15	10	-	-	-	-
Other medical science	96	73	57	42	28	22	1	1	10	8
Agricultural sciences	332	190	254	147	40	19	1	1	37	23
Agriculture, forestry and fisheries	14	9	10	8	4	1	-	-	-	-
Veterinary sciences	51	27	35	19	16	8	-	-	-	-
Agricultural biotechnology	201	114	159	89	15	7	1	1	26	17
Other agricultural sciences	66	40	50	31	5	3	-	-	11	6
Social sciences	247	119	166	73	52	30	-	-	29	16
Psychology	37	19	29	14	1	-	-	-	7	5
Economics and business	49	27	27	12	15	11	-	-	7	4
Sociology	22	7	17	5	-	-	-	-	5	2
Law	26	16	14	8	10	8	-	-	2	-

### 3.1. Full-time and part-time researchers, by academic titles, sectors, field of science and sex, 2015 (head count) (continued)

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
Political sciences	85	28	58	16	24	10	-	-	3	2
Other social sciences	28	22	21	18	2	1	-	-	5	3
Humanities	351	198	222	121	95	57	-	-	34	20
History and archeology	175	75	119	51	37	15	-	-	19	9
Languages and literature	96	71	43	31	38	29	-	-	15	11
Arts (arts, history of arts, performing arts, music)	26	13	15	7	11	6	-	-	-	-
Other humanities	54	39	45	32	9	7	-	-	-	-
<b>Tertiary education</b>	<b>8846</b>	<b>4320</b>	<b>5944</b>	<b>2742</b>	<b>883</b>	<b>487</b>	<b>96</b>	<b>32</b>	<b>1923</b>	<b>1059</b>
Natural sciences	1479	746	1008	479	159	75	1	1	311	191
Mathematics	573	312	354	185	23	11	-	-	196	116
Computer and information sciences	271	121	189	83	64	32	-	-	18	6
Physical sciences	82	25	60	17	22	8	-	-	-	-
Chemical sciences	144	74	118	58	12	7	-	-	14	9
Earth and related environmental sciences	94	51	60	29	6	3	-	-	28	19
Biological sciences	165	102	116	66	-	-	-	-	49	36
Other natural sciences	150	61	111	41	32	14	1	1	6	5
Engineering and technology	2169	804	1375	468	86	39	71	20	637	277
Civil engineering	245	92	134	55	11	5	-	-	100	32
Electrical engineering, electronic engineering and information engineering	1000	294	540	138	54	20	-	-	406	136
Mechanical engineering	249	58	176	36	2	2	71	20	-	-
Chemical engineering	307	214	231	151	5	4	-	-	71	59
Environmental engineering	146	62	123	32	-	-	-	-	23	30
Other technologies and engineering	222	84	171	56	14	8	-	-	37	20
Medical and health sciences	1613	967	1122	635	162	114	5	3	324	215
Basic medicine	658	379	478	254	107	76	-	-	73	49
Other medical sciences	955	588	644	381	55	38	5	3	251	166
Agricultural sciences	752	351	553	233	40	19	2	2	157	97
Agriculture, forestry and fisheries	334	152	236	97	26	12	1	1	71	42
Veterinary sciences	121	60	83	38	-	-	-	-	38	22
Agricultural biotechnology	23	4	20	3	3	1	-	-	-	-
Other agricultural sciences	274	135	214	95	11	6	1	1	48	33
Social sciences	2201	1131	1460	697	367	210	14	4	360	220
Psychology	81	46	58	25	-	-	-	-	23	21
Economics and business	627	307	448	190	70	44	-	-	109	73
Educational sciences	600	298	256	130	176	85	2	1	166	82
Law	279	117	226	85	8	6	10	3	35	23
Political sciences	137	61	88	32	41	24	2	-	6	5
Media and communications	33	20	27	17	6	3	-	-	-	-
Other social sciences	444	282	357	218	66	48	-	-	21	16
Humanities	632	321	426	230	69	30	3	2	134	59
Languages and literature	210	138	172	113	3	3	-	-	35	22
Philosophy, ethics and religion	276	108	180	67	53	22	-	-	43	19
Arts (arts, history of arts, performing arts, music)	93	52	35	28	10	5	3	2	45	17
Other humanities	53	23	39	22	3	-	-	-	11	1
<b>Non-profit sector</b>	<b>7</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>3</b>	-	-	-	-
Engineering and technology	4	2	-	-	4	2	-	-	-	-
Other technologies and engineering	4	2	-	-	4	2	-	-	-	-
Social sciences	3	2	1	1	2	1	-	-	-	-
Economics and business	2	1	1	1	1	-	-	-	-	-
Law	1	1	-	-	1	1	-	-	-	-
<b>Beogradski region</b>	<b>9142</b>	<b>4632</b>	<b>5976</b>	<b>2887</b>	<b>1167</b>	<b>692</b>	<b>312</b>	<b>160</b>	<b>1687</b>	<b>893</b>
Natural sciences	2764	1501	1754	914	421	267	116	90	473	230
Engineering and technology	2106	817	1213	431	135	61	187	64	571	261
Medical and earth sciences	1105	691	767	453	165	115	1	1	172	122
Agricultural sciences	748	384	560	277	58	25	3	3	127	79
Social sciences	1478	736	1063	476	226	137	2	-	187	123
Humanities	941	503	619	336	162	87	3	2	157	78
<b>Business sector</b>	<b>768</b>	<b>309</b>	<b>218</b>	<b>86</b>	<b>100</b>	<b>53</b>	<b>46</b>	<b>15</b>	<b>404</b>	<b>155</b>
Natural sciences	180	66	39	14	46	22	-	-	95	30
Computer and information sciences	17	10	-	-	-	-	-	-	17	10
Chemical sciences	42	24	15	6	27	18	-	-	-	-
Earth and related environmental sciences	3	1	3	1	-	-	-	-	-	-
Other natural sciences	118	31	21	7	19	4	-	-	78	20
Engineering and technology	545	213	160	60	43	22	46	15	296	116
Civil engineering	3	1	-	-	-	-	-	-	3	1
Electrical engineering, electronic engineering and information engineering	239	80	54	11	28	13	14	5	143	51
Mechanical engineering	91	24	31	13	5	3	19	5	36	3
Chemical engineering	83	61	26	19	5	4	-	-	52	38
Materials engineering	47	21	22	10	2	-	8	3	15	8
Environmental engineering	45	15	19	4	3	2	2	-	21	9
Environmental biotechnology	1	1	-	-	-	-	-	-	1	1
Other technologies and engineering	36	10	8	3	-	-	3	2	25	5
Agricultural sciences	7	3	2	1	3	2	-	-	2	-
Agriculture, forestry and fisheries	3	2	-	-	2	2	-	-	1	-
Agricultural biotechnology	3	1	2	1	1	-	-	-	-	-
Other agricultural sciences	1	-	-	-	-	-	-	-	1	-
Social science	36	27	17	11	8	7	-	-	11	9
Economics and business	15	10	9	5	6	5	-	-	-	-
Other social sciences	21	17	8	6	2	2	-	-	11	9



**3.1. Full-time and part-time researchers, by academic titles, sectors, field of science and sex, 2015**  
 (head count) (continued)

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Government sector</b>	<b>2947</b>	<b>1687</b>	<b>1905</b>	<b>1055</b>	<b>497</b>	<b>321</b>	<b>187</b>	<b>120</b>	<b>358</b>	<b>191</b>
Natural sciences	1543	953	1001	593	228	175	115	89	199	96
Mathematics	262	149	186	89	76	60	-	-	-	-
Physical sciences	678	360	387	197	31	16	115	89	145	58
Earth and environmental sciences	35	21	15	5	20	16	-	-	-	-
Biological sciences	404	336	305	255	80	70	-	-	19	11
Other natural sciences	164	87	108	47	21	13	-	-	35	27
Engineering and technology	461	189	277	108	59	20	70	29	55	32
Civil engineering	24	17	15	10	6	4	-	-	3	3
Electrical engineering, electronic engineering and information engineering	333	115	207	73	29	4	68	27	29	11
Materials engineering	41	20	22	8	9	4	-	-	10	8
Environmental biotechnology	34	19	13	7	13	7	-	-	8	5
Industrial biotechnology	29	18	20	10	2	1	2	2	5	5
Medical and health sciences	141	103	87	62	43	32	1	1	10	8
Basic medicine	45	30	30	20	15	10	-	-	-	-
Other medical sciences	96	73	57	42	28	22	1	1	10	8
Agricultural sciences	204	125	152	98	20	7	1	1	31	19
Agriculture, forestry and fisheries	14	9	10	8	4	1	-	-	-	-
Veterinary science	18	10	12	8	6	2	-	-	-	-
Agricultural biotechnology	106	66	80	51	5	1	1	1	20	13
Other agricultural sciences	66	40	50	31	5	3	-	-	11	6
Social sciences	247	119	166	73	52	30	-	-	29	16
Psychology	37	19	29	14	1	-	-	-	7	5
Economics and business	49	27	27	12	15	11	-	-	7	4
Sociology	22	7	17	5	-	-	-	-	5	2
Law	26	16	14	8	10	8	-	-	2	-
Political sciences	85	28	58	16	24	10	-	-	3	2
Other social sciences	28	22	21	18	2	1	-	-	5	3
Humanities	351	198	222	121	95	57	-	-	34	20
History and archeology	175	75	119	51	37	15	-	-	19	9
Languages and literature	96	71	43	31	38	29	-	-	15	11
Arts (arts, history of arts, performing arts, music)	26	13	15	7	11	6	-	-	-	-
Other humanities	54	39	45	32	9	7	-	-	-	-
<b>Tertiary education</b>	<b>5420</b>	<b>2632</b>	<b>3852</b>	<b>1745</b>	<b>564</b>	<b>315</b>	<b>79</b>	<b>25</b>	<b>925</b>	<b>547</b>
Natural sciences	1041	482	714	307	147	70	1	1	179	104
Mathematics	179	75	89	29	13	6	-	-	77	40
Computer and information engineering	271	121	189	83	64	32	-	-	18	6
Physical sciences	82	25	60	17	22	8	-	-	-	-
Chemical sciences	144	74	118	58	12	7	-	-	14	9
Earth and environmental sciences	50	24	31	13	4	3	-	-	15	8
Biological sciences	165	102	116	66	-	-	-	-	49	36
Other natural sciences	150	61	111	41	32	14	1	1	6	5
Engineering and technology	1096	413	776	263	29	17	71	20	220	113
Civil engineering	208	80	134	55	4	2	-	-	70	23
Electrical engineering, electronic engineering and information engineering	187	45	111	23	10	6	-	-	66	16
Mechanical engineering	249	58	176	36	2	2	71	20	-	-
Chemical engineering	152	103	123	77	3	2	-	-	26	24
Environmental engineering	146	62	123	32	-	-	-	-	23	30
Other technologies and engineering	154	65	109	40	10	5	-	-	35	20
Medical and health sciences	964	588	680	391	122	83	-	-	162	114
Basic medicine	658	379	478	254	107	76	-	-	73	49
Other medical sciences	306	209	202	137	15	7	-	-	89	65
Agricultural sciences	537	256	406	178	35	16	2	2	94	60
Agriculture, forestry and fisheries	119	57	89	42	21	9	1	1	8	5
Veterinary science	121	60	83	38	-	-	-	-	38	22
Agricultural biotechnology	23	4	20	3	3	1	-	-	-	-
Other agricultural sciences	274	135	214	95	11	6	1	1	48	33
Social sciences	1192	588	879	391	164	99	2	-	147	98
Economics and business	473	232	351	154	53	34	-	-	69	44
Educational sciences	231	112	156	70	45	22	-	-	30	20
Law	166	71	137	52	8	6	-	-	21	13
Political sciences	137	61	88	32	41	24	2	-	6	5
Media and communications	33	20	27	17	6	3	-	-	-	-
Other social sciences	152	92	120	66	11	10	-	-	21	16
Humanities	590	305	397	215	67	30	3	2	123	58
Languages and literature	210	138	172	113	3	3	-	-	35	22
Philosophy, ethics and religion	276	108	180	67	53	22	-	-	43	19
Arts (arts, history of arts, performing arts, music)	93	52	35	28	10	5	3	2	45	17
Other humanities	11	7	10	7	1	-	-	-	-	-
<b>Non-profit sector</b>	<b>7</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Engineering and technology	4	2	-	-	4	2	-	-	-	-
Other technologies and engineering	4	2	-	-	4	2	-	-	-	-
Social sciences	3	2	1	1	2	1	-	-	-	-
Economics and business	2	1	1	1	1	-	-	-	-	-
Law	1	1	-	-	1	1	-	-	-	-
<b>Region Vojvodine</b>	<b>4259</b>	<b>1955</b>	<b>2272</b>	<b>1081</b>	<b>368</b>	<b>198</b>	<b>18</b>	<b>8</b>	<b>1601</b>	<b>668</b>
Natural sciences	894	346	294	172	12	5	-	-	588	169
Engineering and technology	1319	511	674	240	86	36	1	1	558	234
Medical and health sciences	649	379	442	244	40	31	5	3	162	101
Agricultural sciences	346	160	252	104	25	15	-	-	69	41
Social sciences	1009	543	581	306	203	111	12	4	213	122
Humanities	42	16	29	15	2	-	-	-	11	1

### 3.1. Full-time and part-time researchers, by academic titles, sectors, field of science and sex, 2015 (head count) (continued)

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Business sector</b>	<b>607</b>	<b>146</b>	<b>10</b>	-	<b>9</b>	<b>3</b>	-	-	<b>588</b>	<b>143</b>
Natural sciences	456	82	-	-	-	-	-	-	456	82
Computer and information sciences	456	82	-	-	-	-	-	-	456	82
Engineering and technology	148	64	7	-	9	3	-	-	132	61
Mechanical engineering	2	-	-	-	-	-	-	-	2	-
Chemical engineering	144	64	6	-	9	3	-	-	129	61
Materials engineering	2	-	1	-	-	-	-	-	1	-
Agricultural sciences	3	-	3	-	-	-	-	-	-	-
Agricultural biotechnology	3	-	3	-	-	-	-	-	-	-
<b>Government sector</b>	<b>226</b>	<b>121</b>	<b>170</b>	<b>84</b>	<b>40</b>	<b>23</b>	<b>1</b>	<b>1</b>	<b>15</b>	<b>13</b>
Engineering and technology	98	56	68	35	20	11	1	1	9	9
Environmental biotechnology	81	47	58	30	13	7	1	1	9	9
Other technologies and engineering	17	9	10	5	7	4	-	-	-	-
Agricultural sciences	128	65	102	49	20	12	-	-	6	4
Veterinary sciences	33	17	23	11	10	6	-	-	-	-
Agricultural biotechnology	95	48	79	38	10	6	-	-	6	4
<b>Tertiary education</b>	<b>3426</b>	<b>1688</b>	<b>2092</b>	<b>997</b>	<b>319</b>	<b>172</b>	<b>17</b>	<b>7</b>	<b>998</b>	<b>512</b>
Natural sciences	438	264	294	172	12	5	-	-	132	87
Mathematics	394	237	265	156	10	5	-	-	119	76
Earth and related environmental sciences	44	27	29	16	2	-	-	-	13	11
Engineering and technology	1073	391	599	205	57	22	-	-	417	164
Civil engineering	37	12	-	-	7	3	-	-	30	9
Electrical engineering, electronic engineering and information engineering	813	249	429	115	44	14	-	-	340	120
Chemical engineering	155	111	108	74	2	2	-	-	45	35
Other technologies and engineering	68	19	62	16	4	3	-	-	2	-
Medical and health sciences	649	379	442	244	40	31	5	3	162	101
Other medical sciences	649	379	442	244	40	31	5	3	162	101
Agricultural sciences	215	95	147	55	5	3	-	-	63	37
Agriculture, forestry and fisheries	215	95	147	55	5	3	-	-	63	37
Social sciences	1009	543	581	306	203	111	12	4	213	122
Psychology	81	46	58	25	-	-	-	-	23	21
Economics and business	154	75	97	36	17	10	-	-	40	29
Educational sciences	369	186	100	60	131	63	2	1	136	62
Law	113	46	89	33	-	-	10	3	14	10
Other social sciences	292	190	237	152	55	38	-	-	-	-
Humanities	42	16	29	15	2	-	-	-	11	1
Other humanities	42	16	29	15	2	-	-	-	11	1
<b>SRBIJA – JUG</b>	<b>2937</b>	<b>1457</b>	<b>1928</b>	<b>894</b>	<b>283</b>	<b>147</b>	<b>22</b>	<b>12</b>	<b>704</b>	<b>404</b>
Natural sciences	377	214	251	138	4	2	2	1	120	73
Engineering and technology	889	320	567	184	99	41	2	1	221	94
Medical and health sciences	634	352	466	257	14	7	16	9	138	79
Agricultural sciences	73	33	59	28	7	3	-	-	7	2
Social sciences	535	270	401	179	40	31	-	-	94	60
Humanities	429	268	184	108	119	63	2	1	124	96
<b>Business sector</b>	<b>90</b>	<b>40</b>	<b>28</b>	<b>9</b>	<b>10</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>51</b>	<b>27</b>
Natural sciences	4	3	1	-	-	-	-	-	3	3
Other natural sciences	4	3	1	-	-	-	-	-	3	3
Engineering and technology	72	32	17	6	6	1	1	1	48	24
Electrical engineering, electronic engineering and information engineering	30	11	8	4	4	-	-	-	18	7
Materials engineering	2	1	-	-	-	-	-	-	2	1
Medical engineering	18	5	8	2	1	-	-	-	9	3
Other technologies and engineering	22	15	1	-	1	1	1	1	19	13
Agricultural sciences	14	5	10	3	4	2	-	-	-	-
Agricultural biotechnology	14	5	10	3	4	2	-	-	-	-
<b>Government sector</b>	<b>63</b>	<b>43</b>	<b>32</b>	<b>21</b>	<b>12</b>	<b>8</b>	<b>1</b>	-	<b>18</b>	<b>14</b>
Engineering and technology	44	30	14	9	11	7	1	-	18	14
Other technologies and engineering	44	30	14	9	11	7	1	-	18	14
Agricultural sciences	19	13	18	12	1	1	-	-	-	-
Other agricultural sciences	19	13	18	12	1	1	-	-	-	-
<b>Tertiary education</b>	<b>2784</b>	<b>1374</b>	<b>1868</b>	<b>864</b>	<b>261</b>	<b>136</b>	<b>20</b>	<b>11</b>	<b>635</b>	<b>363</b>
Natural sciences	373	211	250	138	4	2	2	1	117	70
Mathematics	373	211	250	138	4	2	2	1	117	70
Engineering and technology	773	258	536	169	82	33	-	-	155	56
Civil engineering	85	37	39	15	31	16	-	-	15	6
Electrical engineering, electronic engineering and information engineering	300	87	230	74	19	5	-	-	51	8
Mechanical engineering	152	27	99	14	12	3	-	-	41	10
Chemical engineering	53	22	43	17	2	-	-	-	8	5
Environmental engineering	55	25	38	17	8	5	-	-	9	3
Other technologies and engineering	128	60	87	32	10	4	-	-	31	24
Medical and health sciences	634	352	466	257	14	7	16	9	138	79
Basic medicine	634	352	466	257	14	7	16	9	138	79
Agricultural sciences	40	15	31	13	2	-	-	-	7	2
Agriculture, forestry and fisheries	40	15	31	13	2	-	-	-	7	2
Social sciences	535	270	401	179	40	31	-	-	94	60
Economics and business	248	132	185	85	22	20	-	-	41	27
Educational sciences	130	65	96	43	8	5	-	-	26	17
Law	105	35	89	28	2	1	-	-	14	6
Other social sciences	52	38	31	23	8	5	-	-	13	10
Humanities	429	268	184	108	119	63	2	1	124	96
Languages and literature	152	106	42	26	50	25	-	-	60	55
Philosophy, ethics and religion	171	112	118	67	12	12	-	-	41	33
Arts (arts, history of arts, performing arts, music)	106	50	24	15	57	26	2	1	23	8

**3.1. Full-time and part-time researchers, by academic titles, sectors, field of science and sex, 2015**  
 (head count) (continued)

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Region Šumadije i Zapadne Srbije</b>	<b>1212</b>	<b>622</b>	<b>736</b>	<b>350</b>	<b>100</b>	<b>52</b>	<b>16</b>	<b>9</b>	<b>360</b>	<b>211</b>
Natural sciences	175	109	111	65	3	2	-	-	61	42
Engineering and technology	282	86	176	50	18	8	-	-	88	28
Medical and health sciences	292	161	173	92	9	5	16	9	94	55
Agricultural sciences	59	28	49	25	3	1	-	-	7	2
Social sciences	252	132	185	92	17	11	-	-	50	29
Humanities	152	106	42	26	50	25	-	-	60	55
<b>Business sector</b>	<b>38</b>	<b>18</b>	<b>9</b>	<b>2</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>28</b>	<b>16</b>
Natural sciences	4	3	1	-	-	-	-	-	3	3
Other natural sciences	4	3	1	-	-	-	-	-	3	3
Engineering and technology	34	15	8	2	1	-	-	-	25	13
Materials engineering	2	1	-	-	-	-	-	-	2	1
Medical engineering	18	5	8	2	1	-	-	-	9	3
Other technologies and engineering	14	9	-	-	-	-	-	-	14	9
<b>Government sector</b>	<b>19</b>	<b>13</b>	<b>18</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Agricultural sciences	19	13	18	12	1	1	-	-	-	-
Other agricultural sciences	19	13	18	12	1	1	-	-	-	-
<b>Tertiary education</b>	<b>1155</b>	<b>591</b>	<b>709</b>	<b>336</b>	<b>98</b>	<b>51</b>	<b>16</b>	<b>9</b>	<b>332</b>	<b>195</b>
Natural sciences	171	106	110	65	3	2	-	-	58	39
Mathematics	171	106	110	65	3	2	-	-	58	39
Engineering and technology	248	71	168	48	17	8	-	-	63	15
Electrical engineering, electronic engineering and information engineering	158	44	116	36	5	2	-	-	37	6
Mechanical engineering	49	9	27	2	5	2	-	-	17	5
Other technologies and engineering	41	18	25	10	7	4	-	-	9	4
Medical and health sciences	292	161	173	92	9	5	16	9	94	55
Basic medicine	292	161	173	92	9	5	16	9	94	55
Agricultural sciences	40	15	31	13	2	-	-	-	7	2
Agriculture, forestry and fisheries	40	15	31	13	2	-	-	-	7	2
Social sciences	252	132	185	92	17	11	-	-	50	29
Economic and business	128	63	95	43	4	4	-	-	29	16
Educational sciences	43	24	33	19	4	2	-	-	6	3
Law	29	7	26	7	1	-	-	-	2	-
Other social sciences	52	38	31	23	8	5	-	-	13	10
Humanities	152	106	42	26	50	25	-	-	60	55
Languages and literature	152	106	42	26	50	25	-	-	60	55
<b>Region Južne i Istočne Srbije</b>	<b>1725</b>	<b>835</b>	<b>1192</b>	<b>544</b>	<b>183</b>	<b>95</b>	<b>6</b>	<b>3</b>	<b>344</b>	<b>193</b>
Natural sciences	202	105	140	73	1	-	2	1	59	31
Engineering and technology	607	234	391	134	81	33	2	1	133	66
Medical and health sciences	342	191	293	165	5	2	-	-	44	24
Agricultural sciences	14	5	10	3	4	2	-	-	-	-
Social sciences	283	138	216	87	23	20	-	-	44	31
Humanities	277	162	142	82	69	38	2	1	64	41
<b>Business sector</b>	<b>52</b>	<b>22</b>	<b>19</b>	<b>7</b>	<b>9</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>23</b>	<b>11</b>
Engineering and technologies	38	17	9	4	5	1	1	1	23	11
Electrical engineering, electronic engineering and information engineering	30	11	8	4	4	-	-	-	18	7
Other technologies and engineering	8	6	1	-	1	1	1	1	5	4
Agricultural sciences	14	5	10	3	4	2	-	-	-	-
Agricultural biotechnology	14	5	10	3	4	2	-	-	-	-
<b>Government sector</b>	<b>44</b>	<b>30</b>	<b>14</b>	<b>9</b>	<b>11</b>	<b>7</b>	<b>1</b>	<b>-</b>	<b>18</b>	<b>14</b>
Engineering and technology	44	30	14	9	11	7	1	-	18	14
Other technology and engineering	44	30	14	9	11	7	1	-	18	14
<b>Tertiary education</b>	<b>1629</b>	<b>783</b>	<b>1159</b>	<b>528</b>	<b>163</b>	<b>85</b>	<b>4</b>	<b>2</b>	<b>303</b>	<b>168</b>
Natural sciences	202	105	140	73	1	-	2	1	59	31
Mathematics	202	105	140	73	1	-	2	1	59	31
Engineering and technology	525	187	368	121	65	25	-	-	92	41
Civil engineering	85	37	39	15	31	16	-	-	15	6
Electrical engineering, electronic engineering and information engineering	142	43	114	38	14	3	-	-	14	2
Mechanical engineering	103	18	72	12	7	1	-	-	24	5
Chemical engineering	53	22	43	17	2	-	-	-	8	5
Environmental engineering	55	25	38	17	8	5	-	-	9	3
Other technologies and engineering	87	42	62	22	3	-	-	-	22	20
Medical and health sciences	342	191	293	165	5	2	-	-	44	24
Basic medicines	342	191	293	165	5	2	-	-	44	24
Social sciences	283	138	216	87	23	20	-	-	44	31
Economics and business	120	69	90	42	18	16	-	-	12	11
Educational sciences	87	41	63	24	4	3	-	-	20	14
Law	76	28	63	21	1	1	-	-	12	6
Humanities	277	162	142	82	69	38	2	1	64	41
Philosophy, ethics and religion	171	112	118	67	12	12	-	-	41	33
Arts (arts, history of arts, performing arts, music)	106	50	24	15	57	26	2	1	23	8
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...	...	...

### 3.2. Full-time and part-time researchers, by academic titles, sectors, fields of science and sex, expressed in full-time equivalent, 2015

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>REPUBLIC OF SERBIA</b>	<b>14656.7</b>	<b>7201.2</b>	<b>9010.6</b>	<b>4290.6</b>	<b>1711.8</b>	<b>983.1</b>	<b>287.7</b>	<b>152.9</b>	<b>3646.6</b>	<b>1774.6</b>
Natural sciences	3832.2	1976.5	2145.1	1160.5	424.5	270.0	118.0	91.0	1144.6	455.0
Engineering and technology	3902.1	1489.8	2174.8	749.5	300.8	130.7	143.2	47.1	1283.3	562.5
Medical and health sciences	1680.1	1002.5	1179.4	665.1	170.1	121.6	10.0	6.3	320.6	209.6
Agricultural sciences	1127.3	558.4	835.9	392.7	90.0	43.0	3.0	3.0	198.4	119.7
Social sciences	2748.7	1403.8	1858.1	872.5	442.3	261.5	8.5	2.5	439.8	267.3
Humanities	1366.3	770.2	817.3	450.4	284.1	156.3	5.0	3.0	259.9	160.5
<b>Business sector</b>	<b>1405.5</b>	<b>478.0</b>	<b>245.3</b>	<b>90.1</b>	<b>117.3</b>	<b>58.6</b>	<b>47.0</b>	<b>16.0</b>	<b>996.0</b>	<b>313.3</b>
Natural sciences	627.9	150.2	39.1	13.7	46.0	22.0	-	-	542.8	114.5
Computer and information sciences	461.8	91.5	-	-	-	-	-	-	461.8	91.5
Chemical sciences	42.0	24.0	15.0	6.0	27.0	18.0	-	-	-	-
Earth and related environmental sciences	2.1	0.7	2.1	0.7	-	-	-	-	-	-
Other natural sciences	122.0	34.0	22.0	7.0	19.0	4.0	-	-	81.0	23.0
Engineering and technology	721.8	296.6	176.6	63.6	56.7	26.0	47.0	16.0	441.6	191.0
Civil engineering	3.0	1.0	-	-	-	-	-	-	3.0	1.0
Electrical engineering, electronic engineering and information engineering	248.0	85.5	50.5	13.6	30.7	13.0	14.0	5.0	152.8	53.9
Mechanical engineering	79.9	23.5	31.0	13.0	5.0	3.0	19.0	5.0	24.9	2.5
Chemical engineering	227.0	125.0	32.0	19.0	14.0	7.0	-	-	181.0	99.0
Materials engineering	50.4	22.0	22.9	10.0	2.0	-	8.0	3.0	17.5	9.0
Medical engineering	21.6	5.9	12.2	1.0	1.0	-	-	-	8.4	4.9
Environmental engineering	45.0	15.0	19.0	4.0	3.0	2.0	2.0	-	21.0	9.0
Environmental biotechnology	1.0	1.0	-	-	-	-	-	-	1.0	1.0
Other technologies and engineering	46.0	17.7	9.0	3.0	1.0	1.0	4.0	3.0	32.0	10.7
Agricultural sciences	24.0	8.0	15.0	4.0	7.0	4.0	-	-	2.0	-
Agriculture, forestry and fisheries	3.0	2.0	-	-	2.0	2.0	-	-	1.0	-
Agricultural biotechnology	20.0	6.0	15.0	4.0	5.0	2.0	-	-	-	-
Other agricultural sciences	1.0	-	-	-	-	-	-	-	1.0	-
Social sciences	31.8	23.2	14.6	8.8	7.6	6.6	-	-	9.6	7.8
Economics and business	14.0	9.0	8.0	4.0	6.0	5.0	-	-	-	-
Other social sciences	17.8	14.2	6.6	4.8	1.6	1.6	-	-	9.6	7.8
<b>Government sector</b>	<b>3048.9</b>	<b>1767.4</b>	<b>1978.6</b>	<b>1101.2</b>	<b>542.3</b>	<b>348.8</b>	<b>142.2</b>	<b>102.1</b>	<b>385.8</b>	<b>215.3</b>
Natural sciences	1527.4	946.4	986.0	586.8	228.0	175.0	115.0	89.0	198.4	95.6
Mathematics	256.2	147.2	180.2	87.2	76.0	60.0	-	-	-	-
Physical sciences	677.1	359.4	386.1	196.4	31.0	16.0	115.0	89.0	145.0	58.0
Earth and related environmental sciences	34.2	21.0	14.2	5.0	20.0	16.0	-	-	-	-
Biological sciences	399.2	333.3	300.8	252.7	80.0	70.0	-	-	18.4	10.6
Other natural sciences	160.8	85.5	104.8	45.5	21.0	13.0	-	-	35.0	27.0
Engineering and technology	451.7	211.5	259.2	108.8	87.4	37.3	25.2	11.1	79.9	54.3
Civil engineering	24.0	17.0	15.0	10.0	6.0	4.0	-	-	3.0	3.0
Electrical engineering, electronic engineering and information engineering	182.3	51.5	107.8	29.8	26.4	3.3	21.2	8.1	26.9	10.3
Materials engineering	41.0	20.0	22.0	8.0	9.0	4.0	-	-	10.0	8.0
Environmental technology	114.4	66.0	70.4	37.0	26.0	14.0	1.0	1.0	17.0	14.0
Industrial biotechnology	29.0	18.0	20.0	10.0	2.0	1.0	2.0	2.0	5.0	5.0
Other technologies and engineering	61.0	39.0	24.0	14.0	18.0	11.0	1.0	-	18.0	14.0
Medical and health sciences	126.3	93.2	78.9	56.3	38.9	29.5	1.0	1.0	7.5	6.4
Basic medicine	45.0	30.0	30.0	20.0	15.0	10.0	-	-	-	-
Other medical sciences	81.3	63.2	48.9	36.3	23.9	19.5	1.0	1.0	7.5	6.4
Agricultural sciences	350.5	202.5	271.5	158.5	41.0	20.0	1.0	1.0	37.0	23.0
Agriculture, forestry and fisheries	13.5	8.5	9.5	7.5	4.0	1.0	-	-	-	-
Veterinary	51.0	27.0	35.0	19.0	16.0	8.0	-	-	-	-
Agricultural biotechnology	201.0	114.0	159.0	89.0	15.0	7.0	1.0	1.0	26.0	17.0
Other agricultural sciences	85.0	53.0	68.0	43.0	6.0	4.0	-	-	11.0	6.0
Social sciences	244.3	117.6	163.3	71.6	52.0	30.0	-	-	29.0	16.0
Psychology	35.7	18.3	27.7	13.3	1.0	-	-	-	7.0	5.0
Economics and business	49.0	27.0	27.0	12.0	15.0	11.0	-	-	7.0	4.0
Sociology	22.0	7.0	17.0	5.0	-	-	-	-	5.0	2.0
Law	26.0	16.0	14.0	8.0	10.0	8.0	-	-	2.0	-
Political sciences	83.6	27.3	56.6	15.3	24.0	10.0	-	-	3.0	2.0
Other social sciences	28.0	22.0	21.0	18.0	2.0	1.0	-	-	5.0	3.0
Humanities	348.7	196.2	219.7	119.2	95.0	57.0	-	-	34.0	20.0
History and archeology	174.5	75.0	118.5	51.0	37.0	15.0	-	-	19.0	9.0
Languages and literature	94.5	69.5	41.5	29.5	38.0	29.0	-	-	15.0	11.0
Arts (arts, history of arts, performing arts, music)	26.0	13.0	15.0	7.0	11.0	6.0	-	-	-	-
Other humanities	53.7	38.7	44.7	31.7	9.0	7.0	-	-	-	-
<b>Tertiary education</b>	<b>10196.0</b>	<b>4952.6</b>	<b>6785.8</b>	<b>3098.3</b>	<b>1047.0</b>	<b>573.5</b>	<b>98.5</b>	<b>34.8</b>	<b>2264.8</b>	<b>1246.0</b>
Natural sciences	1676.9	879.9	1120.0	560.0	150.5	73.0	3.0	2.0	403.4	244.9
Mathematics	926.3	515.0	590.8	317.5	26.5	13.0	2.0	1.0	307.0	183.5
Computer and information sciences	255.0	115.3	179.6	78.9	63.7	32.0	-	-	11.7	4.4
Physical sciences	37.1	11.6	15.1	3.6	22.0	8.0	-	-	-	-
Chemical sciences	144.0	74.0	118.0	58.0	12.0	7.0	-	-	14.0	9.0
Earth and related environmental sciences	50.0	24.1	30.9	14.6	3.4	2.5	-	-	15.7	7.0
Biological sciences	160.9	100.6	111.9	64.6	-	-	-	-	49.0	36.0
Other natural sciences	103.6	39.3	73.7	22.8	22.9	10.5	1.0	1.0	6.0	5.0
Engineering and technology	2724.6	979.7	1739.1	577.1	152.7	65.4	71.0	20.0	761.8	317.2
Civil engineering	328.8	129.0	171.8	70.0	42.0	21.0	-	-	115.0	38.0
Electrical engineering, electronic engineering and information engineering	1194.3	356.3	674.2	186.8	68.5	24.5	-	-	451.6	145.0
Mechanical engineering	400.0	84.5	274.5	49.5	14.0	5.0	71.0	20.0	40.5	10.0
Chemical engineering	305.8	202.9	234.9	148.5	5.5	3.0	-	-	65.4	51.4
Environmental engineering	173.5	74.5	142.0	40.5	4.0	2.5	-	-	27.5	31.5
Other technologies and engineering	322.2	132.5	241.7	81.8	18.7	9.4	-	-	61.8	41.3

**3.2. Full-time and part-time researchers, by academic titles, sectors, fields of science and sex, expressed in full-time equivalent, 2015 (continued)**

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
Medical and health sciences	1553.8	909.3	1100.5	608.8	131.2	92.1	9.0	5.3	313.1	203.2
Basic medicine	1049.3	602.7	787.0	428.7	99.3	72.3	4.0	2.3	159.0	99.5
Other medical sciences	504.5	306.6	313.5	180.1	31.9	19.8	5.0	3.0	154.1	103.7
Agricultural sciences	752.8	347.9	549.4	230.2	42.0	19.0	2.0	2.0	159.4	96.7
Agriculture, forestry and fisheries	372.0	166.5	265.0	109.5	28.0	12.0	1.0	1.0	78.0	44.0
Veterinary sciences	83.8	42.4	50.4	22.7	-	-	-	-	33.4	19.7
Agricultural biotechnology	23.0	4.0	20.0	3.0	3.0	1.0	-	-	-	-
Other agricultural sciences	274.0	135.0	214.0	95.0	11.0	6.0	1.0	1.0	48.0	33.0
Social sciences	2470.4	1261.8	1679.2	791.1	381.5	224.7	8.5	2.5	401.2	243.5
Psychology	40.5	23.0	29.0	12.5	-	-	-	-	11.5	10.5
Economics and business	809.2	411.1	586.7	259.0	83.1	57.6	-	-	139.4	94.5
Educational sciences	654.8	319.1	309.9	148.9	174.5	84.7	1.5	1.0	168.9	84.5
Law	343.9	134.6	281.1	98.3	9.5	6.5	5.0	1.5	48.3	28.3
Political sciences	127.9	57.1	81.2	29.7	38.7	22.4	2.0	-	6.0	5.0
Media and communications	26.4	15.8	20.4	12.8	6.0	3.0	-	-	-	-
Other social sciences	467.8	301.1	370.9	229.9	69.7	50.5	-	-	27.2	20.7
Humanities	1017.6	574.0	597.6	331.2	189.1	99.3	5.0	3.0	225.9	140.5
Languages and literature	354.8	240.8	211.2	136.3	59.0	34.8	-	-	84.6	69.7
Philosophy, ethics and religion	447.0	220.0	298.0	134.0	65.0	34.0	-	-	84.0	52.0
Arts (arts, history of arts, performing arts, music)	162.8	90.2	49.4	38.9	62.1	30.5	5.0	3.0	46.3	17.8
Other humanities	53.0	23.0	39.0	22.0	3.0	-	-	-	11.0	1.0
<b>Non-profit sector</b>	<b>6.2</b>	<b>3.2</b>	<b>1.0</b>	<b>1.0</b>	<b>5.2</b>	<b>2.2</b>	-	-	-	-
Engineering and technology	4.0	2.0	-	-	4.0	2.0	-	-	-	-
Other technologies and engineering	4.0	2.0	-	-	4.0	2.0	-	-	-	-
Social sciences	2.2	1.2	1.0	1.0	1.2	0.2	-	-	-	-
Economics and business	2.0	1.0	1.0	1.0	1.0	-	-	-	-	-
Law	0.2	0.2	-	-	0.2	0.2	-	-	-	-
SRBIJA – SEVER	12087.5	5929.9	7316.7	3510.7	1446.0	842.1	277.7	147.6	3047.1	1429.5
Natural sciences	3459.8	1764.2	1895.8	1023.2	420.5	268.0	116.0	90.0	1027.5	383.0
Engineering and technology	3119.8	1211.7	1684.5	593.6	211.6	94.8	141.2	46.1	1082.5	477.2
Medical and health sciences	1236.8	752.7	833.4	471.3	162.8	118.3	6.0	4.0	234.6	159.1
Agricultural sciences	1054.3	525.4	776.9	364.7	83.0	40.0	3.0	3.0	191.4	117.7
Social sciences	2266.5	1169.1	1486.7	711.4	408.3	234.5	8.5	2.5	363.0	220.7
Humanities	950.4	506.8	639.4	346.5	159.8	86.5	3.0	2.0	148.2	71.8
<b>Business sector</b>	<b>1323.9</b>	<b>444.4</b>	<b>213.8</b>	<b>82.1</b>	<b>107.3</b>	<b>55.6</b>	<b>46.0</b>	<b>15.0</b>	<b>956.9</b>	<b>291.7</b>
Natural sciences	623.9	147.2	38.1	13.7	46.0	22.0	-	-	539.8	111.5
Computer and information sciences	461.8	91.5	-	-	-	-	-	-	461.8	91.5
Chemical sciences	42.0	24.0	15.0	6.0	27.0	18.0	-	-	-	-
Earth and related environmental sciences	2.1	0.7	2.1	0.7	-	-	-	-	-	-
Other natural sciences	118.0	31.0	21.0	7.0	19.0	4.0	-	-	78.0	20.0
Engineering and technology	658.2	271.0	156.1	58.6	50.7	25.0	46.0	15.0	405.5	172.4
Civil engineering	3.0	1.0	-	-	-	-	-	-	3.0	1.0
Electrical engineering, electronic engineering and information engineering	218.7	74.5	43.2	9.6	26.7	13.0	14.0	5.0	134.8	46.9
Mechanical engineering	79.9	23.5	31.0	13.0	5.0	3.0	19.0	5.0	24.9	2.5
Chemical engineering	227.0	125.0	32.0	19.0	14.0	7.0	-	-	181.0	99.0
Materials engineering	48.4	21.0	22.9	10.0	2.0	-	8.0	3.0	15.5	8.0
Environmental engineering	45.0	15.0	19.0	4.0	3.0	2.0	2.0	-	21.0	9.0
Environmental biotechnology	1.0	1.0	-	-	-	-	-	-	1.0	1.0
Other technologies and engineering	35.3	10.0	8.0	3.0	-	-	3.0	2.0	24.3	5.0
Agricultural sciences	10.0	3.0	5.0	1.0	3.0	2.0	-	-	2.0	-
Agriculture, forestry and fisheries	3.0	2.0	-	-	2.0	2.0	-	-	1.0	-
Agricultural biotechnology	6.0	1.0	5.0	1.0	1.0	-	-	-	-	-
Other agricultural sciences	1.0	-	-	-	-	-	-	-	1.0	-
Social sciences	31.8	23.2	14.6	8.8	7.6	6.6	-	-	9.6	7.8
Economics and business	14.0	9.0	8.0	4.0	6.0	5.0	-	-	-	-
Other social sciences	17.8	14.2	6.6	4.8	1.6	1.6	-	-	9.6	7.8
<b>Government sciences</b>	<b>2985.9</b>	<b>1724.4</b>	<b>1946.6</b>	<b>1080.2</b>	<b>530.3</b>	<b>340.8</b>	<b>141.2</b>	<b>102.1</b>	<b>367.8</b>	<b>201.3</b>
Natural sciences	1527.4	946.4	986.0	586.8	228.0	175.0	115.0	89.0	198.4	95.6
Mathematics	256.2	147.2	180.2	87.2	76.0	60.0	-	-	-	-
Physical sciences	677.1	359.4	386.1	196.4	31.0	16.0	115.0	89.0	145.0	58.0
Earth and related environmental sciences	34.2	21.0	14.2	5.0	20.0	16.0	-	-	-	-
Biological sciences	399.2	333.3	300.8	252.7	80.0	70.0	-	-	18.4	10.6
Other natural sciences	160.8	85.5	104.8	45.5	21.0	13.0	-	-	35.0	27.0
Engineering and technology	407.7	181.5	245.2	99.8	76.4	30.3	24.2	11.1	61.9	40.3
Civil engineering	24.0	17.0	15.0	10.0	6.0	4.0	-	-	3.0	3.0
Electrical engineering, electronic engineering and information engineering	182.3	51.5	107.8	29.8	26.4	3.3	21.2	8.1	26.9	10.3
Materials engineering	41.0	20.0	22.0	8.0	9.0	4.0	-	-	10.0	8.0
Environmental biotechnology	114.4	66.0	70.4	37.0	26.0	14.0	1.0	1.0	17.0	14.0
Industrial biotechnology	29.0	18.0	20.0	10.0	2.0	1.0	2.0	2.0	5.0	5.0
Other technologies and engineering	17.0	9.0	10.0	5.0	7.0	4.0	-	-	-	-
Medical and health sciences	126.3	93.2	78.9	56.3	38.9	29.5	1.0	1.0	7.5	6.4
Basic medicine	45.0	30.0	30.0	20.0	15.0	10.0	-	-	-	-
Other medical sciences	81.3	63.2	48.9	36.3	23.9	19.5	1.0	1.0	7.5	6.4
Agricultural sciences	331.5	189.5	253.5	146.5	40.0	19.0	1.0	1.0	37.0	23.0
Agriculture, forestry and fisheries	13.5	8.5	9.5	7.5	4.0	1.0	-	-	-	-
Veterinary science	51.0	27.0	35.0	19.0	16.0	8.0	-	-	-	-
Agricultural biotechnology	201.0	114.0	159.0	89.0	15.0	7.0	1.0	1.0	26.0	17.0
Other agricultural sciences	66.0	40.0	50.0	31.0	5.0	3.0	-	-	11.0	6.0



**3.2. Full-time and part-time researchers, by academic titles, sectors, fields of science and sex, expressed in full-time equivalent, 2015 (continued)**

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
Social sciences	244.3	117.6	163.3	71.6	52.0	30.0	-	-	29.0	16.0
Psychology	35.7	18.3	27.7	13.3	1.0	-	-	-	7.0	5.0
Economics and business	49.0	27.0	27.0	12.0	15.0	11.0	-	-	7.0	4.0
Sociology	22.0	7.0	17.0	5.0	-	-	-	-	5.0	2.0
Law	26.0	16.0	14.0	8.0	10.0	8.0	-	-	2.0	-
Political sciences	83.6	27.3	56.6	15.3	24.0	10.0	-	-	3.0	2.0
Other social sciences	28.0	22.0	21.0	18.0	2.0	1.0	-	-	5.0	3.0
Humanities	348.7	196.2	219.7	119.2	95.0	57.0	-	-	34.0	20.0
History and archeology	174.5	75.0	118.5	51.0	37.0	15.0	-	-	19.0	9.0
Languages and literature	94.5	69.5	41.5	29.5	38.0	29.0	-	-	15.0	11.0
Art (arts, history of arts, performing arts, music)	26.0	13.0	15.0	7.0	11.0	6.0	-	-	-	-
Other humanities	53.7	38.7	44.7	31.7	9.0	7.0	-	-	-	-
<b>Tertiary education</b>	<b>7771.5</b>	<b>3757.9</b>	<b>5155.4</b>	<b>2347.4</b>	<b>803.2</b>	<b>443.5</b>	<b>90.5</b>	<b>30.5</b>	<b>1722.5</b>	<b>936.5</b>
Natural sciences	1308.5	670.6	871.7	422.7	146.5	71.0	1.0	1.0	289.3	175.9
Mathematics	557.9	305.7	342.5	180.2	22.5	11.0	-	-	192.9	114.5
Computer and information sciences	255.0	115.3	179.6	78.9	63.7	32.0	-	-	11.7	4.4
Physical sciences	37.1	11.6	15.1	3.6	22.0	8.0	-	-	-	-
Chemical sciences	144.0	74.0	118.0	58.0	12.0	7.0	-	-	14.0	9.0
Earth and related environmental sciences	50.0	24.1	30.9	14.6	3.4	2.5	-	-	15.7	7.0
Biological sciences	160.9	100.6	111.9	64.6	-	-	-	-	49.0	36.0
Other natural sciences	103.6	39.3	73.7	22.8	22.9	10.5	1.0	1.0	6.0	5.0
Engineering and technology	2049.9	757.2	1283.3	435.2	80.5	37.5	71.0	20.0	615.1	264.5
Civil engineering	243.8	92.0	132.8	55.0	11.0	5.0	-	-	100.0	32.0
Electrical engineering, electronic engineering and information engineering	934.4	280.0	487.3	125.0	50.0	19.5	-	-	397.1	135.5
Mechanical engineering	249.0	58.0	176.0	36.0	2.0	2.0	71.0	20.0	-	-
Chemical engineering	255.0	181.5	193.5	131.5	3.5	3.0	-	-	58.0	47.0
Environmental engineering	146.0	62.0	123.0	32.0	-	-	-	-	23.0	30.0
Other technologies and engineering	221.7	83.7	170.7	55.7	14.0	8.0	-	-	37.0	20.0
Medical and health sciences	1110.5	659.5	754.5	415.0	123.9	88.8	5.0	3.0	227.1	152.7
Basic medicine	606.0	352.9	441.0	234.9	92.0	69.0	-	-	73.0	49.0
Other medical sciences	504.5	306.6	313.5	180.1	31.9	19.8	5.0	3.0	154.1	103.7
Agricultural sciences	712.8	332.9	518.4	217.2	40.0	19.0	2.0	2.0	152.4	94.7
Agriculture, forestry and fisheries	332.0	151.5	234.0	96.5	26.0	12.0	1.0	1.0	71.0	42.0
Veterinary science	83.8	42.4	50.4	22.7	-	-	-	-	33.4	19.7
Agricultural biotechnology	23.0	4.0	20.0	3.0	3.0	1.0	-	-	-	-
Other agricultural sciences	274.0	135.0	214.0	95.0	11.0	6.0	1.0	1.0	48.0	33.0
Social sciences	1988.2	1027.1	1307.8	630.0	347.5	197.7	8.5	2.5	324.4	196.9
Psychology	40.5	23.0	29.0	12.5	-	-	-	-	11.5	10.5
Economics and business	567.6	282.1	404.8	174.4	61.1	37.6	-	-	101.7	70.1
Educational sciences	544.3	268.1	224.4	112.9	168.5	81.2	1.5	1.0	149.9	73.0
Law	239.4	99.6	192.6	70.3	7.5	5.5	5.0	1.5	34.3	22.3
Political sciences	127.9	57.1	81.2	29.7	38.7	22.4	2.0	-	6.0	5.0
Media and communications	26.4	15.8	20.4	12.8	6.0	3.0	-	-	-	-
Other social sciences	442.1	281.4	355.4	217.4	65.7	48.0	-	-	21.0	16.0
Humanities	601.7	310.6	419.7	227.3	64.8	29.5	3.0	2.0	114.2	51.8
Languages and literature	209.1	138.0	171.1	113.0	3.0	3.0	-	-	35.0	22.0
Philosophy, ethics and religion	276.0	108.0	180.0	67.0	53.0	22.0	-	-	43.0	19.0
Art (arts, history of arts, performing arts, music)	63.6	41.6	29.6	25.3	5.8	4.5	3.0	2.0	25.2	9.8
Other humanities	53.0	23.0	39.0	22.0	3.0	-	-	-	11.0	1.0
<b>Non-profit sector</b>	<b>6.2</b>	<b>3.2</b>	<b>1.0</b>	<b>1.0</b>	<b>5.2</b>	<b>2.2</b>	-	-	-	-
Engineering and technology	4.0	2.0	-	-	4.0	2.0	-	-	-	-
Other technologies and engineering	4.0	2.0	-	-	4.0	2.0	-	-	-	-
Social sciences	2.2	1.2	1.0	1.0	1.2	0.2	-	-	-	-
Economics and business	2.0	1.0	1.0	1.0	1.0	-	-	-	-	-
Law	0.2	0.2	-	-	0.2	0.2	-	-	-	-
<b>Beogradski region</b>	<b>8454.2</b>	<b>4296.7</b>	<b>5481.8</b>	<b>2643.2</b>	<b>1113.5</b>	<b>666.6</b>	<b>265.2</b>	<b>141.1</b>	<b>1593.7</b>	<b>845.8</b>
Natural sciences	2616.2	1442.6	1628.9	865.8	410.1	263.0	116.0	90.0	461.2	223.8
Engineering and technology	1859.6	711.3	1056.4	363.2	129.6	59.3	140.2	45.1	533.4	243.7
Medical and health sciences	965.8	591.4	659.9	373.6	145.9	105.5	1.0	1.0	159.0	111.3
Agricultural sciences	710.3	365.9	526.9	261.2	58.0	25.0	3.0	3.0	122.4	76.7
Social sciences	1393.9	694.7	999.3	447.9	212.1	127.3	2.0	-	180.5	119.5
Humanities	908.4	490.8	610.4	331.5	157.8	86.5	3.0	2.0	137.2	70.8
<b>Business sector</b>	<b>727.8</b>	<b>298.9</b>	<b>203.8</b>	<b>82.1</b>	<b>98.3</b>	<b>52.6</b>	<b>46.0</b>	<b>15.0</b>	<b>379.8</b>	<b>149.2</b>
Natural sciences	178.8	65.7	38.1	13.7	46.0	22.0	-	-	94.7	30.0
Computer and information sciences	16.7	10.0	-	-	-	-	-	-	16.7	10.0
Chemical sciences	42.0	24.0	15.0	6.0	27.0	18.0	-	-	-	-
Earth and related environmental sciences	2.1	0.7	2.1	0.7	-	-	-	-	-	-
Other natural sciences	118.0	31.0	21.0	7.0	19.0	4.0	-	-	78.0	20.0
Engineering and technology	510.2	207.0	149.1	58.6	41.7	22.0	46.0	15.0	273.5	111.4
Civil engineering	3.0	1.0	-	-	-	-	-	-	3.0	1.0
Electrical engineering, electronic engineering and information engineering	218.7	74.5	43.2	9.6	26.7	13.0	14.0	5.0	134.8	46.9
Mechanical engineering	77.9	23.5	31.0	13.0	5.0	3.0	19.0	5.0	22.9	2.5
Chemical engineering	83.0	61.0	26.0	19.0	5.0	4.0	-	-	52.0	38.0
Materials engineering	46.4	21.0	21.9	10.0	2.0	-	8.0	3.0	14.5	8.0
Environmental engineering	45.0	15.0	19.0	4.0	3.0	2.0	2.0	-	21.0	9.0
Environmental biotechnology	1.0	1.0	-	-	-	-	-	-	1.0	1.0
Other technologies and engineering	35.3	10.0	8.0	3.0	-	-	3.0	2.0	24.3	5.0

**3.2. Full-time and part-time researchers, by academic titles, sectors, fields of science and sex, expressed in full-time equivalent, 2015 (continued)**

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
Agricultural sciences	7.0	3.0	2.0	1.0	3.0	2.0	-	-	2.0	-
Agriculture, forestry and fisheries	3.0	2.0	-	-	2.0	2.0	-	-	1.0	-
Agricultural biotechnology	3.0	1.0	2.0	1.0	1.0	-	-	-	-	-
Other agricultural sciences	1.0	-	-	-	-	-	-	-	1.0	-
Social sciences	31.8	23.2	14.6	8.8	7.6	6.6	-	-	9.6	7.8
Economics and business	14.0	9.0	8.0	4.0	6.0	5.0	-	-	-	-
Other social sciences	17.8	14.2	6.6	4.8	1.6	1.6	-	-	9.6	7.8
<b>Government sector</b>	<b>2760.5</b>	<b>1603.4</b>	<b>1777.2</b>	<b>996.2</b>	<b>490.3</b>	<b>317.8</b>	<b>140.2</b>	<b>101.1</b>	<b>352.8</b>	<b>188.3</b>
Natural sciences	1527.4	946.4	986.0	586.8	228.0	175.0	115.0	89.0	198.4	95.6
Mathematics	256.2	147.2	180.2	87.2	76.0	60.0	-	-	-	-
Physical sciences	677.1	359.4	386.1	196.4	31.0	16.0	115.0	89.0	145.0	58.0
Earth and related environmental sciences	34.2	21.0	14.2	5.0	20.0	16.0	-	-	-	-
Biological sciences	399.2	333.3	300.8	252.7	80.0	70.0	-	-	18.4	10.6
Other natural sciences	160.8	85.5	104.8	45.5	21.0	13.0	-	-	35.0	27.0
Engineering and technology	310.3	125.5	177.8	64.8	56.4	19.3	23.2	10.1	52.9	31.3
Civil engineering	24.0	17.0	15.0	10.0	6.0	4.0	-	-	3.0	3.0
Electrical engineering, electronic engineering and information engineering	182.3	51.5	107.8	29.8	26.4	3.3	21.2	8.1	26.9	10.3
Materials engineering	41.0	20.0	22.0	8.0	9.0	4.0	-	-	10.0	8.0
Environmental biotechnology	34.0	19.0	13.0	7.0	13.0	7.0	-	-	8.0	5.0
Industrial biotechnology	29.0	18.0	20.0	10.0	2.0	1.0	2.0	2.0	5.0	5.0
Medical and health sciences	126.3	93.2	78.9	56.3	38.9	29.5	1.0	1.0	7.5	6.4
Basic medicine	45.0	30.0	30.0	20.0	15.0	10.0	-	-	-	-
Other medical sciences	81.3	63.2	48.9	36.3	23.9	19.5	1.0	1.0	7.5	6.4
Agricultural sciences	203.5	124.5	151.5	97.5	20.0	7.0	1.0	1.0	31.0	19.0
Agriculture, forestry and fisheries	13.5	8.5	9.5	7.5	4.0	1.0	-	-	-	-
Veterinary science	18.0	10.0	12.0	8.0	6.0	2.0	-	-	-	-
Agricultural biotechnology	106.0	66.0	80.0	51.0	5.0	1.0	1.0	1.0	20.0	13.0
Other agricultural sciences	66.0	40.0	50.0	31.0	5.0	3.0	-	-	11.0	6.0
Social sciences	244.3	117.6	163.3	71.6	52.0	30.0	-	-	29.0	16.0
Psychology	35.7	18.3	27.7	13.3	1.0	-	-	-	7.0	5.0
Economics and business	49.0	27.0	27.0	12.0	15.0	11.0	-	-	7.0	4.0
Sociology	22.0	7.0	17.0	5.0	-	-	-	-	5.0	2.0
Law	26.0	16.0	14.0	8.0	10.0	8.0	-	-	2.0	-
Political sciences	83.6	27.3	56.6	15.3	24.0	10.0	-	-	3.0	2.0
Other social sciences	28.0	22.0	21.0	18.0	2.0	1.0	-	-	5.0	3.0
Humanities	348.7	196.2	219.7	119.2	95.0	57.0	-	-	34.0	20.0
History and archeology	174.5	75.0	118.5	51.0	37.0	15.0	-	-	19.0	9.0
Languages and literature	94.5	69.5	41.5	29.5	38.0	29.0	-	-	15.0	11.0
Art (arts, history of arts, performing arts, music)	26.0	13.0	15.0	7.0	11.0	6.0	-	-	-	-
Other humanities	53.7	38.7	44.7	31.7	9.0	7.0	-	-	-	-
<b>Tertiary education</b>	<b>4959.7</b>	<b>2391.2</b>	<b>3499.9</b>	<b>1563.9</b>	<b>519.7</b>	<b>294.0</b>	<b>79.0</b>	<b>25.0</b>	<b>861.1</b>	<b>508.3</b>
Natural sciences	910.0	430.5	604.8	265.3	136.1	66.0	1.0	1.0	168.1	98.2
Mathematics	170.9	72.7	83.5	27.2	12.5	6.0	-	-	74.9	39.5
Computer and information sciences	255.0	115.3	179.6	78.9	63.7	32.0	-	-	11.7	4.4
Physical sciences	37.1	11.6	15.1	3.6	22.0	8.0	-	-	-	-
Chemical sciences	144.0	74.0	118.0	58.0	12.0	7.0	-	-	14.0	9.0
Earth and related environmental sciences	38.5	17.0	23.0	10.2	3.0	2.5	-	-	12.5	4.3
Biological sciences	160.9	100.6	111.9	64.6	-	-	-	-	49.0	36.0
Other natural sciences	103.6	39.3	73.7	22.8	22.9	10.5	1.0	1.0	6.0	5.0
Engineering and technology	1035.1	376.8	729.6	239.8	27.5	16.0	71.0	20.0	207.0	101.0
Civil engineering	206.8	80.0	132.8	55.0	4.0	2.0	-	-	70.0	23.0
Electrical engineering, electronic engineering and information engineering	179.6	41.6	103.6	19.6	10.0	6.0	-	-	66.0	16.0
Mechanical engineering	249.0	58.0	176.0	36.0	2.0	2.0	71.0	20.0	-	-
Chemical engineering	100.0	70.5	85.5	57.5	1.5	1.0	-	-	13.0	12.0
Environmental engineering	146.0	62.0	123.0	32.0	-	-	-	-	23.0	30.0
Other technologies and engineering	153.7	64.7	108.7	39.7	10.0	5.0	-	-	35.0	20.0
Medical and health sciences	839.5	498.2	581.0	317.3	107.0	76.0	-	-	151.5	104.9
Basic medicine	606.0	352.9	441.0	234.9	92.0	69.0	-	-	73.0	49.0
Other medical sciences	233.5	145.3	140.0	82.4	15.0	7.0	-	-	78.5	55.9
Agricultural sciences	499.8	238.4	373.4	162.7	35.0	16.0	2.0	2.0	89.4	57.7
Agriculture, forestry and fisheries	119.0	57.0	89.0	42.0	21.0	9.0	1.0	1.0	8.0	5.0
Veterinary science	83.8	42.4	50.4	22.7	-	-	-	-	33.4	19.7
Agricultural biotechnology	23.0	4.0	20.0	3.0	3.0	1.0	-	-	-	-
Other agricultural sciences	274.0	135.0	214.0	95.0	11.0	6.0	1.0	1.0	48.0	33.0
Social sciences	1115.6	552.7	820.4	366.5	151.3	90.5	2.0	-	141.9	95.7
Economics and business	428.0	211.7	318.3	141.7	44.1	27.6	-	-	65.6	42.4
Educational sciences	223.8	110.4	151.2	69.1	44.3	22.0	-	-	28.3	19.3
Law	158.9	65.8	130.4	47.3	7.5	5.5	-	-	21.0	13.0
Political sciences	127.9	57.1	81.2	29.7	38.7	22.4	2.0	-	6.0	5.0
Media and communications	26.4	15.8	20.4	12.8	6.0	3.0	-	-	-	-
Other social sciences	150.6	91.9	118.9	65.9	10.7	10.0	-	-	21.0	16.0
Humanities	559.7	294.6	390.7	212.3	62.8	29.5	3.0	2.0	103.2	50.8
Languages and literature	209.1	138.0	171.1	113.0	3.0	3.0	-	-	35.0	22.0
Philosophy, ethics and religion	276.0	108.0	180.0	67.0	53.0	22.0	-	-	43.0	19.0
Art (arts, history of arts, performing arts, music)	63.6	41.6	29.6	25.3	5.8	4.5	3.0	2.0	25.2	9.8
Other humanities	11.0	7.0	10.0	7.0	1.0	-	-	-	-	-
<b>Non-profit sector</b>	<b>6.2</b>	<b>3.2</b>	<b>1.0</b>	<b>1.0</b>	<b>5.2</b>	<b>2.2</b>	-	-	-	-
Engineering and technology	4.0	2.0	-	-	4.0	2.0	-	-	-	-
Other technologies and engineering	4.0	2.0	-	-	4.0	2.0	-	-	-	-
Social sciences	2.2	1.2	1.0	1.0	1.2	0.2	-	-	-	-
Economics and business	2.0	1.0	1.0	1.0	1.0	-	-	-	-	-
Law	0.2	0.2	-	-	0.2	0.2	-	-	-	-





**3.2. Full-time and part-time researchers, by academic titles, sectors, fields of science and sex, expressed in full-time equivalent, 2015 (continued)**

	Full-time and part-time researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Region Šumadije i Zapadne Srbije</b>	<b>910.1</b>	<b>467.1</b>	<b>546.7</b>	<b>255.1</b>	<b>90.0</b>	<b>50.0</b>	<b>4.0</b>	<b>2.3</b>	<b>269.5</b>	<b>159.7</b>
Natural sciences	170.6	107.5	109.5	64.5	3.0	2.0	-	-	58.1	41.0
Engineering and technology	211.3	57.9	125.7	31.1	12.7	5.4	-	-	72.9	21.4
Medical and health sciences	103.4	60.2	55.1	30.2	2.3	1.3	4.0	2.3	42.0	26.5
Agricultural sciences	59.0	28.0	49.0	25.0	3.0	1.0	-	-	7.0	2.0
Social sciences	220.2	110.7	167.3	81.1	13.0	8.5	-	-	39.9	21.1
Humanities	145.7	102.8	40.1	23.3	56.0	31.8	-	-	49.6	47.7
<b>Business sector</b>	<b>30.3</b>	<b>11.6</b>	<b>13.2</b>	<b>1.0</b>	<b>1.0</b>	-	-	-	<b>16.1</b>	<b>10.6</b>
Natural sciences	4.0	3.0	1.0	-	-	-	-	-	3.0	3.0
Other natural sciences	4.0	3.0	1.0	-	-	-	-	-	3.0	3.0
Engineering and technology	26.3	8.6	12.2	1.0	1.0	-	-	-	13.1	7.6
Materials engineering	2.0	1.0	-	-	-	-	-	-	2.0	1.0
Medical engineering	21.6	5.9	12.2	1.0	1.0	-	-	-	8.4	4.9
Other technologies and engineering	2.7	1.7	-	-	-	-	-	-	2.7	1.7
<b>Government sector</b>	<b>19.0</b>	<b>13.0</b>	<b>18.0</b>	<b>12.0</b>	<b>1.0</b>	<b>1.0</b>	-	-	-	-
Agricultural sciences	19.0	13.0	18.0	12.0	1.0	1.0	-	-	-	-
Other agricultural sciences	19.0	13.0	18.0	12.0	1.0	1.0	-	-	-	-
<b>Tertiary education</b>	<b>860.8</b>	<b>442.5</b>	<b>515.5</b>	<b>242.1</b>	<b>88.0</b>	<b>49.0</b>	<b>4.0</b>	<b>2.3</b>	<b>253.4</b>	<b>149.1</b>
Natural sciences	166.6	104.5	108.5	64.5	3.0	2.0	-	-	55.1	38.0
Mathematics	166.6	104.5	108.5	64.5	3.0	2.0	-	-	55.1	38.0
Engineering and technology	185.0	49.3	113.5	30.1	11.7	5.4	-	-	59.8	13.8
Electrical engineering, electronic engineering and information engineering	122.0	34.0	76.5	24.5	5.0	2.0	-	-	40.5	7.5
Mechanical engineering	48.0	8.5	26.5	1.5	5.0	2.0	-	-	16.5	5.0
Other technologies and engineering	15.0	6.8	10.5	4.1	1.7	1.4	-	-	2.8	1.3
Medical and health sciences	103.4	60.2	55.1	30.2	2.3	1.3	4.0	2.3	42.0	26.5
Basic medicine	103.4	60.2	55.1	30.2	2.3	1.3	4.0	2.3	42.0	26.5
Agricultural sciences	40.0	15.0	31.0	13.0	2.0	-	-	-	7.0	2.0
Agriculture, forestry and fisheries	40.0	15.0	31.0	13.0	2.0	-	-	-	7.0	2.0
Social sciences	220.2	110.7	167.3	81.1	13.0	8.5	-	-	39.9	21.1
Economics and business	122.5	60.0	92.8	42.6	4.0	4.0	-	-	25.7	13.4
Educational sciences	43.0	24.0	33.0	19.0	4.0	2.0	-	-	6.0	3.0
Law	29.0	7.0	26.0	7.0	1.0	-	-	-	2.0	-
Other social sciences	25.7	19.7	15.5	12.5	4.0	2.5	-	-	6.2	4.7
Humanities	145.7	102.8	40.1	23.3	56.0	31.8	-	-	49.6	47.7
Languages and literature	145.7	102.8	40.1	23.3	56.0	31.8	-	-	49.6	47.7
<b>Region Juzne i Istočne Srbije</b>	<b>1659.0</b>	<b>804.2</b>	<b>1147.2</b>	<b>524.8</b>	<b>175.8</b>	<b>91.0</b>	<b>6.0</b>	<b>3.0</b>	<b>330.0</b>	<b>185.4</b>
Natural sciences	201.8	104.8	139.8	72.8	1.0	-	2.0	1.0	59.0	31.0
Engineering and technology	571.0	220.2	364.6	124.8	76.5	30.5	2.0	1.0	127.9	63.9
Medical and health sciences	339.9	189.6	290.9	163.6	5.0	2.0	-	-	44.0	24.0
Agricultural sciences	14.0	5.0	10.0	3.0	4.0	2.0	-	-	-	-
Social sciences	262.1	124.0	204.1	80.0	21.0	18.5	-	-	37.0	25.5
Humanities	270.2	160.6	137.8	80.6	68.3	38.0	2.0	1.0	62.1	41.0
<b>Business sector</b>	<b>51.3</b>	<b>22.0</b>	<b>18.3</b>	<b>7.0</b>	<b>9.0</b>	<b>3.0</b>	<b>1.0</b>	<b>1.0</b>	<b>23.0</b>	<b>11.0</b>
Engineering and technology	37.3	17.0	8.3	4.0	5.0	1.0	1.0	1.0	23.0	11.0
Electrical engineering, electronic engineering and information engineering	29.3	11.0	7.3	4.0	4.0	-	-	-	18.0	7.0
Other technologies and engineering	8.0	6.0	1.0	-	1.0	1.0	1.0	1.0	5.0	4.0
Agricultural sciences	14.0	5.0	10.0	3.0	4.0	2.0	-	-	-	-
Agricultural biotechnology	14.0	5.0	10.0	3.0	4.0	2.0	-	-	-	-
<b>Government sector</b>	<b>44.0</b>	<b>30.0</b>	<b>14.0</b>	<b>9.0</b>	<b>11.0</b>	<b>7.0</b>	<b>1.0</b>	-	<b>18.0</b>	<b>14.0</b>
Engineering and technology	44.0	30.0	14.0	9.0	11.0	7.0	1.0	-	18.0	14.0
Other technologies and engineering	44.0	30.0	14.0	9.0	11.0	7.0	1.0	-	18.0	14.0
<b>Tertiary education</b>	<b>1563.7</b>	<b>752.2</b>	<b>1114.9</b>	<b>508.8</b>	<b>155.8</b>	<b>81.0</b>	<b>4.0</b>	<b>2.0</b>	<b>289.0</b>	<b>160.4</b>
Natural sciences	201.8	104.8	139.8	72.8	1.0	-	2.0	1.0	59.0	31.0
Mathematics	201.8	104.8	139.8	72.8	1.0	-	2.0	1.0	59.0	31.0
Engineering and technology	489.7	173.2	342.3	111.8	60.5	22.5	-	-	86.9	38.9
Civil engineering	85.0	37.0	39.0	15.0	31.0	16.0	-	-	15.0	6.0
Electrical engineering, electronic engineering and information engineering	137.9	42.3	110.4	37.3	13.5	3.0	-	-	14.0	2.0
Mechanical engineering	103.0	18.0	72.0	12.0	7.0	1.0	-	-	24.0	5.0
Chemical engineering	50.8	21.4	41.4	17.0	2.0	-	-	-	7.4	4.4
Environmental engineering	27.5	12.5	19.0	8.5	4.0	2.5	-	-	4.5	1.5
Other technologies and engineering	85.5	42.0	60.5	22.0	3.0	-	-	-	22.0	20.0
Medical and health sciences	339.9	189.6	290.9	163.6	5.0	2.0	-	-	44.0	24.0
Basic medicine	339.9	189.6	290.9	163.6	5.0	2.0	-	-	44.0	24.0
Social sciences	262.1	124.0	204.1	80.0	21.0	18.5	-	-	37.0	25.5
Economics and business	119.1	69.0	89.1	42.0	18.0	16.0	-	-	12.0	11.0
Educational sciences	67.5	27.0	52.5	17.0	2.0	1.5	-	-	13.0	8.5
Law	75.5	28.0	62.5	21.0	1.0	1.0	-	-	12.0	6.0
Humanities	270.2	160.6	137.8	80.6	68.3	38.0	2.0	1.0	62.1	41.0
Philosophy, ethics and religion	171.0	112.0	118.0	67.0	12.0	12.0	-	-	41.0	33.0
Art (arts, history of arts, performing arts, music)	99.2	48.6	19.8	13.6	56.3	26.0	2.0	1.0	21.1	8.0
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...	...	...

## 4.1. Full-time and part-time researchers and assistant researchers, by age and sex, 2015

	Researchers				Assistant researchers			
	Full-time		Part-time		Full-time		Part-time	
	All	Women	All	Women	All	Women	All	Women
<b>REPUBLIC OF SERBIA</b>	<b>13550</b>	<b>6647</b>	<b>2788</b>	<b>1397</b>	<b>1642</b>	<b>805</b>	<b>280</b>	<b>111</b>
Under 25	89	42	7	7	17	11	4	4
25 - 29	1436	707	210	122	153	83	45	20
30 - 34	2726	1321	343	177	273	143	47	21
35 - 39	1924	1068	369	180	243	128	41	16
40 - 44	1780	951	426	217	231	126	36	18
45 - 49	1561	816	412	228	202	103	23	9
50 - 54	1371	652	364	185	239	118	30	12
55 - 59	1223	593	303	146	150	60	21	4
60 - 64	1059	395	278	112	118	32	22	5
65 - 69	368	102	69	23	11	1	8	1
70 and over	13	-	7	-	5	-	3	1
<b>Business sector - total</b>	<b>1331</b>	<b>453</b>	<b>134</b>	<b>42</b>	<b>609</b>	<b>224</b>	<b>177</b>	<b>48</b>
Under 25	6	4	1	1	7	4	-	-
25 - 29	216	77	16	4	51	19	22	8
30 - 34	594	169	23	7	110	46	25	6
35 - 39	159	67	24	5	88	32	24	4
40 - 44	99	45	13	5	79	29	26	11
45 - 49	80	38	17	10	67	33	17	5
50 - 54	48	18	11	3	99	34	19	6
55 - 59	58	19	6	2	61	22	19	3
60 - 64	50	15	10	4	34	5	14	3
65 - 69	16	1	7	1	8	-	8	1
70 and over	5	-	6	-	5	-	3	1
<b>Government sector - total</b>	<b>2946</b>	<b>1718</b>	<b>290</b>	<b>133</b>	<b>411</b>	<b>191</b>	<b>2</b>	<b>1</b>
Under 25	3	-	1	1	5	3	-	-
25 - 29	262	165	5	2	28	13	-	-
30 - 34	540	319	9	6	47	28	-	-
35 - 39	469	300	17	6	48	31	1	1
40 - 44	421	248	51	25	45	26	-	-
45 - 49	407	239	60	33	70	27	-	-
50 - 54	289	165	66	26	64	34	-	-
55 - 59	319	193	52	24	55	21	-	-
60 - 64	189	78	28	10	48	8	1	-
65 - 69	45	11	1	-	1	-	-	-
70 and over	2	-	-	-	-	-	-	-
<b>Tertiary education - total</b>	<b>9267</b>	<b>4473</b>	<b>2363</b>	<b>1221</b>	<b>620</b>	<b>388</b>	<b>101</b>	<b>62</b>
Under 25	80	38	5	5	5	4	4	4
25 - 29	958	465	189	116	73	50	23	12
30 - 34	1591	833	311	164	116	69	22	15
35 - 39	1295	701	328	169	106	64	16	11
40 - 44	1259	657	362	187	107	71	10	7
45 - 49	1074	539	335	185	65	43	6	4
50 - 54	1032	468	286	155	76	50	11	6
55 - 59	845	380	245	120	34	17	2	1
60 - 64	820	302	240	98	36	19	7	2
65 - 69	307	90	61	22	2	1	-	-
70 and over	6	-	1	-	-	-	-	-
<b>Non-profit sector - total</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>
25-29	-	-	-	-	1	1	-	-
30-34	1	-	-	-	-	-	-	-
35 - 39	1	-	-	-	1	1	-	-
40 - 44	1	1	-	-	-	-	-	-
50 - 54	2	1	1	1	-	-	-	-
55 - 59	1	1	-	-	-	-	-	-
<b>SRBIJA – SEVER</b>	<b>11252</b>	<b>5514</b>	<b>2149</b>	<b>1073</b>	<b>1472</b>	<b>730</b>	<b>214</b>	<b>71</b>
Under 25	78	36	7	7	15	10	-	-
25 - 29	1304	639	149	83	138	73	29	12
30 - 34	2323	1103	230	120	237	136	38	15
35 - 39	1591	879	285	141	218	118	34	10
40 - 44	1417	744	347	171	210	114	27	12
45 - 49	1258	670	333	188	184	92	19	7
50 - 54	1076	531	280	141	215	104	18	4
55 - 59	988	480	239	116	135	53	21	4
60 - 64	890	345	222	91	104	29	17	5
65 - 69	315	87	50	15	11	1	8	1
70 and over	12	-	7	-	5	-	3	1

## 4.1. Full-time and part-time researchers and assistant researchers, by age and sex, 2015 (continued)

	Researchers				Assistant researchers			
	Full-time		Part-time		Full-time		Part-time	
	All	Women	All	Women	All	Women	All	Women
<b>Business sector - total</b>	<b>1264</b>	<b>424</b>	<b>111</b>	<b>31</b>	<b>548</b>	<b>211</b>	<b>165</b>	<b>37</b>
Under 25	6	4	1	1	7	4	-	-
25 - 29	209	75	16	4	50	19	18	4
30 - 34	576	161	18	5	89	44	23	4
35 - 39	149	63	19	5	77	30	23	3
40 - 44	91	41	11	4	71	26	25	10
45 - 49	72	35	13	7	61	29	17	5
50 - 54	42	16	9	1	92	32	15	3
55 - 59	53	16	5	1	57	22	19	3
60 - 64	47	12	7	2	31	5	14	3
65 - 69	15	1	6	1	8	-	8	1
70 and over	4	-	6	-	5	-	3	1
<b>Government sector - total</b>	<b>2883</b>	<b>1675</b>	<b>290</b>	<b>133</b>	<b>386</b>	<b>179</b>	<b>2</b>	<b>1</b>
Under 25	3	-	1	1	5	3	-	-
25 - 29	259	163	5	2	28	13	-	-
30 - 34	534	315	9	6	47	28	-	-
35 - 39	463	295	17	6	48	31	1	1
40 - 44	405	235	51	25	44	26	-	-
45 - 49	390	227	60	33	64	25	-	-
50 - 54	282	162	66	26	59	30	-	-
55 - 59	316	191	52	24	49	17	-	-
60 - 64	186	77	28	10	41	6	1	-
65 - 69	43	10	1	-	1	-	-	-
70 and over	2	-	-	-	-	-	-	-
<b>Tertiary education - total</b>	<b>7099</b>	<b>3412</b>	<b>1747</b>	<b>908</b>	<b>536</b>	<b>338</b>	<b>47</b>	<b>33</b>
Under 25	69	32	5	5	3	3	-	-
25 - 29	836	401	128	77	59	40	11	8
30 - 34	1212	627	203	109	101	64	15	11
35 - 39	978	521	249	130	92	56	10	6
40 - 44	920	467	285	142	95	62	2	2
45 - 49	796	408	260	148	59	38	2	2
50 - 54	750	352	204	113	64	42	3	1
55 - 59	618	272	182	91	29	14	2	1
60 - 64	657	256	187	79	32	18	2	2
65 - 69	257	76	43	14	2	1	-	-
70 and over	6	-	1	-	-	-	-	-
<b>Non-profit - total</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>
25 - 29	-	-	-	-	1	1	-	-
30 - 34	1	-	-	-	-	-	-	-
35 - 39	1	-	-	-	1	1	-	-
40 - 44	1	1	-	-	-	-	-	-
50 - 54	2	1	1	1	-	-	-	-
55 - 59	1	1	-	-	-	-	-	-
<b>Beogradski region</b>	<b>7964</b>	<b>4056</b>	<b>1178</b>	<b>576</b>	<b>1109</b>	<b>551</b>	<b>187</b>	<b>56</b>
Under 25	48	24	6	4	9	6	-	-
25 - 29	898	460	83	45	82	42	21	7
30 - 34	1363	738	99	50	165	97	26	8
35 - 39	1154	658	127	68	149	80	30	9
40 - 44	1012	546	169	92	153	85	25	11
45 - 49	977	524	199	112	144	78	19	7
50 - 54	853	415	190	89	176	85	18	4
55 - 59	802	397	139	61	116	50	20	3
60 - 64	624	239	127	45	100	27	17	5
65 - 69	221	55	32	10	10	1	8	1
70 and over	12	-	7	-	5	-	3	1
<b>Business sector - total</b>	<b>675</b>	<b>279</b>	<b>93</b>	<b>30</b>	<b>492</b>	<b>198</b>	<b>160</b>	<b>36</b>
Under 25	5	4	1	1	7	4	-	-
25 - 29	150	60	16	4	40	17	18	4
30 - 34	198	100	13	4	76	38	21	4
35 - 39	91	37	12	5	69	30	21	2
40 - 44	54	21	5	4	58	23	24	10
45 - 49	56	24	13	7	60	29	17	5
50 - 54	32	10	9	1	85	30	15	3
55 - 59	36	11	5	1	54	22	19	3
60 - 64	34	11	7	2	30	5	14	3
65 - 69	15	1	6	1	8	-	8	1
70 and over	4	-	6	-	5	-	3	1

## 4.1. Full-time and part-time researchers and assistant researchers, by age and sex, 2015 (continued)

	Researchers				Assistant researchers			
	Full-time		Part-time		Full-time		Part-time	
	All	Women	All	Women	All	Women	All	Women
<b>Government sector - total</b>	<b>2659</b>	<b>1554</b>	<b>288</b>	<b>133</b>	<b>263</b>	<b>125</b>	<b>2</b>	<b>1</b>
Under 25	3	-	1	1	-	-	-	-
25 - 29	232	149	5	2	10	5	-	-
30 - 34	474	279	9	6	30	21	-	-
35 - 39	429	277	17	6	27	18	1	1
40 - 44	372	216	51	25	29	15	-	-
45 - 49	361	210	60	33	42	19	-	-
50 - 54	267	151	65	26	50	27	-	-
55 - 59	305	189	52	24	37	15	-	-
60 - 64	173	74	27	10	38	5	1	-
65 - 69	41	9	1	-	-	-	-	-
70 and over	2	-	-	-	-	-	-	-
<b>Tertiary education - total</b>	<b>4624</b>	<b>2220</b>	<b>796</b>	<b>412</b>	<b>352</b>	<b>226</b>	<b>25</b>	<b>19</b>
Under 25	40	20	4	2	2	2	-	-
25 - 29	516	251	62	39	31	19	3	3
30 - 34	690	359	77	40	59	38	5	4
35 - 39	633	344	98	57	52	31	8	6
40 - 44	585	308	113	63	66	47	1	1
45 - 49	560	290	126	72	42	30	2	2
50 - 54	552	253	115	61	41	28	3	1
55 - 59	460	196	82	36	25	13	1	-
60 - 64	417	154	93	33	32	17	2	2
65 - 69	165	45	25	9	2	1	-	-
70 and over	6	-	1	-	-	-	-	-
<b>Non-profit sector – total</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>
25 - 29	-	-	-	-	1	1	-	-
30 - 34	1	-	-	-	-	-	-	-
35 - 39	1	-	-	-	1	1	-	-
40 - 44	1	1	-	-	-	-	-	-
50 - 54	2	1	1	1	-	-	-	-
55 - 59	1	1	-	-	-	-	-	-
<b>Region Vojvodine</b>	<b>3288</b>	<b>1458</b>	<b>971</b>	<b>497</b>	<b>363</b>	<b>179</b>	<b>27</b>	<b>15</b>
Under 25	30	12	1	3	6	4	-	-
25 - 29	406	179	66	38	56	31	8	5
30 - 34	960	365	131	70	72	39	12	7
35 - 39	437	221	158	73	69	38	4	1
40 - 44	405	198	178	79	57	29	2	1
45 - 49	281	146	134	76	40	14	-	-
50 - 54	223	116	90	52	39	19	-	-
55 - 59	186	83	100	55	19	3	1	1
60 - 64	266	106	95	46	4	2	-	-
65 - 69	94	32	18	5	1	-	-	-
<b>Business sector - total</b>	<b>589</b>	<b>145</b>	<b>18</b>	<b>1</b>	<b>56</b>	<b>13</b>	<b>5</b>	<b>1</b>
Under 25	1	-	-	-	-	-	-	-
25 - 29	59	15	-	-	10	2	-	-
30 - 34	378	61	5	1	13	6	2	-
35 - 39	58	26	7	-	8	-	2	1
40 - 44	37	20	6	-	13	3	1	-
45 - 49	16	11	-	-	1	-	-	-
50 - 54	10	6	-	-	7	2	-	-
55 - 59	17	5	-	-	3	-	-	-
60 - 64	13	1	-	-	1	-	-	-
<b>Government sector - total</b>	<b>224</b>	<b>121</b>	<b>2</b>	<b>-</b>	<b>123</b>	<b>54</b>	<b>-</b>	<b>-</b>
Under 25	-	-	-	-	5	3	-	-
25 - 29	27	14	-	-	18	8	-	-
30 - 34	60	36	-	-	17	7	-	-
35 - 39	34	18	-	-	21	13	-	-
40 - 44	33	19	-	-	15	11	-	-
45 - 49	29	17	-	-	22	6	-	-
50 - 54	15	11	1	-	9	3	-	-
55 - 59	11	2	-	-	12	2	-	-
60 - 64	13	3	1	-	3	1	-	-
65 - 69	2	1	-	-	1	-	-	-

## 4.1. Full-time and part-time researchers and assistant researchers, by age and sex, 2015 (continued)

	Researchers				Assistant researchers			
	Full-time		Part-time		Full-time		Part-time	
	All	Women	All	Women	All	Women	All	Women
<b>Tertiary education – total</b>	<b>2475</b>	<b>1192</b>	<b>951</b>	<b>496</b>	<b>184</b>	<b>112</b>	<b>22</b>	<b>14</b>
Under 25	29	12	1	3	1	1	-	-
25 - 29	320	150	66	38	28	21	8	5
30 - 34	522	268	126	69	42	26	10	7
35 - 39	345	177	151	73	40	25	2	-
40 - 44	335	159	172	79	29	15	1	1
45 - 49	236	118	134	76	17	8	-	-
50 - 54	198	99	89	52	23	14	-	-
55 - 59	158	76	100	55	4	1	1	1
60 - 64	240	102	94	46	-	1	-	-
65 - 69	92	31	18	5	-	-	-	-
<b>SRBIJA – JUG</b>	<b>2298</b>	<b>1133</b>	<b>639</b>	<b>324</b>	<b>170</b>	<b>75</b>	<b>66</b>	<b>40</b>
Under 25	11	6	-	-	2	1	4	4
25 - 29	132	68	61	39	15	10	16	8
30 - 34	403	218	113	57	36	7	9	6
35 - 39	333	189	84	39	25	10	7	6
40 - 44	363	207	79	46	21	12	9	6
45 - 49	303	146	79	40	18	11	4	2
50 - 54	295	121	84	44	24	14	12	8
55 - 59	235	113	64	30	15	7	-	-
60 - 64	169	50	56	21	14	3	5	-
65 - 69	53	15	19	8	-	-	-	-
70 and over	1	-	-	-	-	-	-	-
<b>Business sector - total</b>	<b>67</b>	<b>29</b>	<b>23</b>	<b>11</b>	<b>61</b>	<b>13</b>	<b>12</b>	<b>11</b>
25 - 29	7	2	-	-	1	-	4	4
30 - 34	18	8	5	2	21	2	2	2
35 - 39	10	4	5	-	11	2	1	1
40 - 44	8	4	2	1	8	3	1	1
45 - 49	8	3	4	3	6	4	-	-
50 - 54	6	2	2	2	7	2	4	3
55 - 59	5	3	1	1	4	-	-	-
60 - 64	3	3	3	2	3	-	-	-
65 - 69	1	-	1	-	-	-	-	-
70 and over	1	-	-	-	-	-	-	-
<b>Government sector – total</b>	<b>63</b>	<b>43</b>	<b>-</b>	<b>-</b>	<b>25</b>	<b>12</b>	<b>-</b>	<b>-</b>
25 - 29	3	2	-	-	-	-	-	-
30 - 34	6	4	-	-	-	-	-	-
35 - 39	6	5	-	-	-	-	-	-
40 - 44	16	13	-	-	1	-	-	-
45 - 49	17	12	-	-	6	2	-	-
50 - 54	7	3	-	-	5	4	-	-
55 - 59	3	2	-	-	6	4	-	-
60 - 64	3	1	-	-	7	2	-	-
65 - 69	2	1	-	-	-	-	-	-
<b>Tertiary education - total</b>	<b>2168</b>	<b>1061</b>	<b>616</b>	<b>313</b>	<b>84</b>	<b>50</b>	<b>54</b>	<b>29</b>
Under 25	11	6	-	-	2	1	4	4
25 - 29	122	64	61	39	14	10	12	4
30 - 34	379	206	108	55	15	5	7	4
35 - 39	317	180	79	39	14	8	6	5
40 - 44	339	190	77	45	12	9	8	5
45 - 49	278	131	75	37	6	5	4	2
50 - 54	282	116	82	42	12	8	8	5
55 - 59	227	108	63	29	5	3	-	-
60 - 64	163	46	53	19	4	1	5	-
65 - 69	50	14	18	8	-	-	-	-
<b>Region Šumadije i Zapadne Srbije</b>	<b>701</b>	<b>359</b>	<b>511</b>	<b>263</b>	<b>64</b>	<b>25</b>	<b>35</b>	<b>19</b>
Under 25	2	1	-	-	2	1	2	2
25 - 29	65	35	54	32	11	7	6	2
30 - 34	144	79	95	52	4	1	6	3
35 - 39	90	56	70	30	14	3	4	4
40 - 44	86	42	61	35	10	4	4	2
45 - 49	69	36	63	33	6	3	2	2
50 - 54	100	46	68	37	10	5	8	4
55 - 59	76	40	48	21	5	1	-	-
60 - 64	52	19	41	17	2	-	3	-
65 - 69	16	5	11	6	-	-	-	-
70 and over	1	-	-	-	-	-	-	-

## 4.1. Full-time and part-time researchers and assistant researchers, by age and sex, 2015 (continued)

	Researchers				Assistant researchers			
	Full-time		Part-time		Full-time		Part-time	
	All	Women	All	Women	All	Women	All	Women
<b>Business sector - total</b>	<b>16</b>	<b>7</b>	<b>22</b>	<b>11</b>	<b>30</b>	<b>8</b>	<b>2</b>	<b>1</b>
25 - 29	3	-	-	-	1	-	-	-
30 - 34	4	3	5	2	2	1	-	-
35 - 39	1	1	5	-	8	1	-	-
40 - 44	2	-	2	1	6	2	-	-
45 - 49	1	1	4	3	4	2	-	-
50 - 54	-	-	2	2	6	2	2	1
55 - 59	2	1	1	1	3	-	-	-
60 - 64	1	1	3	2	-	-	-	-
65-69	1	-	-	-	-	-	-	-
70 and over	1	-	-	-	-	-	-	-
<b>Government sector - total</b>	<b>19</b>	<b>13</b>	-	-	<b>2</b>	<b>1</b>	-	-
30-34	2	1	-	-	-	-	-	-
35-39	2	2	-	-	-	-	-	-
40-44	6	3	-	-	-	-	-	-
45-49	4	4	-	-	-	-	-	-
50-54	2	1	-	-	1	1	-	-
60-64	1	1	-	-	1	-	-	-
65-69	2	1	-	-	-	-	-	-
<b>Tertiary education - total</b>	<b>666</b>	<b>339</b>	<b>489</b>	<b>252</b>	<b>32</b>	<b>16</b>	<b>33</b>	<b>18</b>
Under 25	2	1	-	-	2	1	2	2
25 - 29	62	35	54	32	10	7	6	2
30 - 34	138	75	90	50	2	-	6	3
35 - 39	87	53	65	30	6	2	4	4
40 - 44	78	39	59	34	4	2	4	2
45 - 49	64	31	59	30	2	1	2	2
50 - 54	98	45	66	35	3	2	6	3
55 - 59	74	39	47	20	2	1	-	-
60 - 64	50	17	38	15	1	-	3	-
65 - 69	13	4	11	6	-	-	-	-
<b>Region Južne i Istočne Srbije</b>	<b>1597</b>	<b>774</b>	<b>128</b>	<b>61</b>	<b>106</b>	<b>50</b>	<b>31</b>	<b>21</b>
Under 25	9	5	-	-	-	-	2	2
25 - 29	67	33	7	7	4	3	10	6
30 - 34	259	139	18	5	32	6	3	3
35 - 39	243	133	14	9	11	7	3	2
40 - 44	277	165	18	11	11	8	5	4
45 - 49	234	110	16	7	12	8	2	-
50 - 54	195	75	16	7	14	9	4	4
55 - 59	159	73	16	9	10	6	-	-
60 - 64	117	31	15	4	12	3	2	-
65 - 69	37	10	8	2	-	-	-	-
<b>Business sector - total</b>	<b>51</b>	<b>22</b>	<b>1</b>	-	<b>31</b>	<b>5</b>	<b>10</b>	<b>10</b>
25 - 29	4	2	-	-	-	-	4	4
30 - 34	14	5	-	-	19	1	2	2
35 - 39	9	3	-	-	3	1	1	1
40 - 44	6	4	-	-	2	1	1	1
45 - 49	7	2	-	-	2	2	-	-
50 - 54	6	2	-	-	1	-	2	2
55 - 59	3	2	-	-	1	-	-	-
60 - 64	2	2	-	-	3	-	-	-
65 - 69	-	-	1	-	-	-	-	-
<b>Government sector - total</b>	<b>44</b>	<b>30</b>	-	-	<b>23</b>	<b>11</b>	-	-
25-29	3	2	-	-	-	-	-	-
30-34	4	3	-	-	-	-	-	-
35-39	4	3	-	-	-	-	-	-
40-44	10	10	-	-	1	-	-	-
45-49	13	8	-	-	6	2	-	-
50-54	5	2	-	-	4	3	-	-
55-59	3	2	-	-	6	4	-	-
60-64	2	-	-	-	6	2	-	-
<b>Tertiary education - total</b>	<b>1502</b>	<b>722</b>	<b>127</b>	<b>61</b>	<b>52</b>	<b>34</b>	<b>21</b>	<b>11</b>
Under 25	9	5	-	-	-	-	2	2
25 - 29	60	29	7	7	4	3	6	2
30 - 34	241	131	18	5	13	5	1	1
35 - 39	230	127	14	9	8	6	2	1
40 - 44	261	151	18	11	8	7	4	3
45 - 49	214	100	16	7	4	4	2	-
50 - 54	184	71	16	7	9	6	2	2
55 - 59	153	69	16	9	3	2	-	-
60 - 64	113	29	15	4	3	1	2	-
65 - 69	37	10	7	2	-	-	-	-
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...

**5.1. Full-time and part-time assistant researchers, by academic titles, sectors, fields of science and sex, 2015 (head count)**

	Full-time and part-time assistant researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>REPUBLIC OF SERBIA</b>	<b>1920</b>	<b>915</b>	<b>105</b>	<b>51</b>	<b>204</b>	<b>112</b>	<b>51</b>	<b>20</b>	<b>1560</b>	<b>732</b>
Natural sciences	347	157	37	13	36	15	6	1	268	128
Engineering and technology	701	236	15	5	64	31	29	11	593	189
Medical and health sciences	149	100	12	9	16	9	3	1	118	81
Agricultural sciences	320	150	16	6	26	12	12	7	266	125
Social sciences	237	150	14	9	24	13	-	-	199	128
Humanities	166	122	11	9	38	32	1	-	116	81
<b>Business sector</b>	<b>784</b>	<b>271</b>	<b>15</b>	<b>3</b>	<b>48</b>	<b>16</b>	<b>30</b>	<b>11</b>	<b>691</b>	<b>241</b>
Natural sciences	148	45	5	1	13	2	-	-	130	42
Engineering and technology	503	141	2	-	19	3	28	10	454	128
Medical and health sciences	83	56	-	-	9	6	2	1	72	49
Agricultural sciences	23	9	3	-	5	3	-	-	15	6
Social sciences	27	20	5	2	2	2	-	-	20	16
<b>Government sector</b>	<b>413</b>	<b>192</b>	<b>46</b>	<b>17</b>	<b>47</b>	<b>23</b>	<b>16</b>	<b>7</b>	<b>304</b>	<b>145</b>
Natural sciences	75	38	26	9	8	4	6	1	35	24
Engineering and technology	110	44	7	1	17	8	1	1	85	34
Medical and health sciences	6	6	1	1	-	-	-	-	5	5
Agricultural sciences	204	92	9	4	17	7	9	5	169	76
Social sciences	11	7	3	2	5	4	-	-	3	1
Humanities	7	5	-	-	-	-	-	-	7	5
<b>Tertiary education</b>	<b>721</b>	<b>450</b>	<b>44</b>	<b>31</b>	<b>108</b>	<b>72</b>	<b>5</b>	<b>2</b>	<b>564</b>	<b>345</b>
Natural sciences	124	74	6	3	15	9	-	-	103	62
Engineering and technology	88	51	6	4	28	20	-	-	54	27
Medical and health sciences	60	38	11	8	7	3	1	-	41	27
Agricultural sciences	93	49	4	2	4	2	3	2	82	43
Social sciences	197	121	6	5	16	6	-	-	175	110
Humanities	159	117	11	9	38	32	1	-	109	76
<b>Non-profit sector</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>
Social sciences	2	2	-	-	1	1	-	-	1	1
<b>SRBIJA – SEVER</b>	<b>1686</b>	<b>801</b>	<b>98</b>	<b>46</b>	<b>179</b>	<b>96</b>	<b>49</b>	<b>20</b>	<b>1360</b>	<b>639</b>
Natural sciences	334	151	36	12	34	13	6	1	258	125
Engineering and technology	576	188	10	1	58	28	29	11	479	148
Medical and health sciences	109	76	11	9	12	7	2	1	84	59
Agricultural sciences	307	145	16	6	24	11	12	7	255	121
Social sciences	219	136	14	9	22	13	-	-	183	114
Humanities	141	105	11	9	29	24	-	-	101	72
<b>Business sector</b>	<b>713</b>	<b>248</b>	<b>15</b>	<b>3</b>	<b>48</b>	<b>16</b>	<b>30</b>	<b>11</b>	<b>620</b>	<b>218</b>
Natural sciences	148	45	5	1	13	2	-	-	130	42
Engineering and technology	453	132	2	-	19	3	28	10	404	119
Medical and health sciences	83	56	-	-	9	6	2	1	72	49
Agricultural sciences	12	5	3	-	5	3	-	-	4	2
Social sciences	17	10	5	2	2	2	-	-	10	6
<b>Government sector</b>	<b>388</b>	<b>180</b>	<b>46</b>	<b>17</b>	<b>45</b>	<b>22</b>	<b>16</b>	<b>7</b>	<b>281</b>	<b>134</b>
Natural sciences	75	38	26	9	8	4	6	1	35	24
Engineering and technology	87	33	7	1	17	8	1	1	62	23
Medical and health sciences	6	6	1	1	-	-	-	-	5	5
Agricultural sciences	202	91	9	4	15	6	9	5	169	76
Social sciences	11	7	3	2	5	4	-	-	3	1
Humanities	7	5	-	-	-	-	-	-	7	5
<b>Tertiary education</b>	<b>583</b>	<b>371</b>	<b>37</b>	<b>26</b>	<b>85</b>	<b>57</b>	<b>3</b>	<b>2</b>	<b>458</b>	<b>286</b>
Natural sciences	111	68	5	2	13	7	-	-	93	59
Engineering and technology	36	23	1	-	22	17	-	-	13	6
Medical and health sciences	20	14	10	8	3	1	-	-	7	5
Agricultural sciences	93	49	4	2	4	2	3	2	82	43
Social sciences	189	117	6	5	14	6	-	-	169	106
Humanities	134	100	11	9	29	24	-	-	94	67
<b>Non-profit sector</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>
Social sciences	2	2	-	-	1	1	-	-	1	1

### 5.1. Full-time and part-time assistant researchers, by academic titles, sectors, fields of science and sex, 2015 (head count) (continued)

	Full-time and part-time assistant researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Beogradski region</b>	<b>1296</b>	<b>607</b>	<b>88</b>	<b>45</b>	<b>144</b>	<b>78</b>	<b>46</b>	<b>17</b>	<b>1018</b>	<b>467</b>
Natural sciences	289	137	32	11	26	11	6	1	225	114
Engineering and technology	509	159	5	1	41	15	28	10	435	133
Medical and health sciences	106	74	11	9	12	7	2	1	81	57
Agricultural sciences	185	92	16	6	16	9	10	5	143	72
Social sciences	66	40	13	9	20	12	-	-	33	19
Humanities	141	105	11	9	29	24	-	-	101	72
<b>Business sector</b>	<b>652</b>	<b>234</b>	<b>11</b>	<b>2</b>	<b>42</b>	<b>16</b>	<b>30</b>	<b>11</b>	<b>569</b>	<b>205</b>
Natural sciences	124	43	1	-	7	2	-	-	116	41
Engineering and technology	419	121	2	-	19	3	28	10	370	108
Medical and health sciences	83	56	-	-	9	6	2	1	72	49
Agricultural sciences	11	5	3	-	5	3	-	-	3	2
Social sciences	15	9	5	2	2	2	-	-	8	5
<b>Government sector</b>	<b>265</b>	<b>126</b>	<b>41</b>	<b>17</b>	<b>34</b>	<b>18</b>	<b>13</b>	<b>4</b>	<b>177</b>	<b>87</b>
Natural sciences	75	38	26	9	8	4	6	1	35	24
Engineering and technology	75	29	2	1	14	6	-	-	59	22
Medical and health sciences	6	6	1	1	-	-	-	-	5	5
Agricultural sciences	91	41	9	4	7	4	7	3	68	30
Social sciences	11	7	3	2	5	4	-	-	3	1
Humanities	7	5	-	-	-	-	-	-	7	5
<b>Tertiary education</b>	<b>377</b>	<b>245</b>	<b>36</b>	<b>26</b>	<b>67</b>	<b>43</b>	<b>3</b>	<b>2</b>	<b>271</b>	<b>174</b>
Natural sciences	90	56	5	2	11	5	-	-	74	49
Engineering and technology	15	9	1	-	8	6	-	-	6	3
Medical and health sciences	17	12	10	8	3	1	-	-	4	3
Agricultural sciences	83	46	4	2	4	2	3	2	72	40
Social sciences	38	22	5	5	12	5	-	-	21	12
Humanities	134	100	11	9	29	24	-	-	94	67
<b>Non-profit sector</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>
Social sciences	2	2	-	-	1	1	-	-	1	1
<b>Region Vojvodine</b>	<b>390</b>	<b>194</b>	<b>10</b>	<b>1</b>	<b>35</b>	<b>18</b>	<b>3</b>	<b>3</b>	<b>342</b>	<b>172</b>
Natural sciences	45	14	4	1	8	2	-	-	33	11
Engineering and technology	67	29	5	-	17	13	1	1	44	15
Medical and health sciences	3	2	-	-	-	-	-	-	3	2
Agricultural sciences	122	53	-	-	8	2	2	2	112	49
Social sciences	153	96	1	-	2	1	-	-	150	95
<b>Business sector</b>	<b>61</b>	<b>14</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>51</b>	<b>13</b>
Natural sciences	24	2	4	1	6	-	-	-	14	1
Engineering and technology	34	11	-	-	-	-	-	-	34	11
Agricultural sciences	1	-	-	-	-	-	-	-	1	-
Social sciences	2	1	-	-	-	-	-	-	2	1
<b>Government sector</b>	<b>123</b>	<b>54</b>	<b>5</b>	<b>-</b>	<b>11</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>104</b>	<b>47</b>
Engineering and technology	12	4	5	-	3	2	1	1	3	1
Agricultural sciences	111	50	-	-	8	2	2	2	101	46
<b>Tertiary education</b>	<b>206</b>	<b>126</b>	<b>1</b>	<b>-</b>	<b>18</b>	<b>14</b>	<b>-</b>	<b>-</b>	<b>187</b>	<b>112</b>
Natural sciences	21	12	-	-	2	2	-	-	19	10
Engineering and technology	21	14	-	-	14	11	-	-	7	3
Medical and health sciences	3	2	-	-	-	-	-	-	3	2
Agricultural sciences	10	3	-	-	-	-	-	-	10	3
Social sciences	151	95	1	-	2	1	-	-	148	94
<b>SRBIJA – JUG</b>	<b>234</b>	<b>114</b>	<b>7</b>	<b>5</b>	<b>25</b>	<b>16</b>	<b>2</b>	<b>-</b>	<b>200</b>	<b>93</b>
Natural sciences	13	6	1	1	2	2	-	-	10	3
Engineering and technology	125	48	5	4	6	3	-	-	114	41
Medical and health sciences	40	24	1	-	4	2	1	-	34	22
Agricultural sciences	13	5	-	-	2	1	-	-	11	4
Social sciences	18	14	-	-	2	-	-	-	16	14
Humanities	25	17	-	-	9	8	1	-	15	9



**5.1. Full-time and part-time assistant researchers, by academic titles, sectors, fields of science and sex, 2015 (head count) (continued)**

	Full-time and part-time assistant researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Business sector</b>	<b>71</b>	<b>23</b>	-	-	-	-	-	-	<b>71</b>	<b>23</b>
Engineering and technology	50	9	-	-	-	-	-	-	50	9
Agricultural sciences	11	4	-	-	-	-	-	-	11	4
Social sciences	10	10	-	-	-	-	-	-	10	10
<b>Government sector</b>	<b>25</b>	<b>12</b>	-	-	<b>2</b>	<b>1</b>	-	-	<b>23</b>	<b>11</b>
Engineering and technology	23	11	-	-	-	-	-	-	23	11
Agricultural sciences	2	1	-	-	2	1	-	-	-	-
<b>Tertiary education</b>	<b>138</b>	<b>79</b>	<b>7</b>	<b>5</b>	<b>23</b>	<b>15</b>	<b>2</b>	-	<b>106</b>	<b>59</b>
Natural sciences	13	6	1	1	2	2	-	-	10	3
Engineering and technology	52	28	5	4	6	3	-	-	41	21
Medical and health sciences	40	24	1	-	4	2	1	-	34	22
Social sciences	8	4	-	-	2	-	-	-	6	4
Humanities	25	17	-	-	9	8	1	-	15	9
<b>Region Šumadije i Zapadne Srbije</b>	<b>97</b>	<b>43</b>	<b>5</b>	<b>3</b>	<b>16</b>	<b>10</b>	<b>1</b>	-	<b>75</b>	<b>30</b>
Natural sciences	13	6	1	1	2	2	-	-	10	3
Engineering and technology	35	10	3	2	-	-	-	-	32	8
Medical and health sciences	27	14	1	-	4	2	1	-	21	12
Agricultural sciences	2	1	-	-	2	1	-	-	-	-
Social sciences	4	2	-	-	2	-	-	-	2	2
Humanities	16	10	-	-	6	5	-	-	10	5
<b>Business sector</b>	<b>30</b>	<b>8</b>	-	-	-	-	-	-	<b>30</b>	<b>8</b>
Engineering and technology	30	8	-	-	-	-	-	-	30	8
<b>Government sector</b>	<b>2</b>	<b>1</b>	-	-	<b>2</b>	<b>1</b>	-	-	-	-
Agricultural sciences	2	1	-	-	2	1	-	-	-	-
<b>Tertiary education</b>	<b>65</b>	<b>34</b>	<b>5</b>	<b>3</b>	<b>14</b>	<b>9</b>	<b>1</b>	-	<b>45</b>	<b>22</b>
Natural sciences	13	6	1	1	2	2	-	-	10	3
Engineering and technology	5	2	3	2	-	-	-	-	2	-
Medical and health sciences	27	14	1	-	4	2	1	-	21	12
Social sciences	4	2	-	-	2	-	-	-	2	2
Humanities	16	10	-	-	6	5	-	-	10	5
<b>Region Južne i Istočne Srbije</b>	<b>137</b>	<b>71</b>	<b>2</b>	<b>2</b>	<b>9</b>	<b>6</b>	<b>1</b>	-	<b>125</b>	<b>63</b>
Engineering and technology	90	38	2	2	6	3	-	-	82	33
Medical and health sciences	13	10	-	-	-	-	-	-	13	10
Agricultural sciences	11	4	-	-	-	-	-	-	11	4
Social sciences	14	12	-	-	-	-	-	-	14	12
Humanities	9	7	-	-	3	3	1	-	5	4
<b>Business sector</b>	<b>41</b>	<b>15</b>	-	-	-	-	-	-	<b>41</b>	<b>15</b>
Engineering and technology	20	1	-	-	-	-	-	-	20	1
Agricultural sciences	11	4	-	-	-	-	-	-	11	4
Social sciences	10	10	-	-	-	-	-	-	10	10
<b>Government sector</b>	<b>23</b>	<b>11</b>	-	-	-	-	-	-	<b>23</b>	<b>11</b>
Engineering and technology	23	11	-	-	-	-	-	-	23	11
<b>Tertiary education</b>	<b>73</b>	<b>45</b>	<b>2</b>	<b>2</b>	<b>9</b>	<b>6</b>	<b>1</b>	-	<b>61</b>	<b>37</b>
Engineering and technology	47	26	2	2	6	3	-	-	39	21
Medical and health sciences	13	10	-	-	-	-	-	-	13	10
Social sciences	4	2	-	-	-	-	-	-	4	2
Humanities	9	7	-	-	3	3	1	-	5	4
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...	...	...

## 5.2. Full-time and part-time assistant researchers, by academic titles, sectors, fields of science, expressed in full-time equivalent, 2015

	Full-time and part-time assistant researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>REPUBLIC OF SERBIA</b>	<b>1743.4</b>	<b>847.0</b>	<b>93.9</b>	<b>45.6</b>	<b>186.4</b>	<b>101.2</b>	<b>50.5</b>	<b>20.0</b>	<b>1412.7</b>	<b>680.3</b>
Natural sciences	306.7	143.3	35.4	13.0	31.8	13.6	6.0	1.0	233.5	115.7
Engineering and technology	623.7	220.8	12.8	4.5	60.5	29.0	29.0	11.0	521.4	176.3
Medical and health sciences	127.5	87.6	5.7	4.6	13.3	7.8	2.5	1.0	106.1	74.2
Agricultural sciences	318.4	149.2	16.0	6.0	26.0	12.0	12.0	7.0	264.4	124.2
Social sciences	209.9	130.1	13.0	8.5	22.8	11.8	-	-	174.1	109.8
Humanities	157.2	116.1	11.0	9.0	32.0	27.0	1.0	-	113.2	80.1
<b>Business sector</b>	<b>667.0</b>	<b>239.3</b>	<b>11.0</b>	<b>2.5</b>	<b>42.1</b>	<b>13.9</b>	<b>30.0</b>	<b>11.0</b>	<b>583.9</b>	<b>211.9</b>
Natural sciences	108.5	32.1	3.4	1.0	8.8	0.6	-	-	96.3	30.5
Engineering and technology	438.4	133.0	0.3	-	18.0	3.0	28.0	10.0	392.1	120.0
Medical and health sciences	81.6	55.2	-	-	9.0	6.0	2.0	1.0	70.6	48.2
Agricultural sciences	21.4	8.2	3.0	-	5.0	3.0	-	-	13.4	5.2
Social sciences	17.1	10.8	4.3	1.5	1.3	1.3	-	-	11.5	8.0
<b>Government sector</b>	<b>412.1</b>	<b>191.8</b>	<b>45.8</b>	<b>16.8</b>	<b>47.0</b>	<b>23.0</b>	<b>16.0</b>	<b>7.0</b>	<b>303.3</b>	<b>145.0</b>
Natural sciences	75.0	38.0	26.0	9.0	8.0	4.0	6.0	1.0	35.0	24.0
Engineering and technology	110.0	44.0	7.0	1.0	17.0	8.0	1.0	1.0	85.0	34.0
Medical and health sciences	5.8	5.8	0.8	0.8	-	-	-	-	5.0	5.0
Agricultural sciences	204.0	92.0	9.0	4.0	17.0	7.0	9.0	5.0	169.0	76.0
Social sciences	10.3	7.0	3.0	2.0	5.0	4.0	-	-	2.3	1.0
Humanities	7.0	5.0	-	-	-	-	-	-	7.0	5.0
<b>Tertiary education</b>	<b>662.4</b>	<b>414.0</b>	<b>37.1</b>	<b>26.3</b>	<b>96.3</b>	<b>63.3</b>	<b>4.5</b>	<b>2.0</b>	<b>524.5</b>	<b>322.4</b>
Natural sciences	123.2	73.2	6.0	3.0	15.0	9.0	-	-	102.2	61.2
Engineering and technology	75.3	43.8	5.5	3.5	25.5	18.0	-	-	44.3	22.3
Medical and health sciences	40.1	26.6	4.9	3.8	4.3	1.8	0.5	-	30.5	21.0
Agricultural sciences	93.0	49.0	4.0	2.0	4.0	2.0	3.0	2.0	82.0	43.0
Social sciences	180.5	110.3	5.7	5.0	15.5	5.5	-	-	159.3	99.8
Humanities	150.2	111.1	11.0	9.0	32.0	27.0	1.0	-	106.2	75.1
<b>Non-profit sector</b>	<b>2.0</b>	<b>2.0</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>1.0</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>1.0</b>
Social sciences	2.0	2.0	-	-	1.0	1.0	-	-	1.0	1.0
<b>SRBIJA – SEVER</b>	<b>1545.8</b>	<b>755.4</b>	<b>87.9</b>	<b>41.1</b>	<b>171.6</b>	<b>92.4</b>	<b>49.0</b>	<b>20.0</b>	<b>1237.3</b>	<b>601.9</b>
Natural sciences	293.7	137.3	34.4	12.0	29.8	11.6	6.0	1.0	223.5	112.7
Engineering and technology	507.4	177.5	8.3	1.0	56.0	27.0	29.0	11.0	414.1	138.5
Medical and health sciences	101.8	70.8	5.2	4.6	12.0	7.0	2.0	1.0	82.6	58.2
Agricultural sciences	305.4	144.2	16.0	6.0	24.0	11.0	12.0	7.0	253.4	120.2
Social sciences	201.9	125.1	13.0	8.5	20.8	11.8	-	-	168.1	104.8
Humanities	135.6	100.5	11.0	9.0	29.0	24.0	-	-	95.6	67.5
<b>Business sector</b>	<b>604.0</b>	<b>224.3</b>	<b>11.0</b>	<b>2.5</b>	<b>42.1</b>	<b>13.9</b>	<b>30.0</b>	<b>11.0</b>	<b>520.9</b>	<b>196.9</b>
Natural sciences	108.5	32.1	3.4	1.0	8.8	0.6	-	-	96.3	30.5
Engineering and technology	388.4	124.0	0.3	-	18.0	3.0	28.0	10.0	342.1	111.0
Medical and health sciences	81.6	55.2	-	-	9.0	6.0	2.0	1.0	70.6	48.2
Agricultural sciences	10.4	4.2	3.0	-	5.0	3.0	-	-	2.4	1.2
Social sciences	15.1	8.8	4.3	1.5	1.3	1.3	-	-	9.5	6.0
<b>Government sector</b>	<b>387.1</b>	<b>179.8</b>	<b>45.8</b>	<b>16.8</b>	<b>45.0</b>	<b>22.0</b>	<b>16.0</b>	<b>7.0</b>	<b>280.3</b>	<b>134.0</b>
Natural sciences	75.0	38.0	26.0	9.0	8.0	4.0	6.0	1.0	35.0	24.0
Engineering and technology	87.0	33.0	7.0	1.0	17.0	8.0	1.0	1.0	62.0	23.0
Medical and health sciences	5.8	5.8	0.8	0.8	-	-	-	-	5.0	5.0
Agricultural sciences	202.0	91.0	9.0	4.0	15.0	6.0	9.0	5.0	169.0	76.0
Social sciences	10.3	7.0	3.0	2.0	5.0	4.0	-	-	2.3	1.0
Humanities	7.0	5.0	-	-	-	-	-	-	7.0	5.0
<b>Tertiary education</b>	<b>552.7</b>	<b>349.3</b>	<b>31.1</b>	<b>21.8</b>	<b>83.5</b>	<b>55.5</b>	<b>3.0</b>	<b>2.0</b>	<b>435.1</b>	<b>270.0</b>
Natural sciences	110.2	67.2	5.0	2.0	13.0	7.0	-	-	92.2	58.2
Engineering and technology	32.0	20.5	1.0	-	21.0	16.0	-	-	10.0	4.5
Medical and health sciences	14.4	9.8	4.4	3.8	3.0	1.0	-	-	7.0	5.0
Agricultural sciences	93.0	49.0	4.0	2.0	4.0	2.0	3.0	2.0	82.0	43.0
Social sciences	174.5	107.3	5.7	5.0	13.5	5.5	-	-	155.3	96.8
Humanities	128.6	95.5	11.0	9.0	29.0	24.0	-	-	88.6	62.5
<b>Non-profit sector</b>	<b>2.0</b>	<b>2.0</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>1.0</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>1.0</b>
Social sciences	2.0	2.0	-	-	1.0	1.0	-	-	1.0	1.0

**5.2. Full-time and part-time assistant researchers, by academic titles, sectors, fields of science, expressed in full-time equivalent, 2015 (continued)**

	Full-time and part-time assistant researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Beogradski region</b>	<b>1172.1</b>	<b>571.3</b>	<b>79.8</b>	<b>40.1</b>	<b>136.6</b>	<b>74.4</b>	<b>46.0</b>	<b>17.0</b>	<b>909.7</b>	<b>439.8</b>
Natural sciences	250.8	123.8	32.0	11.0	21.8	9.6	6.0	1.0	191.0	102.2
Engineering and technology	441.1	149.2	3.3	1.0	39.0	14.0	28.0	10.0	370.8	124.2
Medical and health sciences	98.8	68.8	5.2	4.6	12.0	7.0	2.0	1.0	79.6	56.2
Agricultural sciences	183.4	91.2	16.0	6.0	16.0	9.0	10.0	5.0	141.4	71.2
Social sciences	62.4	37.8	12.3	8.5	18.8	10.8	-	-	31.3	18.5
Humanities	135.6	100.5	11.0	9.0	29.0	24.0	-	-	95.6	67.5
<b>Business sector</b>	<b>545.3</b>	<b>211.0</b>	<b>8.6</b>	<b>1.5</b>	<b>36.1</b>	<b>13.9</b>	<b>30.0</b>	<b>11.0</b>	<b>470.6</b>	<b>184.6</b>
Natural sciences	86.1	30.1	1.0	-	2.8	0.6	-	-	82.3	29.5
Engineering and technology	355.1	113.7	0.3	-	18.0	3.0	28.0	10.0	308.8	100.7
Medical and health sciences	81.6	55.2	-	-	9.0	6.0	2.0	1.0	70.6	48.2
Agricultural sciences	9.4	4.2	3.0	-	5.0	3.0	-	-	1.4	1.2
Social sciences	13.1	7.8	4.3	1.5	1.3	1.3	-	-	7.5	5.0
<b>Government sector</b>	<b>264.1</b>	<b>125.8</b>	<b>40.8</b>	<b>16.8</b>	<b>34.0</b>	<b>18.0</b>	<b>13.0</b>	<b>4.0</b>	<b>176.3</b>	<b>87.0</b>
Natural sciences	75.0	38.0	26.0	9.0	8.0	4.0	6.0	1.0	35.0	24.0
Engineering and technology	75.0	29.0	2.0	1.0	14.0	6.0	-	-	59.0	22.0
Medical and health sciences	5.8	5.8	0.8	0.8	-	-	-	-	5.0	5.0
Agricultural sciences	91.0	41.0	9.0	4.0	7.0	4.0	7.0	3.0	68.0	30.0
Social sciences	10.3	7.0	3.0	2.0	5.0	4.0	-	-	2.3	1.0
Humanities	7.0	5.0	-	-	-	-	-	-	7.0	5.0
<b>Tertiary education</b>	<b>360.7</b>	<b>232.5</b>	<b>30.4</b>	<b>21.8</b>	<b>65.5</b>	<b>41.5</b>	<b>3.0</b>	<b>2.0</b>	<b>261.8</b>	<b>167.2</b>
Natural sciences	89.7	55.7	5.0	2.0	11.0	5.0	-	-	73.7	48.7
Engineering and technology	11.0	6.5	1.0	-	7.0	5.0	-	-	3.0	1.5
Medical and health sciences	11.4	7.8	4.4	3.8	3.0	1.0	-	-	4.0	3.0
Agricultural sciences	83.0	46.0	4.0	2.0	4.0	2.0	3.0	2.0	72.0	40.0
Social sciences	37.0	21.0	5.0	5.0	11.5	4.5	-	-	20.5	11.5
Humanities	128.6	95.5	11.0	9.0	29.0	24.0	-	-	88.6	62.5
<b>Non-profit sector</b>	<b>2.0</b>	<b>2.0</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>1.0</b>	<b>-</b>	<b>-</b>	<b>1.0</b>	<b>1.0</b>
Social sciences	2.0	2.0	-	-	1.0	1.0	-	-	1.0	1.0
<b>Region Vojvodine</b>	<b>373.7</b>	<b>184.1</b>	<b>8.1</b>	<b>1.0</b>	<b>35.0</b>	<b>18.0</b>	<b>3.0</b>	<b>3.0</b>	<b>327.6</b>	<b>162.1</b>
Natural sciences	42.9	13.5	2.4	1.0	8.0	2.0	-	-	32.5	10.5
Engineering and technology	66.3	28.3	5.0	-	17.0	13.0	1.0	1.0	43.3	14.3
Medical and health sciences	3.0	2.0	-	-	-	-	-	-	3.0	2.0
Agricultural sciences	122.0	53.0	-	-	8.0	2.0	2.0	2.0	112.0	49.0
Social sciences	139.5	87.3	0.7	-	2.0	1.0	-	-	136.8	86.3
<b>Business sector</b>	<b>58.7</b>	<b>13.3</b>	<b>2.4</b>	<b>1.0</b>	<b>6.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>50.3</b>	<b>12.3</b>
Natural sciences	22.4	2.0	2.4	1.0	6.0	-	-	-	14.0	1.0
Engineering and technology	33.3	10.3	-	-	-	-	-	-	33.3	10.3
Agricultural sciences	1.0	-	-	-	-	-	-	-	1.0	-
Social sciences	2.0	1.0	-	-	-	-	-	-	2.0	1.0
<b>Government sector</b>	<b>123.0</b>	<b>54.0</b>	<b>5.0</b>	<b>-</b>	<b>11.0</b>	<b>4.0</b>	<b>3.0</b>	<b>3.0</b>	<b>104.0</b>	<b>47.0</b>
Engineering and technology	12.0	4.0	5.0	-	3.0	2.0	1.0	1.0	3.0	1.0
Agricultural sciences	111.0	50.0	-	-	8.0	2.0	2.0	2.0	101.0	46.0
<b>Tertiary education</b>	<b>192.0</b>	<b>116.8</b>	<b>0.7</b>	<b>-</b>	<b>18.0</b>	<b>14.0</b>	<b>-</b>	<b>-</b>	<b>173.3</b>	<b>102.8</b>
Natural sciences	20.5	11.5	-	-	2.0	2.0	-	-	18.5	9.5
Engineering and technology	21.0	14.0	-	-	14.0	11.0	-	-	7.0	3.0
Medical and health sciences	3.0	2.0	-	-	-	-	-	-	3.0	2.0
Agricultural sciences	10.0	3.0	-	-	-	-	-	-	10.0	3.0
Social sciences	137.5	86.3	0.7	-	2.0	1.0	-	-	134.8	85.3
<b>SRBIJA – JUG</b>	<b>197.7</b>	<b>91.6</b>	<b>6.0</b>	<b>4.5</b>	<b>14.8</b>	<b>8.8</b>	<b>1.5</b>	<b>-</b>	<b>175.4</b>	<b>78.4</b>
Natural sciences	13.0	6.0	1.0	1.0	2.0	2.0	-	-	10.0	3.0
Engineering and technology	116.3	43.3	4.5	3.5	4.5	2.0	-	-	107.3	37.8
Medical and health sciences	25.8	16.8	0.5	-	1.3	0.8	0.5	-	23.5	16.0
Agricultural sciences	13.0	5.0	-	-	2.0	1.0	-	-	11.0	4.0
Social sciences	8.0	5.0	-	-	2.0	-	-	-	6.0	5.0
Humanities	21.6	15.6	-	-	3.0	3.0	1.0	-	17.6	12.6

## 5.2. Full-time and part-time assistant researchers, by academic titles, sectors, fields of science, expressed in full-time equivalent, 2015 (continued)

	Full-time and part-time assistant researchers									
	Total		Doctors of science		Masters of science		Specialists		University degree	
	All	Women	All	Women	All	Women	All	Women	All	Women
<b>Business sector</b>	<b>63.0</b>	<b>15.0</b>	-	-	-	-	-	-	<b>63.0</b>	<b>15.0</b>
Engineering and technology	50.0	9.0	-	-	-	-	-	-	50.0	9.0
Agricultural sciences	11.0	4.0	-	-	-	-	-	-	11.0	4.0
Social sciences	2.0	2.0	-	-	-	-	-	-	2.0	2.0
<b>Government sector</b>	<b>25.0</b>	<b>12.0</b>	-	-	<b>2.0</b>	<b>1.0</b>	-	-	<b>23.0</b>	<b>11.0</b>
Engineering and technology	23.0	11.0	-	-	-	-	-	-	23.0	11.0
Agricultural sciences	2.0	1.0	-	-	2.0	1.0	-	-	-	-
<b>Tertiary education</b>	<b>109.7</b>	<b>64.7</b>	<b>6.0</b>	<b>4.5</b>	<b>12.8</b>	<b>7.8</b>	<b>1.5</b>	-	<b>89.4</b>	<b>52.4</b>
Natural sciences	13.0	6.0	1.0	1.0	2.0	2.0	-	-	10.0	3.0
Engineering and technology	43.3	23.3	4.5	3.5	4.5	2.0	-	-	34.3	17.8
Medical and health sciences	25.8	16.8	0.5	-	1.3	0.8	0.5	-	23.5	16.0
Social sciences	6.0	3.0	-	-	2.0	-	-	-	4.0	3.0
Humanities	21.6	15.6	-	-	3.0	3.0	1.0	-	17.6	12.6
<b>Region Šumadije i Zapadne Srbije</b>	<b>79.3</b>	<b>34.4</b>	<b>4.5</b>	<b>3.0</b>	<b>7.3</b>	<b>3.8</b>	<b>0.5</b>	-	<b>67.1</b>	<b>27.6</b>
Natural sciences	13.0	6.0	1.0	1.0	2.0	2.0	-	-	10.0	3.0
Engineering and technology	35.0	10.0	3.0	2.0	-	-	-	-	32.0	8.0
Medical and health sciences	12.8	6.8	0.5	-	1.3	0.8	0.5	-	10.5	6.0
Agricultural sciences	2.0	1.0	-	-	2.0	1.0	-	-	-	-
Social sciences	4.0	2.0	-	-	2.0	-	-	-	2.0	2.0
Humanities	12.6	8.6	-	-	-	-	-	-	12.6	8.6
<b>Business sector</b>	<b>30.0</b>	<b>8.0</b>	-	-	-	-	-	-	<b>30.0</b>	<b>8.0</b>
Engineering and technology	30.0	8.0	-	-	-	-	-	-	30.0	8.0
<b>Government sector</b>	<b>2.0</b>	<b>1.0</b>	-	-	<b>2.0</b>	<b>1.0</b>	-	-	-	-
Agricultural sector	2.0	1.0	-	-	2.0	1.0	-	-	-	-
<b>Tertiary education</b>	<b>47.4</b>	<b>25.4</b>	<b>4.5</b>	<b>3.0</b>	<b>5.3</b>	<b>2.8</b>	<b>0.5</b>	-	<b>37.1</b>	<b>19.6</b>
Natural sciences	13.0	6.0	1.0	1.0	2.0	2.0	-	-	10.0	3.0
Engineering and technology	5.0	2.0	3.0	2.0	-	-	-	-	2.0	-
Medical and health sciences	12.8	6.8	0.5	-	1.3	0.8	0.5	-	10.5	6.0
Social sciences	4.0	2.0	-	-	2.0	-	-	-	2.0	2.0
Humanities	12.6	8.6	-	-	-	-	-	-	12.6	8.6
<b>Region Južne i Istočne Srbije</b>	<b>118.3</b>	<b>57.3</b>	<b>1.5</b>	<b>1.5</b>	<b>7.5</b>	<b>5.0</b>	<b>1.0</b>	-	<b>108.3</b>	<b>50.8</b>
Engineering and technology	81.3	33.3	1.5	1.5	4.5	2.0	-	-	75.3	29.8
Medical and health sciences	13.0	10.0	-	-	-	-	-	-	13.0	10.0
Agricultural sciences	11.0	4.0	-	-	-	-	-	-	11.0	4.0
Social sciences	4.0	3.0	-	-	-	-	-	-	4.0	3.0
Humanities	9.0	7.0	-	-	3.0	3.0	1.0	-	5.0	4.0
<b>Business sector</b>	<b>33.0</b>	<b>7.0</b>	-	-	-	-	-	-	<b>33.0</b>	<b>7.0</b>
Engineering and technology	20.0	1.0	-	-	-	-	-	-	20.0	1.0
Agricultural sciences	11.0	4.0	-	-	-	-	-	-	11.0	4.0
Social sciences	2.0	2.0	-	-	-	-	-	-	2.0	2.0
<b>Government sector</b>	<b>23.0</b>	<b>11.0</b>	-	-	-	-	-	-	<b>23.0</b>	<b>11.0</b>
Engineering and technology	23.0	11.0	-	-	-	-	-	-	23.0	11.0
<b>Tertiary education</b>	<b>62.3</b>	<b>39.3</b>	<b>1.5</b>	<b>1.5</b>	<b>7.5</b>	<b>5.0</b>	<b>1.0</b>	-	<b>52.3</b>	<b>32.8</b>
Engineering and technology	38.3	21.3	1.5	1.5	4.5	2.0	-	-	32.3	17.8
Medical and health sciences	13.0	10.0	-	-	-	-	-	-	13.0	10.0
Social sciences	2.0	1.0	-	-	-	-	-	-	2.0	1.0
Humanities	9.0	7.0	-	-	3.0	3.0	1.0	-	5.0	4.0
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...	...	...

## 6.1. Engaged on the basis of work on contract and author contract (head count), 2015

	Engaged on the basis of work on contract and author contract							
	Total		Researchers		Assistant researchers		Other	
	All	Women	All	Women	All	Women	All	Women
<b>REPUBLIC OF SERBIA</b>	<b>1951</b>	<b>874</b>	<b>1556</b>	<b>724</b>	<b>228</b>	<b>76</b>	<b>164</b>	<b>72</b>
Natural sciences	597	237	465	167	53	22	76	46
Engineering and technology	541	140	351	91	113	27	77	22
Medical and health sciences	395	303	395	303	-	-	-	-
Agricultural sciences	42	19	27	16	15	3	-	-
Social sciences	201	88	171	76	28	12	2	-
Humanities	175	87	147	71	19	12	9	4
<b>Business sector</b>	<b>618</b>	<b>343</b>	<b>469</b>	<b>310</b>	<b>64</b>	<b>6</b>	<b>82</b>	<b>25</b>
Natural sciences	46	13	20	1	10	2	13	8
Engineering and technology	196	42	75	21	53	4	68	17
Medical and health sciences	369	286	369	286	-	-	-	-
Agricultural sciences	4	2	3	2	1	-	-	-
Social sciences	3	-	2	-	-	-	1	-
<b>Government sector</b>	<b>356</b>	<b>171</b>	<b>259</b>	<b>120</b>	<b>33</b>	<b>15</b>	<b>64</b>	<b>36</b>
Natural sciences	219	98	158	62	6	4	55	32
Engineering and technology	22	8	11	6	11	2	-	-
Medical and health sciences	12	7	12	7	-	-	-	-
Agricultural sciences	6	3	6	3	-	-	-	-
Social sciences	22	17	19	17	3	-	-	-
Humanities	75	38	53	25	13	9	9	4
<b>Tertiary education</b>	<b>945</b>	<b>353</b>	<b>828</b>	<b>294</b>	<b>100</b>	<b>49</b>	<b>17</b>	<b>10</b>
Natural sciences	332	126	287	104	37	16	8	6
Engineering and technology	305	86	265	64	32	18	8	4
Medical and health sciences	14	10	14	10	-	-	-	-
Agricultural sciences	18	11	18	11	-	-	-	-
Social sciences	176	71	150	59	25	12	1	-
Humanities	100	49	94	46	6	3	-	-
<b>Non-profit sector</b>	<b>32</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>31</b>	<b>6</b>	<b>1</b>	<b>1</b>
Engineering and technology	18	4	-	-	17	3	1	1
Agricultural sciences	14	3	-	-	14	3	-	-
<b>SRBIJA – SEVER</b>	<b>1747</b>	<b>787</b>	<b>1388</b>	<b>651</b>	<b>203</b>	<b>66</b>	<b>153</b>	<b>68</b>
Natural sciences	579	227	454	161	46	18	76	46
Engineering and technology	446	109	277	66	103	25	66	18
Medical and health sciences	395	303	395	303	-	-	-	-
Agricultural sciences	42	19	27	16	15	3	-	-
Social sciences	177	73	155	65	20	8	2	-
Humanities	108	56	80	40	19	12	9	4
<b>Business sector</b>	<b>579</b>	<b>334</b>	<b>442</b>	<b>302</b>	<b>55</b>	<b>5</b>	<b>79</b>	<b>25</b>
Natural sciences	46	13	20	1	10	2	13	8
Engineering and technology	158	33	49	13	44	3	65	17
Medical and health sciences	369	286	369	286	-	-	-	-
Agricultural sciences	4	2	3	2	1	-	-	-
Social sciences	2	-	1	-	-	-	1	-
<b>Government sector</b>	<b>355</b>	<b>171</b>	<b>258</b>	<b>120</b>	<b>33</b>	<b>15</b>	<b>64</b>	<b>36</b>
Natural sciences	219	98	158	62	6	4	55	32
Engineering and technology	21	8	10	6	11	2	-	-
Medical and health sciences	12	7	12	7	-	-	-	-
Agricultural sciences	6	3	6	3	-	-	-	-
Social sciences	22	17	19	17	3	-	-	-
Humanities	75	38	53	25	13	9	9	4
<b>Tertiary education</b>	<b>781</b>	<b>275</b>	<b>688</b>	<b>229</b>	<b>84</b>	<b>40</b>	<b>9</b>	<b>6</b>
Natural sciences	314	116	276	98	30	12	8	6
Engineering and technology	249	64	218	47	31	17	-	-
Medical and health sciences	14	10	14	10	-	-	-	-
Agricultural sciences	18	11	18	11	-	-	-	-
Social sciences	153	56	135	48	17	8	1	-
Humanities	33	18	27	15	6	3	-	-
<b>Non-profit sector</b>	<b>32</b>	<b>7</b>	<b>-</b>	<b>-</b>	<b>31</b>	<b>6</b>	<b>1</b>	<b>1</b>
Engineering and technology	18	4	-	-	17	3	1	1
Agricultural sciences	14	3	-	-	14	3	-	-
<b>Beogradski region</b>	<b>1587</b>	<b>733</b>	<b>1294</b>	<b>621</b>	<b>139</b>	<b>42</b>	<b>151</b>	<b>68</b>
Natural sciences	553	224	437	160	38	16	75	46
Engineering and technology	374	81	248	57	61	6	65	18
Medical and health sciences	395	303	395	303	-	-	-	-
Agricultural sciences	7	5	6	5	1	-	-	-
Social sciences	150	64	128	56	20	8	2	-
Humanities	108	56	80	40	19	12	9	4
<b>Business sector</b>	<b>552</b>	<b>330</b>	<b>425</b>	<b>300</b>	<b>47</b>	<b>3</b>	<b>77</b>	<b>25</b>
Natural sciences	23	11	6	1	2	-	12	8
Engineering and technology	154	31	46	11	44	3	64	17
Medical and health sciences	369	286	369	286	-	-	-	-
Agricultural sciences	4	2	3	2	1	-	-	-
Social sciences	2	-	1	-	-	-	1	-
<b>Government sector</b>	<b>340</b>	<b>168</b>	<b>254</b>	<b>119</b>	<b>22</b>	<b>13</b>	<b>64</b>	<b>36</b>
Natural sciences	219	98	158	62	6	4	55	32
Engineering and technology	10	6	10	6	-	-	-	-
Medical and health sciences	12	7	12	7	-	-	-	-
Agricultural sciences	2	2	2	2	-	-	-	-

## 6.1. Engaged on the basis of work on contract and author contract (head count), 2015 (continued)

	Engaged on the basis of work on contract and author contract							
	Total		Researchers		Assistant researchers		Other	
	All	Women	All	Women	All	Women	All	Women
Social sciences	22	17	19	17	3	-	-	-
Humanities	75	38	53	25	13	9	9	4
<b>Tertiary education</b>	<b>677</b>	<b>231</b>	<b>615</b>	<b>202</b>	<b>53</b>	<b>23</b>	<b>9</b>	<b>6</b>
Natural sciences	311	115	273	97	30	12	8	6
Engineering and technology	192	40	192	40	-	-	-	-
Medical and health sciences	14	10	14	10	-	-	-	-
Agricultural sciences	1	1	1	1	-	-	-	-
Social sciences	126	47	108	39	17	8	1	-
Humanities	33	18	27	15	6	3	-	-
<b>Non-profit sector</b>	<b>18</b>	<b>4</b>	-	-	<b>17</b>	<b>3</b>	<b>1</b>	<b>1</b>
Engineering and technology	18	4	-	-	17	3	1	1
<b>Region Vojvodine</b>	<b>160</b>	<b>54</b>	<b>94</b>	<b>30</b>	<b>64</b>	<b>24</b>	<b>2</b>	-
Natural sciences	26	3	17	1	8	2	1	-
Engineering and technology	72	28	29	9	42	19	1	-
Agricultural sciences	35	14	21	11	14	3	-	-
Social sciences	27	9	27	9	-	-	-	-
<b>Business sector</b>	<b>27</b>	<b>4</b>	<b>17</b>	<b>2</b>	<b>8</b>	<b>2</b>	<b>2</b>	-
Natural sciences	23	2	14	-	8	2	1	-
Engineering and technology	4	2	3	2	-	-	1	-
<b>Government sector</b>	<b>15</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>11</b>	<b>2</b>	-	-
Engineering and technology	11	2	-	-	11	2	-	-
Agricultural sciences	4	1	4	1	-	-	-	-
<b>Tertiary education</b>	<b>104</b>	<b>44</b>	<b>73</b>	<b>27</b>	<b>31</b>	<b>17</b>	-	-
Natural sciences	3	1	3	1	-	-	-	-
Engineering and technology	57	24	26	7	31	17	-	-
Agricultural sciences	17	10	17	10	-	-	-	-
Social sciences	27	9	27	9	-	-	-	-
<b>Non-profit sector</b>	<b>14</b>	<b>3</b>	-	-	<b>14</b>	<b>3</b>	-	-
Agricultural sciences	14	3	-	-	14	3	-	-
<b>SRBIJA – JUG</b>	<b>204</b>	<b>87</b>	<b>168</b>	<b>73</b>	<b>25</b>	<b>10</b>	<b>11</b>	<b>4</b>
Natural sciences	18	10	11	6	7	4	-	-
Engineering and technology	95	31	74	25	10	2	11	4
Social sciences	24	15	16	11	8	4	-	-
Humanities	67	31	67	31	-	-	-	-
<b>Business sector</b>	<b>39</b>	<b>9</b>	<b>27</b>	<b>8</b>	<b>9</b>	<b>1</b>	<b>3</b>	-
Engineering and technology	38	9	26	8	9	1	3	-
Social sciences	1	-	1	-	-	-	-	-
<b>Government sector</b>	<b>1</b>	-	<b>1</b>	-	-	-	-	-
Engineering and technology	1	-	1	-	-	-	-	-
<b>Tertiary education</b>	<b>164</b>	<b>78</b>	<b>140</b>	<b>65</b>	<b>16</b>	<b>9</b>	<b>8</b>	<b>4</b>
Natural sciences	18	10	11	6	7	4	-	-
Engineering and technology	56	22	47	17	1	1	8	4
Social sciences	23	15	15	11	8	4	-	-
Humanities	67	31	67	31	-	-	-	-
<b>Region Južne i Istočne Srbije</b>	<b>130</b>	<b>62</b>	<b>117</b>	<b>56</b>	<b>11</b>	<b>6</b>	<b>2</b>	-
Natural sciences	18	10	11	6	7	4	-	-
Engineering and technology	29	10	23	8	4	2	2	-
Social sciences	16	11	16	11	-	-	-	-
Humanities	67	31	67	31	-	-	-	-
<b>Business sector</b>	<b>28</b>	<b>9</b>	<b>23</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>2</b>	-
Engineering and technology	27	9	22	8	3	1	2	-
Social sciences	1	-	1	-	-	-	-	-
<b>Tertiary education</b>	<b>102</b>	<b>53</b>	<b>94</b>	<b>48</b>	<b>8</b>	<b>5</b>	-	-
Natural sciences	18	10	11	6	7	4	-	-
Engineering and technology	2	1	1	-	1	1	-	-
Social sciences	15	11	15	11	-	-	-	-
Humanities	67	31	67	31	-	-	-	-
<b>Region Južne i Istočne Srbije</b>	<b>74</b>	<b>25</b>	<b>51</b>	<b>17</b>	<b>14</b>	<b>4</b>	<b>9</b>	<b>4</b>
Engineering and technology	66	21	51	17	6	-	9	4
Social sciences	8	4	-	-	8	4	-	-
<b>Business sector</b>	<b>11</b>	-	<b>4</b>	-	<b>6</b>	-	<b>1</b>	-
Engineering and technology	11	-	4	-	6	-	1	-
<b>Government sector</b>	<b>1</b>	-	<b>1</b>	-	-	-	-	-
Engineering and technology	1	-	1	-	-	-	-	-
<b>Tertiary education</b>	<b>62</b>	<b>25</b>	<b>46</b>	<b>17</b>	<b>8</b>	<b>4</b>	<b>8</b>	<b>4</b>
Engineering and technology	54	21	46	17	-	-	8	4
Social sciences	8	4	-	-	8	4	-	-
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...

**6.2. Engaged on the basis of work on contract and author contract, expressed in full-time equivalent, 2015**

	Engaged on the basis of work on contract and author contract							
	Total		Researchers		Assistant researchers		Other	
	All	Women	All	Women	All	Women	All	Women
<b>REPUBLIC OF SERBIA</b>	<b>927.2</b>	<b>347.0</b>	<b>662.6</b>	<b>250.7</b>	<b>134.8</b>	<b>46.1</b>	<b>128.9</b>	<b>49.5</b>
Natural sciences	430.6	166.3	319.2	111.9	48.4	18.6	62.1	35.2
Engineering and technology	271.7	73.5	142.9	41.8	68.7	19.5	60.1	12.2
Medical and health sciences	33.4	25.7	33.4	25.7	-	-	-	-
Agricultural sciences	12.1	7.0	11.7	6.9	0.4	0.1	-	-
Social sciences	99.9	36.7	89.1	33.1	9.5	3.6	1.3	-
Humanities	79.6	37.9	66.4	31.4	7.8	4.4	5.5	2.1
<b>Business sector</b>	<b>187.9</b>	<b>46.1</b>	<b>89.2</b>	<b>31.9</b>	<b>39.0</b>	<b>2.6</b>	<b>58.8</b>	<b>11.0</b>
Natural sciences	31.9	6.0	16.0	0.3	9.0	2.0	6.0	3.1
Engineering and technology	123.7	17.1	42.0	8.6	29.9	0.6	51.8	7.9
Medical and health sciences	28.9	22.8	28.9	22.8	-	-	-	-
Agricultural sciences	0.4	0.2	0.3	0.2	0.1	-	-	-
Social sciences	3.0	-	2.0	-	-	-	1.0	-
<b>Government sector</b>	<b>192.4</b>	<b>81.6</b>	<b>126.2</b>	<b>47.6</b>	<b>11.7</b>	<b>4.8</b>	<b>54.5</b>	<b>29.1</b>
Natural sciences	142.7	59.4	88.5	29.2	5.2	3.2	49.0	27.0
Engineering and technology	12.1	5.5	8.7	5.2	3.4	0.3	-	-
Medical and health sciences	2.5	1.7	2.5	1.7	-	-	-	-
Agricultural sciences	2.3	1.1	2.3	1.1	-	-	-	-
Social sciences	5.5	2.2	4.2	2.2	1.3	-	-	-
Humanities	27.3	11.8	20.1	8.3	1.8	1.4	5.5	2.1
<b>Tertiary education</b>	<b>543.0</b>	<b>218.3</b>	<b>447.2</b>	<b>171.2</b>	<b>80.4</b>	<b>38.0</b>	<b>15.4</b>	<b>9.1</b>
Natural sciences	256.0	100.9	214.7	82.4	34.2	13.4	7.1	5.1
Engineering and technology	132.2	50.0	92.2	28.0	32.0	18.0	8.0	4.0
Medical and health sciences	2.0	1.2	2.0	1.2	-	-	-	-
Agricultural sciences	9.1	5.6	9.1	5.6	-	-	-	-
Social sciences	91.4	34.5	82.9	30.9	8.2	3.6	0.3	-
Humanities	52.3	26.1	46.3	23.1	6.0	3.0	-	-
<b>Non-profit sector</b>	<b>4.0</b>	<b>1.0</b>	-	-	<b>3.7</b>	<b>0.7</b>	<b>0.3</b>	<b>0.3</b>
Engineering and technology	3.7	0.9	-	-	3.4	0.6	0.3	0.3
Agricultural sciences	0.3	0.1	-	-	0.3	0.1	-	-
<b>SRBIJA – SEVER</b>	<b>808.6</b>	<b>299.0</b>	<b>563.6</b>	<b>210.7</b>	<b>124.2</b>	<b>42.1</b>	<b>120.0</b>	<b>45.5</b>
Natural sciences	418.2	158.1	311.0	105.1	44.2	17.2	62.1	35.2
Engineering and technology	198.5	50.6	82.7	24.3	64.7	18.1	51.1	8.2
Medical and health sciences	33.4	25.7	33.4	25.7	-	-	-	-
Agricultural sciences	12.1	7.0	11.7	6.9	0.4	0.1	-	-
Social sciences	89.0	30.0	80.6	27.6	7.1	2.4	1.3	-
Humanities	57.5	27.7	44.3	21.2	7.8	4.4	5.5	2.1
<b>Business sector</b>	<b>170.7</b>	<b>45.2</b>	<b>76.0</b>	<b>31.4</b>	<b>36.0</b>	<b>2.2</b>	<b>57.8</b>	<b>11.0</b>
Natural sciences	31.9	6.0	16.0	0.3	9.0	2.0	6.0	3.1
Engineering and technology	107.5	16.2	29.8	8.1	26.9	0.2	50.8	7.9
Medical and health sciences	28.9	22.8	28.9	22.8	-	-	-	-
Agricultural sciences	0.4	0.2	0.3	0.2	0.1	-	-	-
Social sciences	2.0	-	1.0	-	-	-	1.0	-
<b>Government sector</b>	<b>191.4</b>	<b>81.6</b>	<b>125.2</b>	<b>47.6</b>	<b>11.7</b>	<b>4.8</b>	<b>54.5</b>	<b>29.1</b>
Natural sciences	142.7	59.4	88.5	29.2	5.2	3.2	49.0	27.0
Engineering and technology	11.1	5.5	7.7	5.2	3.4	0.3	-	-
Medical and health sciences	2.5	1.7	2.5	1.7	-	-	-	-
Agricultural sciences	2.3	1.1	2.3	1.1	-	-	-	-
Social sciences	5.5	2.2	4.2	2.2	1.3	-	-	-
Humanities	27.3	11.8	20.1	8.3	1.8	1.4	5.5	2.1
<b>Tertiary education</b>	<b>442.6</b>	<b>171.2</b>	<b>362.4</b>	<b>131.7</b>	<b>72.8</b>	<b>34.4</b>	<b>7.4</b>	<b>5.1</b>
Natural sciences	243.6	92.7	206.5	75.6	30.0	12.0	7.1	5.1
Engineering and technology	76.2	28.0	45.2	11.0	31.0	17.0	-	-
Medical and health sciences	2.0	1.2	2.0	1.2	-	-	-	-
Agricultural sciences	9.1	5.6	9.1	5.6	-	-	-	-
Social sciences	81.5	27.8	75.4	25.4	5.8	2.4	0.3	-
Humanities	30.2	15.9	24.2	12.9	6.0	3.0	-	-
<b>Non-profit sector</b>	<b>4.0</b>	<b>1.0</b>	-	-	<b>3.7</b>	<b>0.7</b>	<b>0.3</b>	<b>0.3</b>
Engineering and technology	3.7	0.9	-	-	3.4	0.6	0.3	0.3
Agricultural sciences	0.3	0.1	-	-	0.3	0.1	-	-
<b>Beogradski region</b>	<b>696.6</b>	<b>260.0</b>	<b>496.3</b>	<b>191.1</b>	<b>81.5</b>	<b>22.8</b>	<b>117.9</b>	<b>45.5</b>
Natural sciences	394.9	156.0	296.7	105.0	36.2	15.2	61.1	35.2
Engineering and technology	134.1	24.3	53.7	15.3	30.3	0.8	50.1	8.2
Medical and health sciences	33.4	25.7	33.4	25.7	-	-	-	-
Agricultural sciences	1.9	1.7	1.8	1.7	0.1	-	-	-
Social sciences	74.9	24.7	66.5	22.3	7.1	2.4	1.3	-
Humanities	57.5	27.7	44.3	21.2	7.8	4.4	5.5	2.1
<b>Business sector</b>	<b>143.7</b>	<b>41.2</b>	<b>59.0</b>	<b>29.4</b>	<b>28.0</b>	<b>0.2</b>	<b>55.8</b>	<b>11.0</b>
Natural sciences	8.9	4.0	2.0	0.3	1.0	-	5.0	3.1
Engineering and technology	103.5	14.2	26.8	6.1	26.9	0.2	49.8	7.9
Medical and health sciences	28.9	22.8	28.9	22.8	-	-	-	-
Agricultural sciences	0.4	0.2	0.3	0.2	0.1	-	-	-
Social sciences	2.0	-	1.0	-	-	-	1.0	-



## 6.2. Engaged on the basis of work on contract and author contract, expressed in full-time equivalent, 2015 (continued)

	Engaged on the basis of work on contract and author contract							
	Total		Researchers		Assistant researchers		Other	
	All	Women	All	Women	All	Women	All	Women
<b>Government sector</b>	<b>186.6</b>	<b>81.1</b>	<b>123.8</b>	<b>47.4</b>	<b>8.3</b>	<b>4.6</b>	<b>54.5</b>	<b>29.1</b>
Natural sciences	142.7	59.4	88.5	29.2	5.2	3.2	49.0	27.0
Engineering and technology	7.7	5.2	7.7	5.2	-	-	-	-
Medical and health sciences	2.5	1.7	2.5	1.7	-	-	-	-
Agricultural sciences	0.9	0.9	0.9	0.9	-	-	-	-
Social sciences	5.5	2.2	4.2	2.2	1.3	-	-	-
Humanities	27.3	11.8	20.1	8.3	1.8	1.4	5.5	2.1
<b>Tertiary education</b>	<b>362.7</b>	<b>136.8</b>	<b>313.5</b>	<b>114.3</b>	<b>41.8</b>	<b>17.4</b>	<b>7.4</b>	<b>5.1</b>
Natural sciences	243.3	92.6	206.2	75.5	30.0	12.0	7.1	5.1
Engineering and technology	19.2	4.0	19.2	4.0	-	-	-	-
Medical and health sciences	2.0	1.2	2.0	1.2	-	-	-	-
Agricultural sciences	0.6	0.6	0.6	0.6	-	-	-	-
Social sciences	67.4	22.5	61.3	20.1	5.8	2.4	0.3	-
Humanities	30.2	15.9	24.2	12.9	6.0	3.0	-	-
<b>Non-profit sector</b>	<b>3.7</b>	<b>0.9</b>	-	-	<b>3.4</b>	<b>0.6</b>	<b>0.3</b>	<b>0.3</b>
Engineering and technology	3.7	0.9	-	-	3.4	0.6	0.3	0.3
<b>Region Vojvodine</b>	<b>112.0</b>	<b>39.0</b>	<b>67.3</b>	<b>19.6</b>	<b>42.7</b>	<b>19.4</b>	<b>2.0</b>	-
Natural sciences	23.3	2.1	14.3	0.1	8.0	2.0	1.0	-
Engineering and technology	64.4	26.3	29.0	9.0	34.4	17.3	1.0	-
Agricultural sciences	10.2	5.3	9.9	5.2	0.3	0.1	-	-
Social sciences	14.1	5.3	14.1	5.3	-	-	-	-
<b>Business sector</b>	<b>27.0</b>	<b>4.0</b>	<b>17.0</b>	<b>2.0</b>	<b>8.0</b>	<b>2.0</b>	<b>2.0</b>	-
Natural sciences	23.0	2.0	14.0	-	8.0	2.0	1.0	-
Engineering and technology	4.0	2.0	3.0	2.0	-	-	1.0	-
<b>Government sector</b>	<b>4.8</b>	<b>0.5</b>	<b>1.4</b>	<b>0.2</b>	<b>3.4</b>	<b>0.3</b>	-	-
Engineering and technology	3.4	0.3	-	-	3.4	0.3	-	-
Agricultural sciences	1.4	0.2	1.4	0.2	-	-	-	-
<b>Tertiary education</b>	<b>79.9</b>	<b>34.4</b>	<b>48.9</b>	<b>17.4</b>	<b>31.0</b>	<b>17.0</b>	-	-
Natural sciences	0.3	0.1	0.3	0.1	-	-	-	-
Engineering and technology	57.0	24.0	26.0	7.0	31.0	17.0	-	-
Agricultural sciences	8.5	5.0	8.5	5.0	-	-	-	-
Social sciences	14.1	5.3	14.1	5.3	-	-	-	-
<b>Non-profit sector</b>	<b>0.3</b>	<b>0.1</b>	-	-	<b>0.3</b>	<b>0.1</b>	-	-
Agricultural sciences	0.3	0.1	-	-	0.3	0.1	-	-
<b>SRBIJA – JUG</b>	<b>118.6</b>	<b>48.0</b>	<b>99.0</b>	<b>40.0</b>	<b>10.6</b>	<b>4.0</b>	<b>9.0</b>	<b>4.0</b>
Natural sciences	12.4	8.2	8.2	6.8	4.2	1.4	-	-
Engineering and technology	73.2	22.9	60.2	17.5	4.0	1.4	9.0	4.0
Social sciences	10.9	6.7	8.5	5.5	2.4	1.2	-	-
Humanities	22.1	10.2	22.1	10.2	-	-	-	-
<b>Business sector</b>	<b>17.2</b>	<b>0.9</b>	<b>13.2</b>	<b>0.5</b>	<b>3.0</b>	<b>0.4</b>	<b>1.0</b>	-
Engineering and technology	16.2	0.9	12.2	0.5	3.0	0.4	1.0	-
Social sciences	1.0	-	1.0	-	-	-	-	-
<b>Government sector</b>	<b>1.0</b>	-	<b>1.0</b>	-	-	-	-	-
Engineering and technology	1.0	-	1.0	-	-	-	-	-
<b>Tertiary education</b>	<b>100.4</b>	<b>47.1</b>	<b>84.8</b>	<b>39.5</b>	<b>7.6</b>	<b>3.6</b>	<b>8.0</b>	<b>4.0</b>
Natural sciences	12.4	8.2	8.2	6.8	4.2	1.4	-	-
Engineering and technology	56.0	22.0	47.0	17.0	1.0	1.0	8.0	4.0
Social sciences	9.9	6.7	7.5	5.5	2.4	1.2	-	-
Humanities	22.1	10.2	22.1	10.2	-	-	-	-
<b>Region Šumadije i Zapadne Srbije</b>	<b>57.5</b>	<b>25.8</b>	<b>50.0</b>	<b>23.0</b>	<b>7.0</b>	<b>2.8</b>	<b>0.5</b>	-
Natural sciences	12.4	8.2	8.2	6.8	4.2	1.4	-	-
Engineering and technology	14.5	1.9	11.2	0.5	2.8	1.4	0.5	-
Social sciences	8.5	5.5	8.5	5.5	-	-	-	-
Humanities	22.1	10.2	22.1	10.2	-	-	-	-
<b>Business sector</b>	<b>13.5</b>	<b>0.9</b>	<b>11.2</b>	<b>0.5</b>	<b>1.8</b>	<b>0.4</b>	<b>0.5</b>	-
Engineering and technology	12.5	0.9	10.2	0.5	1.8	0.4	0.5	-
Social sciences	1.0	-	1.0	-	-	-	-	-
<b>Tertiary education</b>	<b>44.0</b>	<b>24.9</b>	<b>38.8</b>	<b>22.5</b>	<b>5.2</b>	<b>2.4</b>	-	-
Natural sciences	12.4	8.2	8.2	6.8	4.2	1.4	-	-
Engineering and technology	2.0	1.0	1.0	-	1.0	1.0	-	-
Social sciences	7.5	5.5	7.5	5.5	-	-	-	-
Humanities	22.1	10.2	22.1	10.2	-	-	-	-
<b>Region Južne i Istočne Srbije</b>	<b>61.1</b>	<b>22.2</b>	<b>49.0</b>	<b>17.0</b>	<b>3.6</b>	<b>1.2</b>	<b>8.5</b>	<b>4.0</b>
Engineering and technology	58.7	21.0	49.0	17.0	1.2	-	8.5	4.0
Social sciences	2.4	1.2	-	-	2.4	1.2	-	-
<b>Business sector</b>	<b>3.7</b>	-	<b>2.0</b>	-	<b>1.2</b>	-	<b>0.5</b>	-
Engineering and technology	3.7	-	2.0	-	1.2	-	0.5	-
<b>Government sector</b>	<b>1.0</b>	-	<b>1.0</b>	-	-	-	-	-
Engineering and technology	1.0	-	1.0	-	-	-	-	-
<b>Tertiary education</b>	<b>56.4</b>	<b>22.2</b>	<b>46.0</b>	<b>17.0</b>	<b>2.4</b>	<b>1.2</b>	<b>8.0</b>	<b>4.0</b>
Engineering and technology	54.0	21.0	46.0	17.0	-	-	8.0	4.0
Social sciences	2.4	1.2	-	-	2.4	1.2	-	-
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...

**7.1. Research works (projects and studies), by sectors and territories, 2015**

	Research works (projects and studies), 2015							
	Number of works				Value of scientific works, thous. RSD			
	Total	Basic	Applied	Development	Total	Basic	Applied	Development
<b>REPUBLIC OF SERBIA</b>	<b>11786</b>	<b>5724</b>	<b>4348</b>	<b>1714</b>	<b>34990573</b>	<b>12708745</b>	<b>13030826</b>	<b>9251002</b>
Business sector	1852	250	1102	500	11103915	209299	6019728	4874888
Government sector	2558	1535	688	335	9569130	5285696	2825205	1458229
Tertiary education	7347	3936	2532	879	14260714	7192451	4150378	2917885
Non-profit sector	29	3	26	-	56814	21299	35515	-
<b>SRBIJA – SEVER</b>	<b>8585</b>	<b>3887</b>	<b>3256</b>	<b>1442</b>	<b>32326428</b>	<b>11900225</b>	<b>12248185</b>	<b>8178018</b>
Business sector	1164	248	475	441	10230731	201784	5727623	4301324
Government sector	2502	1525	682	295	9460370	5283508	2785387	1391475
Tertiary education	4890	2111	2073	706	12578513	6393634	3699660	2485219
Non-profit sector	29	3	26	-	56814	21299	35515	-
<b>Beogradski region</b>	<b>6193</b>	<b>3295</b>	<b>1836</b>	<b>1062</b>	<b>24112725</b>	<b>10110814</b>	<b>9229990</b>	<b>4771921</b>
Business sector	972	248	409	315	7184036	201784	5539577	1442675
Government sector	2348	1519	551	278	8844006	5263549	2200820	1379637
Tertiary education	2863	1525	869	469	8029180	4624182	1455389	1949609
Non-profit sector	10	3	7	-	55503	21299	34204	-
<b>Region Vojvodine</b>	<b>2392</b>	<b>592</b>	<b>1420</b>	<b>380</b>	<b>8213703</b>	<b>1789411</b>	<b>3018195</b>	<b>3406097</b>
Business sector	192	-	66	126	3046695	-	188046	2858649
Government sector	154	6	131	17	616364	19959	584567	11838
Tertiary education	2027	586	1204	237	4549333	1769452	2244271	535610
Non-profit sector	19	-	19	-	1311	-	1311	-
<b>SRBIJA – JUG</b>	<b>3201</b>	<b>1837</b>	<b>1092</b>	<b>272</b>	<b>2664145</b>	<b>808520</b>	<b>782641</b>	<b>1072984</b>
Business sector	688	2	627	59	873184	7515	292105	573564
Government sector	56	10	6	40	108760	2188	39818	66754
Tertiary education	2457	1825	459	173	1682201	798817	450718	432666
<b>Region Šumadije i Zapadne Srbije</b>	<b>1196</b>	<b>339</b>	<b>751</b>	<b>106</b>	<b>1269158</b>	<b>477985</b>	<b>408658</b>	<b>382515</b>
Business sector	643	2	602	39	381989	7515	82331	292143
Government sector	6	-	6	-	39818	-	39818	-
Tertiary education	547	337	143	67	847351	470470	286509	90372
<b>Region Južne i Istočne Srbije</b>	<b>2005</b>	<b>1498</b>	<b>341</b>	<b>166</b>	<b>1394987</b>	<b>330535</b>	<b>373983</b>	<b>690469</b>
Business sector	45	-	25	20	491195	-	209774	281421
Government sector	50	10	-	40	68942	2188	-	66754
Tertiary education	1910	1488	316	106	834850	328347	164209	342294
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...

## 7.2. Research works (projects and studies), by sectors and fields of science, 2015

	Research works (projects and studies), 2015							
	Number of works				Value of scientific works, thous. RSD			
	Total	Basic	Applied	Development	Total	Basic	Applied	Development
<b>REPUBLIC OF SERBIA</b>	<b>11786</b>	<b>5724</b>	<b>4348</b>	<b>1714</b>	<b>34990573</b>	<b>12708745</b>	<b>13030826</b>	<b>9251002</b>
Natural sciences	1909	1130	542	237	11219108	5691553	2791938	2735617
Engineering and technology	4076	312	2650	1114	11909134	789362	5885181	5234591
Medical and health sciences	557	346	173	38	1950853	783617	1044226	123010
Agricultural sciences	741	93	432	216	2916435	326662	1766943	822830
Social sciences	3680	3095	479	106	5069936	3443820	1293677	332439
Humanities	823	748	72	3	1925107	1673731	248861	2515
<b>Business sector</b>	<b>1852</b>	<b>250</b>	<b>1102</b>	<b>500</b>	<b>11103915</b>	<b>209299</b>	<b>6019728</b>	<b>4874888</b>
Natural sciences	403	106	157	140	3336525	83585	1177483	2075457
Engineering and technology	1155	17	834	304	6440283	76577	3772322	2591384
Medical and health sciences	64	-	56	8	944574	-	895064	49510
Agricultural sciences	41	-	17	24	290747	-	141867	148880
Social sciences	189	127	38	24	91786	49137	32992	9657
<b>Government sector</b>	<b>2558</b>	<b>1535</b>	<b>688</b>	<b>335</b>	<b>9569130</b>	<b>5285696</b>	<b>2825205</b>	<b>1458229</b>
Natural sciences	601	452	115	34	4437114	3689203	697709	50202
Engineering and technology	598	32	292	274	1988905	150566	732462	1105877
Medical and health sciences	152	113	37	2	244333	200153	38177	6003
Agricultural sciences	237	52	172	13	1563142	110554	1205497	247091
Social sciences	523	498	16	9	504241	413020	44680	46541
Humanities	447	388	56	3	831395	722200	106680	2515
<b>Tertiary education</b>	<b>7347</b>	<b>3936</b>	<b>2532</b>	<b>879</b>	<b>14260714</b>	<b>7192451</b>	<b>4150378</b>	<b>2917885</b>
Natural sciences	900	572	265	63	3444611	1918765	915888	609958
Engineering and technology	2320	262	1522	536	3453410	561778	1354302	1537330
Medical and health sciences	339	233	78	28	760466	583464	109505	67497
Agricultural sciences	449	41	229	179	1062093	216108	419126	426859
Social sciences	2963	2468	422	73	4446422	2960805	1209376	276241
Humanities	376	360	16	-	1093712	951531	142181	-
<b>Non-profit sector</b>	<b>29</b>	<b>3</b>	<b>26</b>	<b>-</b>	<b>56814</b>	<b>21299</b>	<b>35515</b>	<b>-</b>
Natural sciences	5	-	5	-	858	-	858	-
Engineering and technology	3	1	2	-	26536	441	26095	-
Medical and health sciences	2	-	2	-	1480	-	1480	-
Agricultural sciences	14	-	14	-	453	-	453	-
Social sciences	5	2	3	-	27487	20858	6629	-
<b>SRBIJA – SEVER</b>	<b>8585</b>	<b>3887</b>	<b>3256</b>	<b>1442</b>	<b>32326428</b>	<b>11900225</b>	<b>12248185</b>	<b>8178018</b>
Natural sciences	1451	794	430	227	10653421	5310712	2634420	2708289
Engineering and technology	2791	207	1723	861	10489179	694483	5530747	4263949
Medical and health sciences	508	297	173	38	1805896	638660	1044226	123010
Agricultural sciences	705	90	400	215	2724524	322645	1580050	821829
Social sciences	2345	1788	459	98	4778267	3309898	1209943	258426
Humanities	785	711	71	3	1875141	1623827	248799	2515
<b>Business sector</b>	<b>1164</b>	<b>248</b>	<b>475</b>	<b>441</b>	<b>10230731</b>	<b>201784</b>	<b>5727623</b>	<b>4301324</b>
Natural sciences	397	106	155	136	3313595	83585	1166009	2064001
Engineering and technology	492	16	225	251	5716514	69391	3614206	2032917
Medical and health sciences	64	-	56	8	944574	-	895064	49510
Agricultural sciences	34	-	11	23	167957	-	20078	147879
Social sciences	177	126	28	23	88091	48808	32266	7017
<b>Government sector</b>	<b>2502</b>	<b>1525</b>	<b>682</b>	<b>295</b>	<b>9460370</b>	<b>5283508</b>	<b>2785387</b>	<b>1391475</b>
Natural sciences	601	452	115	34	4437114	3689203	697709	50202
Engineering and technology	548	22	292	234	1919963	148378	732462	1039123
Medical and health sciences	152	113	37	2	244333	200153	38177	6003
Agricultural sciences	231	52	166	13	1523324	110554	1165679	247091
Social sciences	523	498	16	9	504241	413020	44680	46541
Humanities	447	388	56	3	831395	722200	106680	2515
<b>Tertiary education</b>	<b>4890</b>	<b>2111</b>	<b>2073</b>	<b>706</b>	<b>12578513</b>	<b>6393634</b>	<b>3699660</b>	<b>2485219</b>
Natural sciences	448	236	155	57	2901854	1537924	769844	594086
Engineering and technology	1748	168	1204	376	2826166	476273	1157984	1191909
Medical and health sciences	290	184	78	28	615509	438507	109505	67497
Agricultural sciences	426	38	209	179	1032790	212091	393840	426859
Social sciences	1640	1162	412	66	4158448	2827212	1126368	204868
Humanities	338	323	15	-	1043746	901627	142119	-
<b>Non-profit sector</b>	<b>29</b>	<b>3</b>	<b>26</b>	<b>-</b>	<b>56814</b>	<b>21299</b>	<b>35515</b>	<b>-</b>
Natural sciences	5	-	5	-	858	-	858	-
Engineering and technology	3	1	2	-	26536	441	26095	-
Medical and health sciences	2	-	2	-	1480	-	1480	-
Agricultural sciences	14	-	14	-	453	-	453	-
Social sciences	5	2	3	-	27487	20858	6629	-

## 7.2. Research works (projects and studies), by sectors and fields of science, 2015 (continued)

	Research works (projects and studies), 2015							
	Number of works				Value of scientific works, thous. RSD			
	Total	Basic	Applied	Development	Total	Basic	Applied	Development
<b>Beogradski region</b>	<b>6193</b>	<b>3295</b>	<b>1836</b>	<b>1062</b>	<b>24112725</b>	<b>10110814</b>	<b>9229990</b>	<b>4771921</b>
Natural sciences	1135	749	304	82	7597443	4855404	1865564	876475
Engineering and technology	1636	118	819	699	7933463	414599	4514243	3004621
Medical and health sciences	396	232	132	32	1686671	570175	1000493	116003
Agricultural sciences	525	89	261	175	2188573	322225	1201804	664544
Social sciences	1721	1397	253	71	2960992	2354584	498645	107763
Humanities	780	710	67	3	1745583	1593827	149241	2515
<b>Business sector</b>	<b>972</b>	<b>248</b>	<b>409</b>	<b>315</b>	<b>7184036</b>	<b>201784</b>	<b>5539577</b>	<b>1442675</b>
Natural sciences	224	106	102	16	1585590	83585	1073027	428978
Engineering and technology	475	16	213	246	4468239	69391	3532805	866043
Medical and health sciences	64	-	56	8	944574	-	895064	49510
Agricultural sciences	33	-	11	22	111205	-	20078	91127
Social sciences	176	126	27	23	74428	48808	18603	7017
<b>Government sector</b>	<b>2348</b>	<b>1519</b>	<b>551</b>	<b>278</b>	<b>8844006</b>	<b>5263549</b>	<b>2200820</b>	<b>1379637</b>
Natural sciences	601	452	115	34	4437114	3689203	697709	50202
Engineering and technology	437	16	204	217	1601208	128419	445504	1027285
Medical and health sciences	152	113	37	2	244333	200153	38177	6003
Agricultural sciences	188	52	123	13	1225715	110554	868070	247091
Social sciences	523	498	16	9	504241	413020	44680	46541
Humanities	447	388	56	3	831395	722200	106680	2515
<b>Tertiary education</b>	<b>2863</b>	<b>1525</b>	<b>869</b>	<b>469</b>	<b>8029180</b>	<b>4624182</b>	<b>1455389</b>	<b>1949609</b>
Natural sciences	310	191	87	32	1574739	1082616	94828	397295
Engineering and technology	721	85	400	236	1837480	216348	509839	1111293
Medical and health sciences	178	119	37	22	496284	370022	65772	60490
Agricultural sciences	304	37	127	140	851653	211671	313656	326326
Social sciences	1017	771	207	39	2354836	1871898	428733	54205
Humanities	333	322	11	-	914188	871627	42561	-
<b>Non-profit sector</b>	<b>10</b>	<b>3</b>	<b>7</b>	<b>-</b>	<b>55503</b>	<b>21299</b>	<b>34204</b>	<b>-</b>
Engineering and technology	3	1	2	-	26536	441	26095	-
Medical and health sciences	2	-	2	-	1480	-	1480	-
Social sciences	5	2	3	-	27487	20858	6629	-
<b>Region Vojvodine</b>	<b>2392</b>	<b>592</b>	<b>1420</b>	<b>380</b>	<b>8213703</b>	<b>1789411</b>	<b>3018195</b>	<b>3406097</b>
Natural sciences	316	45	126	145	3055978	455308	768856	1831814
Engineering and technology	1155	89	904	162	2555716	279884	1016504	1259328
Medical and health sciences	112	65	41	6	119225	68485	43733	7007
Agricultural sciences	180	1	139	40	535951	420	378246	157285
Social sciences	624	391	206	27	1817275	955314	711298	150663
Humanities	5	1	4	-	129558	30000	99558	-
<b>Business sector</b>	<b>192</b>	<b>-</b>	<b>66</b>	<b>126</b>	<b>3046695</b>	<b>-</b>	<b>188046</b>	<b>2858649</b>
Natural sciences	173	-	53	120	1728005	-	92982	1635023
Engineering and technology	17	-	12	5	1248275	-	81401	1166874
Agricultural sciences	1	-	-	1	56752	-	-	56752
Social sciences	1	-	1	-	13663	-	13663	-
<b>Government sector</b>	<b>154</b>	<b>6</b>	<b>131</b>	<b>17</b>	<b>616364</b>	<b>19959</b>	<b>584567</b>	<b>11838</b>
Engineering and technology	111	6	88	17	318755	19959	286958	11838
Agricultural sciences	43	-	43	-	297609	-	297609	-
<b>Tertiary education</b>	<b>2027</b>	<b>586</b>	<b>1204</b>	<b>237</b>	<b>4549333</b>	<b>1769452</b>	<b>2244271</b>	<b>535610</b>
Natural sciences	138	45	68	25	1327115	455308	675016	196791
Engineering and technology	1027	83	804	140	988686	259925	648145	80616
Medical and health sciences	112	65	41	6	119225	68485	43733	7007
Agricultural sciences	122	1	82	39	181137	420	80184	100533
Social sciences	623	391	205	27	1803612	955314	697635	150663
Humanities	5	1	4	-	129558	30000	99558	-
<b>Non-profit sector</b>	<b>19</b>	<b>-</b>	<b>19</b>	<b>-</b>	<b>1311</b>	<b>-</b>	<b>1311</b>	<b>-</b>
Natural sciences	5	-	5	-	858	-	858	-
Agricultural sciences	14	-	14	-	453	-	453	-
<b>SRBIJA – JUG</b>	<b>3201</b>	<b>1837</b>	<b>1092</b>	<b>272</b>	<b>2664145</b>	<b>808520</b>	<b>782641</b>	<b>1072984</b>
Natural sciences	458	336	112	10	565687	380841	157518	27328
Engineering and technology	1285	105	927	253	1419955	94879	354434	970642
Medical and health sciences	49	49	-	-	144957	144957	-	-
Agricultural sciences	36	3	32	1	191911	4017	186893	1001
Social sciences	1335	1307	20	8	291669	133922	83734	74013
Humanities	38	37	1	-	49966	49904	62	-

## 7.2. Research works (projects and studies), by sectors and fields of science, 2015 (continued)

	Research works (projects and studies), 2015							
	Number of works				Value of scientific works, thous. RSD			
	Total	Basic	Applied	Development	Total	Basic	Applied	Development
<b>Business sector</b>	<b>688</b>	<b>2</b>	<b>627</b>	<b>59</b>	<b>873184</b>	<b>7515</b>	<b>292105</b>	<b>573564</b>
Natural sciences	6	-	2	4	22930	-	11474	11456
Engineering and technology	663	1	609	53	723769	7186	158116	558467
Agricultural sciences	7	-	6	1	122790	-	121789	1001
Social sciences	12	1	10	1	3695	329	726	2640
<b>Government sector</b>	<b>56</b>	<b>10</b>	<b>6</b>	<b>40</b>	<b>108760</b>	<b>2188</b>	<b>39818</b>	<b>66754</b>
Engineering and technology	50	10	-	40	68942	2188	-	66754
Agricultural sciences	6	-	6	-	39818	-	39818	-
<b>Tertiary education</b>	<b>2457</b>	<b>1825</b>	<b>459</b>	<b>173</b>	<b>1682201</b>	<b>798817</b>	<b>450718</b>	<b>432666</b>
Natural sciences	452	336	110	6	542757	380841	146044	15872
Engineering and technology	572	94	318	160	627244	85505	196318	345421
Medical and health sciences	49	49	-	-	144957	144957	-	-
Agricultural sciences	23	3	20	-	29303	4017	25286	-
Social sciences	1323	1306	10	7	287974	133593	83008	71373
Humanities	38	37	1	-	49966	49904	62	-
<b>Region Šumadije i Zapadne Srbije</b>	<b>1196</b>	<b>339</b>	<b>751</b>	<b>106</b>	<b>1269158</b>	<b>477985</b>	<b>408658</b>	<b>382515</b>
Natural sciences	156	103	44	9	453554	294479	132871	26204
Engineering and technology	805	51	660	94	518460	39061	124789	354610
Medical and health sciences	43	43	-	-	47952	47952	-	-
Agricultural sciences	32	3	28	1	72344	4017	67326	1001
Social sciences	158	137	19	2	159036	74664	83672	700
Humanities	2	2	-	-	17812	17812	-	-
<b>Business sector</b>	<b>643</b>	<b>2</b>	<b>602</b>	<b>39</b>	<b>381989</b>	<b>7515</b>	<b>82331</b>	<b>292143</b>
Natural sciences	6	-	2	4	22930	-	11474	11456
Engineering and technology	623	1	588	34	354781	7186	67909	279686
Agricultural sciences	3	-	2	1	3223	-	2222	1001
Social sciences	11	1	10	-	1055	329	726	-
<b>Government sector</b>	<b>6</b>	<b>-</b>	<b>6</b>	<b>-</b>	<b>39818</b>	<b>-</b>	<b>39818</b>	<b>-</b>
Agricultural sciences	6	-	6	-	39818	-	39818	-
<b>Tertiary education</b>	<b>547</b>	<b>337</b>	<b>143</b>	<b>67</b>	<b>847351</b>	<b>470470</b>	<b>286509</b>	<b>90372</b>
Natural sciences	150	103	42	5	430624	294479	121397	14748
Engineering and technology	182	50	72	60	163679	31875	56880	74924
Medical and health sciences	43	43	-	-	47952	47952	-	-
Agricultural sciences	23	3	20	-	29303	4017	25286	-
Social sciences	147	136	9	2	157981	74335	82946	700
Humanities	2	2	-	-	17812	17812	-	-
<b>Region Južne i Istočne Srbije</b>	<b>2005</b>	<b>1498</b>	<b>341</b>	<b>166</b>	<b>1394987</b>	<b>330535</b>	<b>373983</b>	<b>690469</b>
Natural sciences	302	233	68	1	112133	86362	24647	1124
Engineering and technology	480	54	267	159	901495	55818	229645	616032
Medical sciences	6	6	-	-	97005	97005	-	-
Agricultural sciences	4	-	4	-	119567	-	119567	-
Social sciences	1177	1170	1	6	132633	59258	62	73313
Humanities	36	35	1	-	32154	32092	62	-
<b>Business sector</b>	<b>45</b>	<b>-</b>	<b>25</b>	<b>20</b>	<b>491195</b>	<b>-</b>	<b>209774</b>	<b>281421</b>
Engineering and technology	40	-	21	19	368988	-	90207	278781
Agricultural sciences	4	-	4	-	119567	-	119567	-
Social sciences	1	-	-	1	2640	-	-	2640
<b>Government sector</b>	<b>50</b>	<b>10</b>	<b>-</b>	<b>40</b>	<b>68942</b>	<b>2188</b>	<b>-</b>	<b>66754</b>
Engineering and technology	50	10	-	40	68942	2188	-	66754
<b>Tertiary education</b>	<b>1910</b>	<b>1488</b>	<b>316</b>	<b>106</b>	<b>834850</b>	<b>328347</b>	<b>164209</b>	<b>342294</b>
Natural sciences	302	233	68	1	112133	86362	24647	1124
Engineering and technology	390	44	246	100	463565	53630	139438	270497
Medical and health sciences	6	6	-	-	97005	97005	-	-
Social sciences	1176	1170	1	5	129993	59258	62	70673
Humanities	36	35	1	-	32154	32092	62	-
<b>Region Kosovo i Metohija</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>

## 8.1. R&amp;D works, by ordering parties, fields of science

	Ordering parties							
	Enterprises				Ministries			
	Total	Basic	Applied	Development	Total	Basic	Applied	Development
<b>REPUBLIC OF SERBIA</b>	<b>1227</b>	<b>84</b>	<b>844</b>	<b>299</b>	<b>7128</b>	<b>4081</b>	<b>2118</b>	<b>929</b>
Natural sciences	81	2	71	8	1531	1023	341	167
Engineering and technology	872	24	600	248	1909	215	1110	584
Medical and health sciences	104	56	36	12	296	235	47	14
Agricultural sciences	112	2	80	30	417	79	245	93
Social sciences	58	-	57	1	2469	2092	309	68
Humanities	-	-	-	-	506	437	66	3
<b>Business sector</b>	<b>180</b>	<b>-</b>	<b>105</b>	<b>75</b>	<b>616</b>	<b>248</b>	<b>129</b>	<b>239</b>
Natural sciences	76	-	71	5	238	106	29	103
Engineering and technology	91	-	21	70	191	16	69	106
Medical and health sciences	2	-	2	-	-	-	-	-
Agricultural sciences	-	-	-	-	11	-	4	7
Social sciences	11	-	11	-	176	126	27	23
<b>Government sector</b>	<b>43</b>	<b>1</b>	<b>42</b>	<b>-</b>	<b>2107</b>	<b>1302</b>	<b>512</b>	<b>293</b>
Natural sciences	-	-	-	-	522	393	99	30
Engineering and technology	40	-	40	-	465	25	195	245
Medical and health sciences	1	1	-	-	116	110	5	1
Agricultural sciences	2	-	2	-	201	50	141	10
Social sciences	-	-	-	-	425	405	16	4
Humanities	-	-	-	-	378	319	56	3
<b>Tertiary education</b>	<b>1004</b>	<b>83</b>	<b>697</b>	<b>224</b>	<b>4404</b>	<b>2530</b>	<b>1477</b>	<b>397</b>
Natural sciences	5	2	-	3	771	524	213	34
Engineering and technology	741	24	539	178	1252	173	846	233
Medical and health sciences	101	55	34	12	180	125	42	13
Agricultural sciences	110	2	78	30	205	29	100	76
Social sciences	47	-	46	1	1868	1561	266	41
Humanities	-	-	-	-	128	118	10	-
<b>Non-profit sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>
Natural sciences	-	-	-	-	-	-	-	-
Engineering and technology	-	-	-	-	1	1	-	-
Medical and health sciences	-	-	-	-	-	-	-	-
Agricultural sciences	-	-	-	-	-	-	-	-
Social sciences	-	-	-	-	-	-	-	-
<b>SRBIJA – SEVER</b>	<b>994</b>	<b>84</b>	<b>641</b>	<b>269</b>	<b>5360</b>	<b>2678</b>	<b>1900</b>	<b>782</b>
Natural sciences	81	2	71	8	1084	687	236	161
Engineering and technology	649	24	407	218	1626	152	1030	444
Medical and health sciences	104	56	36	12	285	224	47	14
Agricultural sciences	112	2	80	30	384	76	215	93
Social sciences	48	-	47	1	1501	1128	306	67
Humanities	-	-	-	-	480	411	66	3
<b>Business sector</b>	<b>159</b>	<b>-</b>	<b>91</b>	<b>68</b>	<b>603</b>	<b>247</b>	<b>120</b>	<b>236</b>
Natural sciences	76	-	71	5	238	106	29	103
Engineering and technology	80	-	17	63	182	15	64	103
Medical and health sciences	2	-	2	-	-	-	-	-
Agricultural sciences	-	-	-	-	7	-	-	7
Social sciences	1	-	1	-	176	126	27	23
<b>Government sector</b>	<b>43</b>	<b>1</b>	<b>42</b>	<b>-</b>	<b>2051</b>	<b>1292</b>	<b>506</b>	<b>253</b>
Natural sciences	-	-	-	-	522	393	99	30
Engineering and technology	40	-	40	-	415	15	195	205
Medical and health sciences	1	1	-	-	116	110	5	1
Agricultural sciences	2	-	2	-	195	50	135	10
Social sciences	-	-	-	-	425	405	16	4
Humanities	-	-	-	-	378	319	56	3
<b>Tertiary education</b>	<b>792</b>	<b>83</b>	<b>508</b>	<b>201</b>	<b>2705</b>	<b>1138</b>	<b>1274</b>	<b>293</b>
Natural sciences	5	2	-	3	324	188	108	28
Engineering and technology	529	24	350	155	1028	121	771	136
Medical and health sciences	101	55	34	12	169	114	42	13
Agricultural sciences	110	2	78	30	182	26	80	76
Social sciences	47	-	46	1	900	597	263	40
Humanities	-	-	-	-	102	92	10	-
<b>Non-profit sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>
Natural sciences	-	-	-	-	-	-	-	-
Engineering and technology	-	-	-	-	1	1	-	-
Medical and health sciences	-	-	-	-	-	-	-	-
Agricultural sciences	-	-	-	-	-	-	-	-
Social sciences	-	-	-	-	-	-	-	-

## and type of research, 2015

Ordering parties								
Other				From abroad				
Total	Basic	Applied	Development	Total	Basic	Applied	Development	
<b>2291</b>	<b>1017</b>	<b>984</b>	<b>290</b>	<b>1140</b>	<b>542</b>	<b>402</b>	<b>196</b>	<b>REPUBLIC OF SERBIA</b>
154	15	90	49	143	90	40	13	Natural sciences
962	31	783	148	333	42	157	134	Engineering and technology
43	39	4	-	114	16	86	12	Medical and health sciences
110	7	38	65	102	5	69	28	Agricultural sciences
848	755	65	28	305	248	48	9	Social sciences
174	170	4	-	143	141	2	-	Humanities
<b>895</b>	<b>2</b>	<b>742</b>	<b>151</b>	<b>161</b>	<b>-</b>	<b>126</b>	<b>35</b>	<b>Business sector</b>
76	-	52	24	13	-	5	8	Natural sciences
787	1	677	109	86	-	67	19	Engineering and technology
-	-	-	-	62	-	54	8	Medical and health sciences
30	-	13	17	-	-	-	-	Agricultural sciences
2	1	-	1	-	-	-	-	Social sciences
<b>157</b>	<b>77</b>	<b>54</b>	<b>26</b>	<b>251</b>	<b>155</b>	<b>80</b>	<b>16</b>	<b>Government sector</b>
7	-	4	3	72	59	12	1	Natural sciences
69	5	48	16	24	2	9	13	Engineering and technology
-	-	-	-	35	2	32	1	Medical and health sciences
5	-	2	3	29	2	27	-	Agricultural sciences
57	53	-	4	41	40	-	1	Social sciences
19	19	-	-	50	50	-	-	Humanities
<b>1211</b>	<b>936</b>	<b>162</b>	<b>113</b>	<b>728</b>	<b>387</b>	<b>196</b>	<b>145</b>	<b>Tertiary education</b>
66	15	29	22	58	31	23	4	Natural sciences
104	25	56	23	223	40	81	102	Engineering and technology
41	39	2	-	17	14	-	3	Medical and health sciences
61	7	9	45	73	3	42	28	Agricultural sciences
784	699	62	23	264	208	48	8	Social sciences
155	151	4	-	93	91	2	-	Humanities
<b>28</b>	<b>2</b>	<b>26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Non-profit sector</b>
5	-	5	-	-	-	-	-	Natural sciences
2	-	2	-	-	-	-	-	Engineering and technology
2	-	2	-	-	-	-	-	Medical and health sciences
14	-	14	-	-	-	-	-	Agricultural sciences
5	2	3	-	-	-	-	-	Social sciences
1320	717	370	233	911	408	345	158	SRBIJA – SEVER
248	15	88	45	138	90	35	13	Natural sciences
294	16	176	102	222	15	110	97	Engineering and technology
5	1	4	-	114	16	86	12	Medical and health sciences
107	7	36	64	102	5	69	28	Agricultural sciences
604	519	63	22	192	141	43	8	Social sciences
162	159	3	-	143	141	2	-	Humanities
<b>257</b>	<b>1</b>	<b>147</b>	<b>109</b>	<b>145</b>	<b>-</b>	<b>117</b>	<b>28</b>	<b>Business sector</b>
70	-	50	20	13	-	5	8	Natural sciences
160	1	86	73	70	-	58	12	Engineering and technology
-	-	-	-	62	-	54	8	Medical and health sciences
27	-	11	16	-	-	-	-	Agricultural sciences
-	-	-	-	-	-	-	-	Social sciences
<b>157</b>	<b>77</b>	<b>54</b>	<b>26</b>	<b>251</b>	<b>155</b>	<b>80</b>	<b>16</b>	<b>Government sector</b>
7	-	4	3	72	59	12	1	Natural sciences
69	5	48	16	24	2	9	13	Engineering and technology
-	-	-	-	35	2	32	1	Medical and health sciences
5	-	2	3	29	2	27	-	Agricultural sciences
57	53	-	4	41	40	-	1	Social sciences
19	19	-	-	50	50	-	-	Humanities
<b>878</b>	<b>637</b>	<b>143</b>	<b>98</b>	<b>515</b>	<b>253</b>	<b>148</b>	<b>114</b>	<b>Tertiary education</b>
66	15	29	22	53	31	18	4	Natural sciences
63	10	40	13	128	13	43	72	Engineering and technology
3	1	2	-	17	14	-	3	Medical and health sciences
61	7	9	45	73	3	42	28	Agricultural sciences
542	464	60	18	151	101	43	7	Social sciences
143	140	3	-	93	91	2	-	Humanities
<b>28</b>	<b>2</b>	<b>26</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Non-profit sector</b>
5	-	5	-	-	-	-	-	Natural sciences
2	-	2	-	-	-	-	-	Engineering and technology
2	-	2	-	-	-	-	-	Medical and health sciences
14	-	14	-	-	-	-	-	Agricultural sciences
5	2	3	-	-	-	-	-	Social sciences



## 8.1. R&amp;D works, by ordering parties, fields of science

	Ordering parties							
	Enterprises				Ministries			
	Total	Basic	Applied	Development	Total	Basic	Applied	Development
<b>Beogradski region</b>	<b>836</b>	<b>60</b>	<b>534</b>	<b>242</b>	<b>3720</b>	<b>2263</b>	<b>899</b>	<b>558</b>
Natural sciences	81	2	71	8	880	642	198	40
Engineering and technology	518	-	327	191	775	100	272	403
Medical and health sciences	104	56	36	12	174	160	6	8
Agricultural sciences	90	2	58	30	303	75	174	54
Social sciences	43	-	42	1	1110	876	184	50
Humanities	-	-	-	-	478	410	65	3
<b>Business sector</b>	<b>156</b>	<b>-</b>	<b>90</b>	<b>66</b>	<b>503</b>	<b>247</b>	<b>120</b>	<b>136</b>
Natural sciences	76	-	71	5	138	106	29	3
Engineering and technology	78	-	17	61	182	15	64	103
Medical and health sciences	2	-	2	-	-	-	-	-
Agricultural sciences	-	-	-	-	7	-	-	7
Social sciences	-	-	-	-	176	126	27	23
<b>Government sector</b>	<b>32</b>	<b>1</b>	<b>31</b>	<b>-</b>	<b>1959</b>	<b>1289</b>	<b>417</b>	<b>253</b>
Natural sciences	-	-	-	-	522	393	99	30
Engineering and technology	31	-	31	-	341	12	124	205
Medical and health sciences	1	1	-	-	116	110	5	1
Agricultural sciences	-	-	-	-	177	50	117	10
Social sciences	-	-	-	-	425	405	16	4
Humanities	-	-	-	-	378	319	56	3
<b>Tertiary education</b>	<b>648</b>	<b>59</b>	<b>413</b>	<b>176</b>	<b>1257</b>	<b>726</b>	<b>362</b>	<b>169</b>
Natural sciences	5	2	-	3	220	143	70	7
Engineering and technology	409	-	279	130	251	72	84	95
Medical and health sciences	101	55	34	12	58	50	1	7
Agricultural sciences	90	2	58	30	119	25	57	37
Social sciences	43	-	42	1	509	345	141	23
Humanities	-	-	-	-	100	91	9	-
<b>Non-profit sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>
Engineering and technology	-	-	-	-	1	1	-	-
Medical and health sciences	-	-	-	-	-	-	-	-
Social sciences	-	-	-	-	-	-	-	-
<b>Region Vojvodine</b>	<b>158</b>	<b>24</b>	<b>107</b>	<b>27</b>	<b>1640</b>	<b>415</b>	<b>1001</b>	<b>224</b>
Natural sciences	-	-	-	-	204	45	38	121
Engineering and technology	131	24	80	27	851	52	758	41
Medical and health sciences	-	-	-	-	111	64	41	6
Agricultural sciences	22	-	22	-	81	1	41	39
Social sciences	5	-	5	-	391	252	122	17
Humanities	-	-	-	-	2	1	1	-
<b>Business sector</b>	<b>3</b>	<b>-</b>	<b>1</b>	<b>2</b>	<b>100</b>	<b>-</b>	<b>-</b>	<b>100</b>
Natural sciences	-	-	-	-	100	-	-	100
Engineering and technology	2	-	-	2	-	-	-	-
Agricultural sciences	-	-	-	-	-	-	-	-
Social sciences	1	-	1	-	-	-	-	-
<b>Government sector</b>	<b>11</b>	<b>-</b>	<b>11</b>	<b>-</b>	<b>92</b>	<b>3</b>	<b>89</b>	<b>-</b>
Engineering and technology	9	-	9	-	74	3	71	-
Agricultural sciences	2	-	2	-	18	-	18	-
<b>Tertiary education</b>	<b>144</b>	<b>24</b>	<b>95</b>	<b>25</b>	<b>1448</b>	<b>412</b>	<b>912</b>	<b>124</b>
Natural sciences	-	-	-	-	104	45	38	21
Engineering and technology	120	24	71	25	777	49	687	41
Medical and health sciences	-	-	-	-	111	64	41	6
Agricultural sciences	20	-	20	-	63	1	23	39
Social sciences	4	-	4	-	391	252	122	17
Humanities	-	-	-	-	2	1	1	-
<b>Non-profit sector</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Natural sciences	-	-	-	-	-	-	-	-
Agricultural sciences	-	-	-	-	-	-	-	-



## and type of research, 2015 (continued)

Ordering parties								
Other				From abroad				
Total	Basic	Applied	Development	Total	Basic	Applied	Development	
<b>1003</b>	<b>611</b>	<b>204</b>	<b>188</b>	<b>634</b>	<b>361</b>	<b>199</b>	<b>74</b>	<b>Beogradski region</b>
53	15	16	22	121	90	19	12	Natural sciences
233	5	141	87	110	13	79	18	Engineering and technology
4	0	4	0	114	16	86	12	Medical and health sciences
90	7	20	63	42	5	9	28	Agricultural sciences
462	425	21	16	106	96	6	4	Social sciences
161	159	2	0	141	141	0	0	Humanities
<b>172</b>	<b>1</b>	<b>85</b>	<b>86</b>	<b>141</b>	<b>0</b>	<b>114</b>	<b>27</b>	<b>Business sector</b>
0	0	0	0	10	0	2	8	Natural sciences
146	1	74	71	69	0	58	11	Engineering and technology
0	0	0	0	62	0	54	8	Medical and health sciences
26	0	11	15	0	0	0	0	Agricultural sciences
0	0	0	0	0	0	0	0	Social sciences
<b>148</b>	<b>76</b>	<b>50</b>	<b>22</b>	<b>209</b>	<b>153</b>	<b>53</b>	<b>3</b>	<b>Government sector</b>
7	0	4	3	72	59	12	1	Natural sciences
62	4	46	12	3	0	3	0	Engineering and technology
0	0	0	0	35	2	32	1	Medical and health sciences
3	0	0	3	8	2	6	0	Agricultural sciences
57	53	0	4	41	40	0	1	Social sciences
19	19	0	0	50	50	0	0	Humanities
<b>674</b>	<b>532</b>	<b>62</b>	<b>80</b>	<b>284</b>	<b>208</b>	<b>32</b>	<b>44</b>	<b>Tertiary education</b>
46	15	12	19	39	31	5	3	Natural sciences
23	0	19	4	38	13	18	7	Engineering and technology
2	0	2	0	17	14	0	3	Medical and health sciences
61	7	9	45	34	3	3	28	Agricultural sciences
400	370	18	12	65	56	6	3	Social sciences
142	140	2	0	91	91	0	0	Humanities
<b>9</b>	<b>2</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Non-profit sector</b>
2	0	2	0	0	0	0	0	Engineering and technology
2	0	2	0	0	0	0	0	Medical and health sciences
5	2	3	0	0	0	0	0	Social sciences
<b>317</b>	<b>106</b>	<b>166</b>	<b>45</b>	<b>277</b>	<b>47</b>	<b>146</b>	<b>84</b>	<b>Region Vojvodine</b>
95	0	72	23	17	0	16	1	Natural sciences
61	11	35	15	112	2	31	79	Engineering and technology
1	1	0	0	0	0	0	0	Medical and health sciences
17	0	16	1	60	0	60	0	Agricultural sciences
142	94	42	6	86	45	37	4	Social sciences
1	0	1	0	2	0	2	0	Humanities
<b>85</b>	<b>0</b>	<b>62</b>	<b>23</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>Business sector</b>
70	0	50	20	3	0	3	0	Natural sciences
14	0	12	2	1	0	0	1	Engineering and technology
1	0	0	1	0	0	0	0	Agricultural sciences
0	0	0	0	0	0	0	0	Social sciences
<b>9</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>42</b>	<b>2</b>	<b>27</b>	<b>13</b>	<b>Government sector</b>
7	1	2	4	21	2	6	13	Engineering and technology
2	0	2	0	21	0	21	0	Agricultural sciences
<b>204</b>	<b>105</b>	<b>81</b>	<b>18</b>	<b>231</b>	<b>45</b>	<b>116</b>	<b>70</b>	<b>Tertiary education</b>
20	0	17	3	14	0	13	1	Natural sciences
40	10	21	9	90	0	25	65	Engineering and technology
1	1	0	0	0	0	0	0	Medical and health sciences
0	0	0	0	39	0	39	0	Agricultural sciences
142	94	42	6	86	45	37	4	Social sciences
1	0	1	0	2	0	2	0	Humanities
<b>19</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>Non-profit sector</b>
5	0	5	0	0	0	0	0	Natural sciences
14	0	14	0	0	0	0	0	Agricultural sciences

## 8.1. R&amp;D works, by ordering parties, fields of science

	Ordering parties							
	Enterprises				Ministries			
	Total	Basic	Applied	Development	Total	Basic	Applied	Development
SRBIJA – JUG	233	-	203	30	1768	1403	218	147
Natural sciences	-	-	-	-	447	336	105	6
Engineering and technology	223	-	193	30	283	63	80	140
Medical and health sciences	-	-	-	-	11	11	-	-
Agricultural sciences	-	-	-	-	33	3	30	-
Social sciences	10	-	10	-	968	964	3	1
Humanities	-	-	-	-	26	26	-	-
<b>Business sector</b>	<b>21</b>	-	<b>14</b>	<b>7</b>	<b>13</b>	<b>1</b>	<b>9</b>	<b>3</b>
Natural sciences	-	-	-	-	-	-	-	-
Engineering and technology	11	-	4	7	9	1	5	3
Agricultural sciences	-	-	-	-	4	-	4	-
Social sciences	10	-	10	-	-	-	-	-
<b>Government sector</b>	-	-	-	-	<b>56</b>	<b>10</b>	<b>6</b>	<b>40</b>
Engineering and technology	-	-	-	-	50	10	-	40
Agricultural sciences	-	-	-	-	6	-	6	-
<b>Tertiary education</b>	<b>212</b>	-	<b>189</b>	<b>23</b>	<b>1699</b>	<b>1392</b>	<b>203</b>	<b>104</b>
Natural sciences	-	-	-	-	447	336	105	6
Engineering and technology	212	-	189	23	224	52	75	97
Medical and health sciences	-	-	-	-	11	11	-	-
Agricultural sciences	-	-	-	-	23	3	20	-
Social sciences	-	-	-	-	968	964	3	1
Humanities	-	-	-	-	26	26	-	-
<b>Region Šumadije i Zapadne Srbije</b>	<b>10</b>	-	<b>10</b>	-	<b>408</b>	<b>265</b>	<b>106</b>	<b>37</b>
Natural sciences	-	-	-	-	150	103	42	5
Engineering and technology	-	-	-	-	87	19	36	32
Medical and health sciences	-	-	-	-	23	3	20	-
Agricultural sciences	-	-	-	-	29	3	26	-
Social sciences	10	-	10	-	135	133	2	-
Humanities	-	-	-	-	2	2	-	-
<b>Business sector</b>	<b>10</b>	-	<b>10</b>	-	<b>6</b>	<b>1</b>	<b>5</b>	-
Natural sciences	-	-	-	-	-	-	-	-
Engineering and technology	-	-	-	-	6	1	5	-
Agricultural sciences	-	-	-	-	-	-	-	-
Social sciences	10	-	10	-	-	-	-	-
<b>Government sector</b>	-	-	-	-	<b>6</b>	-	<b>6</b>	-
Agricultural sciences	-	-	-	-	6	-	6	-
<b>Tertiary education</b>	-	-	-	-	<b>396</b>	<b>264</b>	<b>95</b>	<b>37</b>
Natural sciences	-	-	-	-	150	103	42	5
Engineering and technology	-	-	-	-	81	18	31	32
Medical and health sciences	-	-	-	-	5	5	-	-
Agricultural sciences	-	-	-	-	23	3	20	-
Social sciences	-	-	-	-	135	133	2	-
Humanities	-	-	-	-	2	2	-	-
<b>Region Južne i Istočne Srbije</b>	<b>223</b>	-	<b>193</b>	<b>30</b>	<b>1360</b>	<b>1138</b>	<b>112</b>	<b>110</b>
Natural sciences	-	-	-	-	297	233	63	1
Engineering and technology	223	-	193	30	196	44	44	108
Medical and health sciences	-	-	-	-	6	6	-	-
Agricultural sciences	-	-	-	-	4	-	4	-
Social sciences	-	-	-	-	833	831	1	1
Humanities	-	-	-	-	24	24	-	-
<b>Business sector</b>	<b>11</b>	-	<b>4</b>	<b>7</b>	<b>7</b>	-	<b>4</b>	<b>3</b>
Engineering and technology	11	-	4	7	3	-	-	3
Agricultural sciences	-	-	-	-	4	-	4	-
Social sciences	-	-	-	-	-	-	-	-
<b>Government sector</b>	-	-	-	-	<b>50</b>	<b>10</b>	-	<b>40</b>
Engineering and technology	-	-	-	-	50	10	-	40
<b>Tertiary education</b>	<b>212</b>	-	<b>189</b>	<b>23</b>	<b>1303</b>	<b>1128</b>	<b>108</b>	<b>67</b>
Natural sciences	-	-	-	-	297	233	63	1
Engineering and technology	212	-	189	23	143	34	44	65
Medical and health sciences	-	-	-	-	6	6	-	-
Social sciences	-	-	-	-	833	831	1	1
Humanities	-	-	-	-	24	24	-	-
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...

## and type of research, 2015 (continued)

Ordering parties								
Other				From abroad				
Total	Basic	Applied	Development	Total	Basic	Applied	Development	
971	300	614	57	229	134	57	38	SRBIJA – JUG
6	-	2	4	5	-	5	-	Natural sciences
668	15	607	46	111	27	47	37	Engineering and technology
38	38	-	-	-	-	-	-	Medical and health sciences
3	-	2	1	-	-	-	-	Agricultural sciences
244	236	2	6	113	107	5	1	Social sciences
12	11	1	-	-	-	-	-	Humanities
<b>638</b>	<b>1</b>	<b>595</b>	<b>42</b>	<b>16</b>	<b>-</b>	<b>9</b>	<b>7</b>	<b>Business sector</b>
6	-	2	4	-	-	-	-	Natural sciences
627	-	591	36	16	-	9	7	Engineering and technology
3	-	2	1	-	-	-	-	Agricultural sciences
2	1	-	1	-	-	-	-	Social sciences
-	-	-	-	-	-	-	-	<b>Government sector</b>
-	-	-	-	-	-	-	-	Engineering and technology
-	-	-	-	-	-	-	-	Agricultural sciences
<b>333</b>	<b>299</b>	<b>19</b>	<b>15</b>	<b>213</b>	<b>134</b>	<b>48</b>	<b>31</b>	<b>Tertiary education</b>
-	-	-	-	5	-	5	-	Natural sciences
41	15	16	10	95	27	38	30	Engineering and technology
38	38	-	-	-	-	-	-	Medical and health sciences
-	-	-	-	-	-	-	-	Agricultural sciences
242	235	2	5	113	107	5	1	Social sciences
12	11	1	-	-	-	-	-	Humanities
<b>703</b>	<b>57</b>	<b>601</b>	<b>45</b>	<b>75</b>	<b>17</b>	<b>34</b>	<b>24</b>	<b>Region Šumadije i Zapadne Srbije</b>
6	-	2	4	-	-	-	-	Natural sciences
648	15	595	38	70	17	29	24	Engineering and technology
-	-	-	-	-	-	-	-	Medical and health sciences
3	-	2	1	-	-	-	-	Agricultural sciences
8	4	2	2	5	-	5	-	Social sciences
-	-	-	-	-	-	-	-	Humanities
<b>617</b>	<b>1</b>	<b>583</b>	<b>33</b>	<b>10</b>	<b>-</b>	<b>4</b>	<b>6</b>	<b>Business sector</b>
6	-	2	4	-	-	-	-	Natural sciences
607	-	579	28	10	-	4	6	Engineering and technology
3	-	2	1	-	-	-	-	Agricultural sciences
1	1	-	-	-	-	-	-	Social sciences
-	-	-	-	-	-	-	-	<b>Government sector</b>
-	-	-	-	-	-	-	-	Agricultural sciences
<b>86</b>	<b>56</b>	<b>18</b>	<b>12</b>	<b>65</b>	<b>17</b>	<b>30</b>	<b>18</b>	<b>Tertiary education</b>
-	-	-	-	-	-	-	-	Natural sciences
41	15	16	10	60	17	25	18	Engineering and technology
38	38	-	-	-	-	-	-	Medical and health sciences
-	-	-	-	-	-	-	-	Agricultural sciences
7	3	2	2	5	-	5	-	Social sciences
-	-	-	-	-	-	-	-	Humanities
<b>268</b>	<b>243</b>	<b>13</b>	<b>12</b>	<b>154</b>	<b>117</b>	<b>23</b>	<b>14</b>	<b>Region Južne i Istočne Srbije</b>
-	-	-	-	5	-	5	-	Natural sciences
20	-	12	8	41	10	18	13	Engineering and technology
-	-	-	-	-	-	-	-	Medical and health sciences
-	-	-	-	-	-	-	-	Agricultural sciences
236	232	-	4	108	107	-	1	Social sciences
12	11	1	-	-	-	-	-	Humanities
<b>21</b>	<b>-</b>	<b>12</b>	<b>9</b>	<b>6</b>	<b>-</b>	<b>5</b>	<b>1</b>	<b>Business sector</b>
20	-	12	8	6	-	5	1	Engineering and technology
-	-	-	-	-	-	-	-	Agricultural sciences
1	-	-	1	-	-	-	-	Social sciences
-	-	-	-	-	-	-	-	<b>Government sector</b>
-	-	-	-	-	-	-	-	Engineering and technology
<b>247</b>	<b>243</b>	<b>1</b>	<b>3</b>	<b>148</b>	<b>117</b>	<b>18</b>	<b>13</b>	<b>Tertiary education</b>
-	-	-	-	5	-	5	-	Natural sciences
-	-	-	-	35	10	13	12	Engineering and technology
-	-	-	-	-	-	-	-	Medical and health sciences
235	232	-	3	108	107	-	1	Social sciences
12	11	1	-	-	-	-	-	Humanities
...	...	...	...	...	...	...	...	<b>Region Kosovo i Metohija</b>

## 9.1. Published R&amp;D works, inventions and patents, by fields of science, 2015

	Published R&D works				Inventions and patents					
	Total	Published in			Tested inventions	Patents		Sold		Inventions and patents used for the first time in practice
		Own publications	Other publications in the Republic of Serbia	Foreign publications		Pending in the Patent Office	Registered in the Patent Office	In the Republic of Serbia	Abroad	
<b>REPUBLIC OF SERBIA</b>	<b>25256</b>	<b>5518</b>	<b>9089</b>	<b>11321</b>	<b>341</b>	<b>132</b>	<b>69</b>	<b>94</b>	<b>4</b>	<b>7</b>
Natural sciences	5606	711	1104	3844	32	25	20	6	3	-
Engineering and technology	6636	1226	2248	3162	280	89	40	74	-	3
Medical and health sciences	1613	51	377	1185	7	7	-	-	-	-
Agricultural sciences	1349	353	629	599	10	7	2	4	-	3
Social sciences	7726	2351	3739	1935	12	4	7	10	1	1
Humanities	2326	826	992	596	-	-	-	-	-	-
<b>Business sector</b>	<b>902</b>	<b>154</b>	<b>326</b>	<b>422</b>	<b>47</b>	<b>19</b>	<b>27</b>	<b>11</b>	<b>1</b>	<b>3</b>
Natural sciences	178	18	62	98	31	15	17	-	-	-
Engineering and technology	508	27	215	266	2	-	2	1	-	-
Agricultural sciences	41	22	14	5	3	-	2	-	-	3
Social sciences	175	87	35	53	11	4	6	10	1	-
<b>Government sector</b>	<b>7421</b>	<b>1534</b>	<b>2426</b>	<b>3526</b>	<b>4</b>	<b>14</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>-</b>
Natural sciences	2525	175	393	2007	1	10	1	6	3	-
Engineering and technology	1385	262	516	607	-	1	1	-	-	-
Medical and health sciences	150	1	10	139	-	-	-	-	-	-
Agricultural sciences	1027	227	400	400	3	3	-	-	-	-
Social sciences	1261	495	571	195	-	-	-	-	-	-
Humanities	1073	374	536	178	-	-	-	-	-	-
<b>Tertiary education</b>	<b>16932</b>	<b>3830</b>	<b>6336</b>	<b>7373</b>	<b>290</b>	<b>99</b>	<b>40</b>	<b>77</b>	<b>-</b>	<b>4</b>
Natural sciences	2903	518	649	1739	-	-	2	-	-	-
Engineering and technology	4743	937	1517	2289	278	88	37	73	-	3
Medical and health sciences	1463	50	367	1046	7	7	-	-	-	-
Agricultural sciences	281	104	215	194	4	4	-	4	-	-
Social sciences	6289	1769	3132	1687	1	-	1	-	-	1
Humanities	1253	452	456	418	-	-	-	-	-	-
<b>Non-profit sector</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Social sciences	1	-	1	-	-	-	-	-	-	-
<b>SRBIJA – SEVER</b>	<b>19371</b>	<b>4350</b>	<b>6803</b>	<b>8587</b>	<b>224</b>	<b>103</b>	<b>63</b>	<b>94</b>	<b>4</b>	<b>2</b>
Natural sciences	5131	683	1072	3426	32	25	20	6	3	-
Engineering and technology	4142	764	1536	1842	165	60	36	74	-	-
Medical and health sciences	1373	5	315	1053	7	7	-	-	-	-
Agricultural sciences	1112	340	510	494	8	7	-	4	-	1
Social sciences	5603	1815	2507	1280	12	4	7	10	1	1
Humanities	2010	743	863	492	-	-	-	-	-	-
<b>Business sector</b>	<b>759</b>	<b>147</b>	<b>265</b>	<b>347</b>	<b>43</b>	<b>19</b>	<b>25</b>	<b>11</b>	<b>1</b>	<b>1</b>
Natural sciences	178	18	62	98	31	15	17	-	-	-
Engineering and technology	379	20	164	195	-	-	2	1	-	-
Agricultural sciences	27	22	4	1	1	-	-	-	-	1
Social sciences	175	87	35	53	11	4	6	10	1	-
<b>Government sector</b>	<b>7039</b>	<b>1484</b>	<b>2324</b>	<b>3296</b>	<b>4</b>	<b>14</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>-</b>
Natural sciences	2525	175	393	2007	1	10	1	6	3	-
Engineering and technology	1085	212	466	407	-	1	1	-	-	-
Medical and health sciences	150	1	10	139	-	-	-	-	-	-
Agricultural sciences	945	227	348	370	3	3	-	-	-	-
Social sciences	1261	495	571	195	-	-	-	-	-	-
Humanities	1073	374	536	178	-	-	-	-	-	-
<b>Tertiary education</b>	<b>11572</b>	<b>2719</b>	<b>4213</b>	<b>4944</b>	<b>177</b>	<b>70</b>	<b>36</b>	<b>77</b>	<b>-</b>	<b>1</b>
Natural sciences	2428	490	617	1321	-	-	2	-	-	-
Engineering and technology	2678	532	906	1240	165	59	33	73	-	-
Medical and health sciences	1223	4	305	914	7	7	-	-	-	-
Agricultural sciences	140	91	158	123	4	4	-	4	-	-
Social sciences	4166	1233	1900	1032	1	-	1	-	-	1
Humanities	937	369	327	314	-	-	-	-	-	-
<b>Non-profit sector</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Social sciences	1	-	1	-	-	-	-	-	-	-

## 9.1. Published R&amp;D works, inventions and patents, by fields of science, 2015 (continued)

	Published R&D works				Inventions and patents					
	Total	Published in			Tested inventions	Patents		Sold		Inventions and patents used for the first time in practice
		Own publications	Other publications in the Republic of Serbia	Foreign publications		Pending in the Patent Office	Registered in the Patent Office	In the Republic of Serbia	Abroad	
<b>Beogradski region</b>	<b>14356</b>	<b>3234</b>	<b>4710</b>	<b>6549</b>	<b>15</b>	<b>17</b>	<b>13</b>	<b>17</b>	<b>4</b>	<b>1</b>
Natural sciences	4156	625	738	2843	1	10	4	6	3	-
Engineering and technology	2361	313	865	1183	-	1	2	1	-	-
Medical and health sciences	1152	1	251	900	-	-	-	-	-	-
Agricultural sciences	815	277	246	292	2	2	-	-	-	-
Social sciences	3951	1276	1816	858	12	4	7	10	1	1
Humanities	1921	742	794	473	-	-	-	-	-	-
<b>Business sector</b>	<b>755</b>	<b>147</b>	<b>265</b>	<b>343</b>	<b>11</b>	<b>4</b>	<b>9</b>	<b>11</b>	<b>1</b>	<b>-</b>
Natural sciences	175	18	62	95	-	-	1	-	-	-
Engineering and technology	378	20	164	194	-	-	2	1	-	-
Agricultural sciences	27	22	4	1	-	-	-	-	-	-
Social sciences	175	87	35	53	11	4	6	10	1	-
<b>Government sector</b>	<b>6415</b>	<b>1423</b>	<b>2042</b>	<b>3015</b>	<b>3</b>	<b>13</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>-</b>
Natural sciences	2525	175	393	2007	1	10	1	6	3	-
Engineering and technology	754	188	326	240	-	1	-	-	-	-
Medical and health sciences	150	1	10	139	-	-	-	-	-	-
Agricultural sciences	652	190	206	256	2	2	-	-	-	-
Social sciences	1261	495	571	195	-	-	-	-	-	-
Humanities	1073	374	536	178	-	-	-	-	-	-
<b>Tertiary education</b>	<b>7185</b>	<b>1664</b>	<b>2402</b>	<b>3191</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>1</b>
Natural sciences	1456	432	283	741	-	-	2	-	-	-
Engineering and technology	1229	105	375	749	-	-	-	-	-	-
Medical and health sciences	1002	-	241	761	-	-	-	-	-	-
Agricultural sciences	136	65	36	35	-	-	-	-	-	-
Social sciences	2514	694	1209	610	1	-	1	-	-	1
Humanities	848	368	258	295	-	-	-	-	-	-
<b>Non-profit sector</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Social sciences	1	-	1	-	-	-	-	-	-	-
<b>Region Vojvodine</b>	<b>5015</b>	<b>1116</b>	<b>2093</b>	<b>2038</b>	<b>209</b>	<b>86</b>	<b>50</b>	<b>77</b>	<b>-</b>	<b>1</b>
Natural sciences	975	58	334	583	31	15	16	-	-	-
Engineering and technology	1781	451	671	659	165	59	34	73	-	-
Medical and health sciences	221	4	64	153	7	7	-	-	-	-
Agricultural sciences	297	63	264	202	6	5	-	4	-	1
Social sciences	1652	539	691	422	-	-	-	-	-	-
Humanities	89	1	69	19	-	-	-	-	-	-
<b>Business sector</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>32</b>	<b>15</b>	<b>16</b>	<b>-</b>	<b>-</b>	<b>1</b>
Natural sciences	3	-	-	3	31	15	16	-	-	-
Engineering and technology	1	-	-	1	-	-	-	-	-	-
Agricultural sciences	-	-	-	-	1	-	-	-	-	1
<b>Government sector</b>	<b>624</b>	<b>61</b>	<b>282</b>	<b>281</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>
Engineering and technology	331	24	140	167	-	-	1	-	-	-
Agricultural sciences	293	37	142	114	1	1	-	-	-	-
<b>Tertiary education</b>	<b>4387</b>	<b>1055</b>	<b>1811</b>	<b>1753</b>	<b>176</b>	<b>70</b>	<b>33</b>	<b>77</b>	<b>-</b>	<b>-</b>
Natural sciences	972	58	334	580	-	-	-	-	-	-
Engineering and technology	1449	427	531	491	165	59	33	73	-	-
Medical and health sciences	221	4	64	153	7	7	-	-	-	-
Agricultural sciences	4	26	122	88	4	4	-	4	-	-
Social sciences	1652	539	691	422	-	-	-	-	-	-
Humanities	89	1	69	19	-	-	-	-	-	-

## 9.1. Published R&amp;D works, inventions and patents, by fields of science, 2015 (continued)

	Published R&D works				Inventions and patents					
	Total	Published in			Tested inventions	Patents		Sold		Inventions and patents used for the first time in practice
		Own publications	Other publications in the Republic of Serbia	Foreign publications		Pending in the Patent Office	Registered in the Patent Office	In the Republic of Serbia	Abroad	
<b>SRBIJA – JUG</b>	<b>5885</b>	<b>1168</b>	<b>2286</b>	<b>2734</b>	<b>117</b>	<b>29</b>	<b>6</b>	-	-	<b>5</b>
Natural sciences	475	28	32	418	-	-	-	-	-	-
Engineering and technology	2494	462	712	1320	115	29	4	-	-	3
Medical and health sciences	240	46	62	132	-	-	-	-	-	-
Agricultural sciences	237	13	119	105	2	-	2	119	-	2
Social sciences	2123	536	1232	655	-	-	-	-	-	-
Humanities	316	83	129	104	-	-	-	-	-	-
<b>Business sector</b>	<b>143</b>	<b>7</b>	<b>61</b>	<b>75</b>	<b>4</b>	-	<b>2</b>	-	-	<b>2</b>
Engineering and technology	129	7	51	71	2	-	-	-	-	-
Agricultural sciences	14	-	10	4	2	-	2	-	-	2
<b>Government sector</b>	<b>382</b>	<b>50</b>	<b>102</b>	<b>230</b>	-	-	-	-	-	-
Engineering and technology	300	50	50	200	-	-	-	-	-	-
Agricultural sciences	82	-	52	30	-	-	-	-	-	-
<b>Tertiary education</b>	<b>5360</b>	<b>1111</b>	<b>2123</b>	<b>2429</b>	<b>113</b>	<b>29</b>	<b>4</b>	-	-	<b>3</b>
Natural sciences	475	28	32	418	-	-	-	-	-	-
Engineering and technology	2065	405	611	1049	113	29	4	-	-	3
Medical and health sciences	240	46	62	132	-	-	-	-	-	-
Agricultural sciences	141	13	57	71	-	-	-	-	-	-
Social sciences	2123	536	1232	655	-	-	-	-	-	-
Humanities	316	83	129	104	-	-	-	-	-	-
<b>Region Šumadije i Zapadne Srbije</b>	<b>2163</b>	<b>479</b>	<b>789</b>	<b>895</b>	<b>110</b>	<b>29</b>	<b>2</b>	-	-	-
Natural sciences	160	-	-	160	-	-	-	-	-	-
Engineering and technology	599	131	204	264	110	29	2	-	-	-
Medical and health sciences	240	46	62	132	-	-	-	-	-	-
Agricultural sciences	223	13	109	101	-	-	-	-	-	-
Social sciences	715	289	292	134	-	-	-	-	-	-
Humanities	226	-	122	104	-	-	-	-	-	-
<b>Business sector</b>	<b>70</b>	-	<b>12</b>	<b>58</b>	-	-	-	-	-	-
Engineering and technology	70	-	12	58	-	-	-	-	-	-
<b>Government sector</b>	<b>82</b>	-	<b>52</b>	<b>30</b>	-	-	-	-	-	-
Agricultural sciences	82	-	52	30	-	-	-	-	-	-
<b>Tertiary education</b>	<b>2011</b>	<b>479</b>	<b>725</b>	<b>807</b>	<b>110</b>	<b>29</b>	<b>2</b>	-	-	-
Natural sciences	160	-	-	160	-	-	-	-	-	-
Engineering and technology	529	131	192	206	110	29	2	-	-	-
Medical and health sciences	240	46	62	132	-	-	-	-	-	-
Agricultural sciences	141	13	57	71	-	-	-	-	-	-
Social sciences	715	289	292	134	-	-	-	-	-	-
Humanities	226	-	122	104	-	-	-	-	-	-
<b>Region Južne i Istočne Srbije</b>	<b>3722</b>	<b>689</b>	<b>1497</b>	<b>1839</b>	<b>7</b>	-	<b>4</b>	-	-	<b>5</b>
Social sciences	315	28	32	258	-	-	-	-	-	-
Engineering and technology	1895	331	508	1056	5	-	2	-	-	3
Agricultural sciences	14	-	10	4	2	-	2	-	-	2
Social sciences	1408	247	940	521	-	-	-	-	-	-
Humanities	90	83	7	-	-	-	-	-	-	-
<b>Business sector</b>	<b>73</b>	<b>7</b>	<b>49</b>	<b>17</b>	<b>4</b>	-	<b>2</b>	-	-	<b>2</b>
Engineering and technology	59	7	39	13	2	-	-	-	-	-
Agricultural sciences	14	-	10	4	2	-	2	-	-	2
<b>Government sector</b>	<b>300</b>	<b>50</b>	<b>50</b>	<b>200</b>	-	-	-	-	-	-
Engineering and technology	300	50	50	200	-	-	-	-	-	-
<b>Tertiary education</b>	<b>3349</b>	<b>632</b>	<b>1398</b>	<b>1622</b>	<b>3</b>	-	<b>2</b>	-	-	<b>3</b>
Natural sciences	315	28	32	258	-	-	-	-	-	-
Engineering and technology	1536	274	419	843	3	-	2	-	-	3
Social sciences	1408	247	940	521	-	-	-	-	-	-
Humanities	90	83	7	-	-	-	-	-	-	-
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	...	...	...	...

## 10.1. Inventions and patent by R&amp;D intensity, 2015

R&D intensity	Inventions and patents					
	Tested inventions	Patents		Inventions and patents sold		Inventions and patents used for the first time in practice
		Pending in the Patent Office	Registered in the Patent Office	In the Republic of Serbia	Abroad	
<b>REPUBLIC OF SERBIA</b>	<b>341</b>	<b>132</b>	<b>69</b>	<b>94</b>	<b>4</b>	<b>7</b>
Natural sciences	32	25	20	6	3	-
Engineering and technology	280	89	40	74	-	3
Medical and health sciences	7	7	-	-	-	-
Agricultural sciences	10	7	2	4	-	3
Social sciences	12	4	7	10	1	1
<b>Business sector</b>	<b>47</b>	<b>19</b>	<b>27</b>	<b>11</b>	<b>1</b>	<b>3</b>
Natural sciences	31	15	17	-	-	-
Engineering and technology	2	-	2	1	-	-
Agricultural sciences	3	-	2	-	-	3
Social sciences	11	4	6	10	1	-
<b>Government sector</b>	<b>4</b>	<b>14</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>-</b>
Natural sciences	1	10	1	6	3	-
Engineering and technology	-	1	1	-	-	-
Agricultural sciences	3	3	-	-	-	-
<b>Tertiary education</b>	<b>290</b>	<b>99</b>	<b>40</b>	<b>77</b>	<b>-</b>	<b>4</b>
Natural sciences	-	-	2	-	-	-
Engineering and technology	278	88	37	73	-	3
Medical and health sciences	7	7	-	-	-	-
Agricultural sciences	4	4	-	4	-	-
Social sciences	1	-	1	-	-	1
<b>SRBIJA – SEVER</b>	<b>224</b>	<b>103</b>	<b>63</b>	<b>94</b>	<b>4</b>	<b>2</b>
Natural sciences	32	25	20	6	3	-
Engineering and technology	165	60	36	74	-	-
Medical and health sciences	7	7	-	-	-	-
Agricultural sciences	8	7	-	4	-	1
Social sciences	12	4	7	10	1	1
<b>Business sector</b>	<b>43</b>	<b>19</b>	<b>25</b>	<b>11</b>	<b>1</b>	<b>1</b>
Natural sciences	31	15	17	-	-	-
Engineering and technology	-	-	2	1	-	-
Agricultural sciences	1	-	-	-	-	1
Social sciences	11	4	6	10	1	-
<b>Government sector</b>	<b>4</b>	<b>14</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>-</b>
Natural sciences	1	10	1	6	3	-
Engineering and technology	-	1	1	-	-	-
Agricultural sciences	3	3	-	-	-	-
<b>Tertiary education</b>	<b>177</b>	<b>70</b>	<b>36</b>	<b>77</b>	<b>-</b>	<b>1</b>
Natural sciences	-	-	2	-	-	-
Engineering and technology	165	59	33	73	-	-
Medical and health sciences	7	7	-	-	-	-
Agricultural sciences	4	4	-	4	-	-
Social sciences	1	-	1	-	-	1
<b>Beogradski region</b>	<b>15</b>	<b>17</b>	<b>13</b>	<b>17</b>	<b>4</b>	<b>1</b>
Natural sciences	1	10	4	6	3	-
Engineering and technology	-	1	2	1	-	-
Agricultural sciences	2	2	-	-	-	-
Social sciences	12	4	7	10	1	1
<b>Business sector</b>	<b>11</b>	<b>4</b>	<b>9</b>	<b>11</b>	<b>1</b>	<b>-</b>
Natural sciences	-	-	1	-	-	-
Engineering and technology	-	-	2	1	-	-
Social sciences	11	4	6	10	1	-
<b>Government sector</b>	<b>3</b>	<b>13</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>-</b>
Natural sciences	1	10	1	6	3	-
Engineering and technology	-	1	-	-	-	-
Agricultural sciences	2	2	-	-	-	-
<b>Tertiary education</b>	<b>1</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>1</b>
Natural sciences	-	-	2	-	-	-
Social sciences	1	-	1	-	-	1

## 10.1. Inventions and patent by R&amp;D intensity, 2015 (continued)

R&D intensity	Inventions and patents					
	Tested inventions	Patents		Inventions and patents sold		Inventions and patents used for the first time in practice
		Pending in the Patent Office	Registered in the Patent Office	In the Republic of Serbia	Abroad	
<b>Region Vojvodine</b>	<b>209</b>	<b>86</b>	<b>50</b>	<b>77</b>	-	<b>1</b>
Natural sciences	31	15	16	-	-	-
Engineering and technology	165	59	34	73	-	-
Medical and health sciences	7	7	-	-	-	-
Agricultural sciences	6	5	-	4	-	1
<b>Business sector</b>	<b>32</b>	<b>15</b>	<b>16</b>	-	-	<b>1</b>
Natural sciences	31	15	16	-	-	-
Agricultural sciences	1	-	-	-	-	1
<b>Government sector</b>	<b>1</b>	<b>1</b>	<b>1</b>	-	-	-
Engineering and technology	-	-	1	-	-	-
Agricultural sciences	1	1	-	-	-	-
<b>Tertiary education</b>	<b>176</b>	<b>70</b>	<b>33</b>	<b>77</b>	-	-
Engineering and technology	165	59	33	73	-	-
Medical and health sciences	7	7	-	-	-	-
Agricultural sciences	4	4	-	4	-	-
<b>SRBIJA – JUG</b>	<b>117</b>	<b>29</b>	<b>6</b>	-	-	<b>5</b>
Engineering and technology	115	29	4	-	-	3
Agricultural sciences	2	-	2	-	-	2
<b>Business sector</b>	<b>4</b>	-	<b>2</b>	-	-	<b>2</b>
Engineering and technology	2	-	-	-	-	-
Agricultural sciences	2	-	2	-	-	2
<b>Tertiary education</b>	<b>113</b>	<b>29</b>	<b>4</b>	-	-	<b>3</b>
Engineering and technology	113	29	4	-	-	3
<b>Region Šumadije i Zapadne Srbije</b>	<b>110</b>	<b>29</b>	<b>2</b>	-	-	-
Engineering and technology	110	29	2	-	-	-
<b>Tertiary education</b>	<b>110</b>	<b>29</b>	<b>2</b>	-	-	-
Engineering and technology	110	29	2	-	-	-
<b>Region Južne i Istočne Srbije</b>	<b>7</b>	-	<b>4</b>	-	-	<b>5</b>
Engineering and technology	5	-	2	-	-	3
Agricultural sciences	2	-	2	-	-	2
<b>Business sector</b>	<b>4</b>	-	<b>2</b>	-	-	<b>2</b>
Engineering and technology	2	-	-	-	-	-
Agricultural sciences	2	-	2	-	-	2
<b>Tertiary education</b>	<b>3</b>	-	<b>2</b>	-	-	<b>3</b>
Engineering and technology	3	-	2	-	-	3
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...



Thous. RSD

## 11.1. Gross domestic expenditure for R&amp;D, by sectors and fields of science, 2015

	Gross domestic expenditure	Gross investments	Current costs		
			Total	Gross salaries and wages	Material costs
<b>REPUBLIC OF SERBIA</b>	<b>34990573</b>	<b>2783880</b>	<b>32206693</b>	<b>18960762</b>	<b>13245931</b>
Natural sciences	11219108	463355	10755753	6390308	4365445
Engineering and technology	11909134	1955776	9953358	5202541	4750817
Medical and health sciences	1950853	74611	1876242	1161785	714457
Agricultural sciences	2916435	103144	2813291	1771557	1041734
Social sciences	5069936	129645	4940291	3510849	1429442
Humanities	1925107	57349	1867758	923722	944036
<b>Business sector</b>	<b>11103915</b>	<b>1941999</b>	<b>9161916</b>	<b>4446535</b>	<b>4715381</b>
Natural sciences	3336525	165314	3171211	1504957	1666254
Engineering and technology	6440283	1666734	4773549	2382891	2390658
Medical and health sciences	944574	50604	893970	390759	503211
Agricultural sciences	290747	54171	236576	128595	107981
Social sciences	91786	5176	86610	39333	47277
<b>Government sector</b>	<b>9569130</b>	<b>434146</b>	<b>9134984</b>	<b>5898056</b>	<b>3236928</b>
Natural sciences	4437114	145986	4291128	2709779	1581349
Engineering and technology	1988905	215997	1772908	1047707	725201
Medical and health sciences	244333	18408	225925	143174	82751
Agricultural sciences	1563142	31084	1532058	1073077	458981
Social sciences	504241	3002	501239	387795	113444
Humanities	831395	19669	811726	536524	275202
<b>Tertiary education</b>	<b>14260714</b>	<b>407072</b>	<b>13853642</b>	<b>8580065</b>	<b>5273577</b>
Natural sciences	3444611	151959	3292652	2175572	1117080
Engineering and technology	3453410	73045	3380365	1751706	1628659
Medical and health sciences	760466	5421	755045	627852	127193
Agricultural sciences	1062093	17889	1044204	569885	474319
Social sciences	4446422	121078	4325344	3067852	1257492
Humanities	1093712	37680	1056032	387198	668834
<b>Non-profit sector</b>	<b>56814</b>	<b>663</b>	<b>56151</b>	<b>36106</b>	<b>20045</b>
Natural sciences	858	96	762	-	762
Engineering and technology	26536	-	26536	20237	6299
Medical and health sciences	1480	178	1302	-	1302
Agricultural sciences	453	-	453	-	453
Social sciences	27487	389	27098	15869	11229
<b>SRBIJA – SEVER</b>	<b>32326428</b>	<b>2309878</b>	<b>30016550</b>	<b>17570119</b>	<b>12446431</b>
Natural sciences	10653421	447855	10205566	6033738	4171828
Engineering and technology	10489179	1513836	8975343	4649878	4325465
Medical and health sciences	1805896	72007	1733889	1040105	693784
Agricultural sciences	2724524	96536	2627988	1660881	967107
Social sciences	4778267	122587	4655680	3306788	1348892
Humanities	1875141	57057	1818084	878729	939355
<b>Business sector</b>	<b>10230731</b>	<b>1508742</b>	<b>8721989</b>	<b>4179181</b>	<b>4542808</b>
Natural sciences	3313595	159750	3153845	1490149	1663696
Engineering and technology	5716514	1244034	4472480	2187427	2285053
Medical and health sciences	944574	50604	893970	390759	503211
Agricultural sciences	167957	49778	118179	73799	44380
Social sciences	88091	4576	83515	37047	46468
<b>Government sector</b>	<b>9460370</b>	<b>434051</b>	<b>9026319</b>	<b>5800840</b>	<b>3225479</b>
Natural sciences	4437114	145986	4291128	2709779	1581349
Engineering and technology	1919963	215997	1703966	982104	721862
Medical and health sciences	244333	18408	225925	143174	82751
Agricultural sciences	1523324	30989	1492335	1041464	450871
Social sciences	504241	3002	501239	387795	113444
Humanities	831395	19669	811726	536524	275202
<b>Tertiary education</b>	<b>12578513</b>	<b>366422</b>	<b>12212091</b>	<b>7553992</b>	<b>4658099</b>
Natural sciences	2901854	142023	2759831	1833810	926021
Engineering and technology	2826166	53805	2772361	1460110	1312251
Medical and health sciences	615509	2817	612692	506172	106520
Agricultural sciences	1032790	15769	1017021	545618	471403
Social sciences	4158448	114620	4043828	2866077	1177751
Humanities	1043746	37388	1006358	342205	664153
<b>Non-profit sector</b>	<b>56814</b>	<b>663</b>	<b>56151</b>	<b>36106</b>	<b>20045</b>
Natural sciences	858	96	762	-	762
Engineering and technology	26536	-	26536	20237	6299
Medical and health sciences	1480	178	1302	-	1302
Agricultural sciences	453	-	453	-	453
Social sciences	27487	389	27098	15869	11229

## 11.1. Gross domestic expenditure for R&amp;D, by sectors and fields of science, 2015 (continued)

Thous. RSD

	Gross domestic expenditure	Gross investments	Current costs		
			Total	Gross salaries and wages	Material costs
<b>Beogradski region</b>	<b>24112725</b>	<b>1969251</b>	<b>22143474</b>	<b>12643605</b>	<b>9499869</b>
Natural sciences	7597443	287554	7309889	4387825	2922064
Engineering and technology	7933463	1414205	6519258	2967608	3551650
Medical and health sciences	1686671	69190	1617481	931480	686001
Agricultural sciences	2188573	61213	2127360	1439692	687668
Social sciences	2960992	95783	2865209	2112872	752337
Humanities	1745583	41306	1704277	804128	900149
<b>Business sector</b>	<b>7184036</b>	<b>1304309</b>	<b>5879727</b>	<b>2385358</b>	<b>3494369</b>
Natural sciences	1585590	48013	1537577	736460	801117
Engineering and technology	4468239	1183558	3284681	1165572	2119109
Medical and health sciences	944574	50604	893970	390759	503211
Agricultural sciences	111205	17558	93647	56925	36722
Social sciences	74428	4576	69852	35642	34210
<b>Government sector</b>	<b>8844006</b>	<b>411779</b>	<b>8432227</b>	<b>5399919</b>	<b>3032308</b>
Natural sciences	4437114	145986	4291128	2709779	1581349
Engineering and technology	1601208	196828	1404380	785498	618882
Medical and health sciences	244333	18408	225925	143174	82751
Agricultural sciences	1225715	27886	1197829	837149	360680
Social sciences	504241	3002	501239	387795	113444
Humanities	831395	19669	811726	536524	275202
<b>Tertiary education</b>	<b>8029180</b>	<b>252596</b>	<b>7776584</b>	<b>4822222</b>	<b>2954362</b>
Natural sciences	1574739	93555	1481184	941586	539598
Engineering and technology	1837480	33819	1803661	996301	807360
Medical and health sciences	496284	-	496284	397547	98737
Agricultural sciences	851653	15769	835884	545618	290266
Social sciences	2354836	87816	2267020	1673566	593454
Humanities	914188	21637	892551	267604	624947
<b>Non-profit sector</b>	<b>55503</b>	<b>567</b>	<b>54936</b>	<b>36106</b>	<b>18830</b>
Engineering and technology	26536	-	26536	20237	6299
Medical and health sciences	1480	178	1302	-	1302
Social sciences	27487	389	27098	15869	11229
<b>Region Vojvodine</b>	<b>8213703</b>	<b>340627</b>	<b>7873076</b>	<b>4926514</b>	<b>2946562</b>
Natural sciences	3055978	160301	2895677	1645913	1249764
Engineering and technology	2555716	99631	2456085	1682270	773815
Medical and health sciences	119225	2817	116408	108625	7783
Agricultural sciences	535951	35323	500628	221189	279439
Social sciences	1817275	26804	1790471	1193916	596555
Humanities	129558	15751	113807	74601	39206
<b>Business sector</b>	<b>3046695</b>	<b>204433</b>	<b>2842262</b>	<b>1793823</b>	<b>1048439</b>
Natural sciences	1728005	111737	1616268	753689	862579
Engineering and technology	1248275	60476	1187799	1021855	165944
Agricultural sciences	56752	32220	24532	16874	7658
Social sciences	13663	-	13663	1405	12258
<b>Government sector</b>	<b>616364</b>	<b>22272</b>	<b>594092</b>	<b>400921</b>	<b>193171</b>
Engineering and technology	318755	19169	299586	196606	102980
Agricultural sciences	297609	3103	294506	204315	90191
<b>Tertiary education</b>	<b>4549333</b>	<b>113826</b>	<b>4435507</b>	<b>2731770</b>	<b>1703737</b>
Natural sciences	1327115	48468	1278647	892224	386423
Engineering and technology	988686	19986	968700	463809	504891
Medical and health sciences	119225	2817	116408	108625	7783
Agricultural sciences	181137	-	181137	-	181137
Social sciences	1803612	26804	1776808	1192511	584297
Humanities	129558	15751	113807	74601	39206
<b>Non-profit sector</b>	<b>1311</b>	<b>96</b>	<b>1215</b>	<b>-</b>	<b>1215</b>
Natural sciences	858	96	762	-	762
Agricultural sciences	453	-	453	-	453
<b>SRBIJA – JUG</b>	<b>2664145</b>	<b>474002</b>	<b>2190143</b>	<b>1390643</b>	<b>799500</b>
Natural sciences	565687	15500	550187	356570	193617
Engineering and technology	1419955	441940	978015	552663	425352
Medical and health sciences	144957	2604	142353	121680	20673
Agricultural sciences	191911	6608	185303	110676	74627
Social sciences	291669	7058	284611	204061	80550
Humanities	49966	292	49674	44993	4681

## 11.1. Gross domestic expenditure for R&amp;D, by sectors and fields of science, 2015 (continued)

Thous. RSD

	Gross domestic expenditure	Gross investments	Current costs		
			Total	Gross salaries and wages	Material costs
<b>Business sector</b>	<b>873184</b>	<b>433257</b>	<b>439927</b>	<b>267354</b>	<b>172573</b>
Natural sciences	22930	5564	17366	14808	2558
Engineering and technology	723769	422700	301069	195464	105605
Agricultural sciences	122790	4393	118397	54796	63601
Social sciences	3695	600	3095	2286	809
<b>Government sector</b>	<b>108760</b>	<b>95</b>	<b>108665</b>	<b>97216</b>	<b>11449</b>
Engineering and technology	68942	-	68942	65603	3339
Agricultural sciences	39818	95	39723	31613	8110
<b>Tertiary education</b>	<b>1682201</b>	<b>40650</b>	<b>1641551</b>	<b>1026073</b>	<b>615478</b>
Natural sciences	542757	9936	532821	341762	191059
Engineering and technology	627244	19240	608004	291596	316408
Medical and health sciences	144957	2604	142353	121680	20673
Agricultural sciences	29303	2120	27183	24267	2916
Social sciences	287974	6458	281516	201775	79741
Humanities	49966	292	49674	44993	4681
<b>Region Šumadija i Zapadne Srbije</b>	<b>1269158</b>	<b>244875</b>	<b>1024283</b>	<b>740742</b>	<b>283541</b>
Natural sciences	453554	13253	440301	315328	124973
Engineering and technology	518460	223225	295235	187348	107887
Medical and health sciences	47952	1625	46327	34901	11426
Agricultural sciences	72344	4528	67816	56790	11026
Social sciences	159036	2244	156792	131339	25453
Humanities	17812	-	17812	15036	2776
<b>Business sector</b>	<b>381989</b>	<b>226816</b>	<b>155173</b>	<b>99306</b>	<b>55867</b>
Natural sciences	22930	5564	17366	14808	2558
Engineering and technology	354781	218939	135842	82862	52980
Agricultural sciences	3223	2313	910	910	-
Social sciences	1055	-	1055	726	329
<b>Government sector</b>	<b>39818</b>	<b>95</b>	<b>39723</b>	<b>31613</b>	<b>8110</b>
Agricultural sciences	39818	95	39723	31613	8110
<b>Tertiary education</b>	<b>847351</b>	<b>17964</b>	<b>829387</b>	<b>609823</b>	<b>219564</b>
Natural sciences	430624	7689	422935	300520	122415
Engineering and technology	163679	4286	159393	104486	54907
Medical and health sciences	47952	1625	46327	34901	11426
Agricultural sciences	29303	2120	27183	24267	2916
Social sciences	157981	2244	155737	130613	25124
Humanities	17812	-	17812	15036	2776
<b>Region Južne i Istočne Srbije</b>	<b>1394987</b>	<b>229127</b>	<b>1165860</b>	<b>649901</b>	<b>515959</b>
Natural sciences	112133	2247	109886	41242	68644
Engineering and technology	901495	218715	682780	365315	317465
Medical and health sciences	97005	979	96026	86779	9247
Agricultural sciences	119567	2080	117487	53886	63601
Social sciences	132633	4814	127819	72722	55097
Humanities	32154	292	31862	29957	1905
<b>Business sector</b>	<b>491195</b>	<b>206441</b>	<b>284754</b>	<b>168048</b>	<b>116706</b>
Engineering and technology	368988	203761	165227	112602	52625
Agricultural sciences	119567	2080	117487	53886	63601
Social sciences	2640	600	2040	1560	480
<b>Government sector</b>	<b>68942</b>	<b>-</b>	<b>68942</b>	<b>65603</b>	<b>3339</b>
Engineering and technology	68942	-	68942	65603	3339
<b>Tertiary education</b>	<b>834850</b>	<b>22686</b>	<b>812164</b>	<b>416250</b>	<b>395914</b>
Natural sciences	112133	2247	109886	41242	68644
Engineering and technology	463565	14954	448611	187110	261501
Medical and health sciences	97005	979	96026	86779	9247
Social sciences	129993	4214	125779	71162	54617
Humanities	32154	292	31862	29957	1905
<b>Region Kosovo i Metohija</b>	...	...	...	...	...

## 12.1. Sources of funds spent on R&amp;D activities, 2015

	Total	Own	Government and local authorities	Private and public enterprises	Non-profit institutions	Foreign ordering parties
						<b>Thous. RSD</b>
<b>REPUBLIC OF SERBIA</b>	<b>34990573</b>	<b>8406244</b>	<b>17715427</b>	<b>4472044</b>	<b>4839</b>	<b>4392019</b>
Natural sciences	11219108	1242727	5863487	2157235	606	1955053
Engineering ant technology	11909134	3314524	5192776	2047551	728	1353555
Medical and health sciences	1950853	48280	942975	7378	-	952220
Agricultural sciences	2916435	1177380	1511706	200345	3505	23499
Social sciences	5069936	2355833	2587161	59535	-	67407
Humanities	1925107	267500	1617322	-	-	40285
<b>Business sector</b>	<b>11103915</b>	<b>3511773</b>	<b>1002082</b>	<b>3045868</b>	<b>-</b>	<b>3544192</b>
Natural sciences	3336525	363688	261290	1071567	-	1639980
Engineering ant technology	6440283	2860797	662102	1953155	-	964229
Medical and health sciences	944574	-	-	7378	-	937196
Agricultural sciences	290747	264298	23557	105	-	2787
Social sciences	91786	22990	55133	13663	-	-
<b>Government sector</b>	<b>9569130</b>	<b>1084073</b>	<b>7112448</b>	<b>1083905</b>	<b>1334</b>	<b>287370</b>
Natural sciences	4437114	40373	3186828	1000301	606	209006
Engineering ant technology	1988905	191433	1757969	15192	728	23583
Medical and health sciences	244333	-	231041	-	-	13292
Agricultural sciences	1563142	723973	761955	68223	-	8991
Social sciences	504241	4983	481626	189	-	17443
Humanities	831395	123311	693029	-	-	15055
<b>Tertiary education</b>	<b>14260714</b>	<b>3762889</b>	<b>9598945</b>	<b>342080</b>	<b>3052</b>	<b>553748</b>
Natural sciences	3444611	838666	2414511	85367	-	106067
Engineering ant technology	3453410	236399	2772255	79013	-	365743
Medical and health sciences	760466	46800	711934	-	-	1732
Agricultural sciences	1062093	189109	726194	132017	3052	11721
Social sciences	4446422	2307726	2049758	45683	-	43255
Humanities	1093712	144189	924293	-	-	25230
<b>Non-profit sector</b>	<b>56814</b>	<b>47509</b>	<b>1952</b>	<b>191</b>	<b>453</b>	<b>6709</b>
Natural sciences	858	-	858	-	-	-
Engineering ant technology	26536	25895	450	191	-	-
Medical and health sciences	1480	1480	-	-	-	-
Agricultural sciences	453	-	-	-	453	-
Social sciences	27487	20134	644	-	-	6709
<b>SRBIJA – SEVER</b>	<b>32326428</b>	<b>7570142</b>	<b>16258987</b>	<b>4321573</b>	<b>4839</b>	<b>4170887</b>
Natural sciences	10653421	1172675	5381944	2150955	606	1947241
Engineering ant technology	10489179	2770440	4669504	1903360	728	1145147
Medical and health sciences	1805896	46045	801985	7378	-	950488
Agricultural sciences	2724524	1073505	1425750	200345	3505	21419
Social sciences	4778267	2240256	2412169	59535	-	66307
Humanities	1875141	267221	1567635	-	-	40285
<b>Business sector</b>	<b>10230731</b>	<b>2845477</b>	<b>938770</b>	<b>2972079</b>	<b>-</b>	<b>3474405</b>
Natural sciences	3313595	347426	260902	1065287	-	1639980
Engineering ant technology	5716514	2317129	617217	1885646	-	896522
Medical and health sciences	944574	-	-	7378	-	937196
Agricultural sciences	167957	161627	5518	105	-	707
Social sciences	88091	19295	55133	13663	-	-
<b>Government sector</b>	<b>9460370</b>	<b>1082869</b>	<b>7004892</b>	<b>1083905</b>	<b>1334</b>	<b>287370</b>
Natural sciences	4437114	40373	3186828	1000301	606	209006
Engineering ant technology	1919963	191433	1689027	15192	728	23583
Medical and health sciences	244333	-	231041	-	-	13292
Agricultural sciences	1523324	722769	723341	68223	-	8991
Social sciences	504241	4983	481626	189	-	17443
Humanities	831395	123311	693029	-	-	15055
<b>Tertiary education</b>	<b>12578513</b>	<b>3594287</b>	<b>8313373</b>	<b>265398</b>	<b>3052</b>	<b>402403</b>
Natural sciences	2901854	784876	1933356	85367	-	98255
Engineering ant technology	2826166	235983	2362810	2331	-	225042
Medical and health sciences	615509	44565	570944	-	-	-
Agricultural sciences	1032790	189109	696891	132017	3052	11721
Social sciences	4158448	2195844	1874766	45683	-	42155
Humanities	1043746	143910	874606	-	-	25230
<b>Non-profit sector</b>	<b>56814</b>	<b>47509</b>	<b>1952</b>	<b>191</b>	<b>453</b>	<b>6709</b>
Natural sciences	858	-	858	-	-	-
Engineering ant technology	26536	25895	450	191	-	-
Medical and health sciences	1480	1480	-	-	-	-
Agricultural sciences	453	-	-	-	453	-
Social sciences	27487	20134	644	-	-	6709
<b>Beogradski region</b>	<b>24112725</b>	<b>6063000</b>	<b>12354614</b>	<b>3298735</b>	<b>4386</b>	<b>2391990</b>
Natural sciences	7597443	923711	4375286	2065588	606	232252
Engineering ant technology	7933463	2280646	3559150	979552	728	1113387
Medical and health sciences	1686671	1480	727325	7378	-	950488
Agricultural sciences	2188573	1008809	963939	200345	3052	12428
Social sciences	2960992	1633763	1238207	45872	-	43150
Humanities	1745583	214591	1490707	-	-	40285

## 12.1. Sources of funds spent on R&amp;D activities, 2015 (continued)

	Total	Own	Government and local authorities	Private and public enterprises	Non-profit institutions	Foreign ordering parties
						<b>Thous. RSD</b>
<b>Business sector</b>	<b>7184036</b>	<b>2430424</b>	<b>883307</b>	<b>2045208</b>	-	<b>1825097</b>
Natural sciences	1585590	314040	205439	1065287	-	824
Engineering and technology	4468239	1992214	617217	972438	-	886370
Medical and health sciences	944574	-	-	7378	-	937196
Agricultural sciences	111205	104875	5518	105	-	707
Social sciences	74428	19295	55133	-	-	-
<b>Government sector</b>	<b>8844006</b>	<b>1050427</b>	<b>6461664</b>	<b>1073810</b>	<b>1334</b>	<b>256771</b>
Natural sciences	4437114	40373	3186828	1000301	606	209006
Engineering and technology	1601208	166935	1426473	5097	728	1975
Medical and health sciences	244333	-	231041	-	-	13292
Agricultural sciences	1225715	714825	442667	68223	-	-
Social sciences	504241	4983	481626	189	-	17443
Humanities	831395	123311	693029	-	-	15055
<b>Tertiary education</b>	<b>8029180</b>	<b>2534640</b>	<b>5008549</b>	<b>179526</b>	<b>3052</b>	<b>303413</b>
Natural sciences	1574739	569298	983019	-	-	22422
Engineering and technology	1837480	95602	1515010	1826	-	225042
Medical and health sciences	496284	-	496284	-	-	-
Agricultural sciences	851653	189109	515754	132017	3052	11721
Social sciences	2354836	1589351	700804	45683	-	18998
Humanities	914188	91280	797678	-	-	25230
<b>Non-profit sector</b>	<b>55503</b>	<b>47509</b>	<b>1094</b>	<b>191</b>	-	<b>6709</b>
Engineering and technology	26536	25895	450	191	-	-
Medical and health sciences	1480	1480	-	-	-	-
Social sciences	27487	20134	644	-	-	6709
<b>Region Vojvodine</b>	<b>8213703</b>	<b>1507142</b>	<b>3904373</b>	<b>1022838</b>	<b>453</b>	<b>1778897</b>
Natural sciences	3055978	248964	1006658	85367	-	1714989
Engineering and technology	2555716	489794	1110354	923808	-	31760
Medical and health sciences	119225	44565	74660	-	-	-
Agricultural sciences	535951	64696	461811	-	453	8991
Social sciences	1817275	606493	1173962	13663	-	23157
Humanities	129558	52630	76928	-	-	-
<b>Business sector</b>	<b>3046695</b>	<b>415053</b>	<b>55463</b>	<b>926871</b>	-	<b>1649308</b>
Natural sciences	1728005	33386	55463	-	-	1639156
Engineering and technology	1248275	324915	-	913208	-	10152
Agricultural sciences	56752	56752	-	-	-	-
Social sciences	13663	-	-	13663	-	-
<b>Government sector</b>	<b>616364</b>	<b>32442</b>	<b>543228</b>	<b>10095</b>	-	<b>30599</b>
Engineering and technology	318755	24498	262554	10095	-	21608
Agricultural sciences	297609	7944	280674	-	-	8991
<b>Tertiary education</b>	<b>4549333</b>	<b>1059647</b>	<b>3304824</b>	<b>85872</b>	-	<b>98990</b>
Natural sciences	1327115	215578	950337	85367	-	75833
Engineering and technology	988686	140381	847800	505	-	-
Medical and health sciences	119225	44565	74660	-	-	-
Agricultural sciences	181137	-	181137	-	-	-
Social sciences	1803612	606493	1173962	-	-	23157
Humanities	129558	52630	76928	-	-	-
<b>Non-profit sector</b>	<b>1311</b>	-	<b>858</b>	-	<b>453</b>	-
Natural sciences	858	-	858	-	-	-
Agricultural sciences	453	-	-	-	453	-
<b>SRBIJA – JUG</b>	<b>2664145</b>	<b>836102</b>	<b>1456440</b>	<b>150471</b>	-	<b>221132</b>
Natural sciences	565687	70052	481543	6280	-	7812
Engineering and technology	1419955	544084	523272	144191	-	208408
Medical and health sciences	144957	2235	140990	-	-	1732
Agricultural sciences	191911	103875	85956	-	-	2080
Social sciences	291669	115577	174992	-	-	1100
Humanities	49966	279	49687	-	-	-
<b>Business sector</b>	<b>873184</b>	<b>666296</b>	<b>63312</b>	<b>73789</b>	-	<b>69787</b>
Natural sciences	22930	16262	388	6280	-	-
Engineering and technology	723769	543668	44885	67509	-	67707
Agricultural sciences	122790	102671	18039	-	-	2080
Social sciences	3695	3695	-	-	-	-

## 12.1. Sources of funds spent on R&amp;D activities, 2015 (continued)

Thous. RSD

	Total	Own	Government and local authorities	Private and public enterprises	Non-profit institutions	Foreign ordering parties
<b>Government sector</b>	<b>108760</b>	<b>1204</b>	<b>107556</b>	-	-	-
Engineering and technology	68942	-	68942	-	-	-
Agricultural sciences	39818	1204	38614	-	-	-
<b>Tertiary education</b>	<b>1682201</b>	<b>168602</b>	<b>1285572</b>	<b>76682</b>	-	<b>151345</b>
Natural sciences	542757	53790	481155	-	-	7812
Engineering and technology	627244	416	409445	76682	-	140701
Medical and health sciences	144957	2235	140990	-	-	1732
Agricultural sciences	29303	-	29303	-	-	-
Social sciences	287974	111882	174992	-	-	1100
Humanities	49966	279	49687	-	-	-
<b>Region Šumadije i Zapadne Srbije</b>	<b>1269158</b>	<b>377541</b>	<b>781100</b>	<b>59615</b>	-	<b>50902</b>
Natural sciences	453554	70052	371129	6280	-	6093
Engineering and technology	518460	258094	165054	53335	-	41977
Medical and health sciences	47952	2235	43985	-	-	1732
Agricultural sciences	72344	2205	70139	-	-	-
Social sciences	159036	44955	112981	-	-	1100
Humanities	17812	-	17812	-	-	-
<b>Business sector</b>	<b>381989</b>	<b>275996</b>	<b>18135</b>	<b>53080</b>	-	<b>34778</b>
Natural sciences	22930	16262	388	6280	-	-
Engineering and technology	354781	257678	15525	46800	-	34778
Agricultural sciences	3223	1001	2222	-	-	-
Social sciences	1055	1055	-	-	-	-
<b>Government sector</b>	<b>39818</b>	<b>1204</b>	<b>38614</b>	-	-	-
Agricultural sciences	39818	1204	38614	-	-	-
<b>Tertiary education</b>	<b>847351</b>	<b>100341</b>	<b>724351</b>	<b>6535</b>	-	<b>16124</b>
Natural sciences	430624	53790	370741	-	-	6093
Engineering and technology	163679	416	149529	6535	-	7199
Medical and health sciences	47952	2235	43985	-	-	1732
Agricultural sciences	29303	-	29303	-	-	-
Social sciences	157981	43900	112981	-	-	1100
Humanities	17812	-	17812	-	-	-
<b>Region Južne i Istočne Srbije</b>	<b>1394987</b>	<b>458561</b>	<b>675340</b>	<b>90856</b>	-	<b>170230</b>
Natural sciences	112133	-	110414	-	-	1719
Engineering and technology	901495	285990	358218	90856	-	166431
Medical and health sciences	97005	-	97005	-	-	-
Agricultural sciences	119567	101670	15817	-	-	2080
Social sciences	132633	70622	62011	-	-	-
Humanities	32154	279	31875	-	-	-
<b>Business sector</b>	<b>491195</b>	<b>390300</b>	<b>45177</b>	<b>20709</b>	-	<b>35009</b>
Engineering and technology	368988	285990	29360	20709	-	32929
Agricultural sciences	119567	101670	15817	-	-	2080
Social sciences	2640	2640	-	-	-	-
<b>Government sector</b>	<b>68942</b>	-	<b>68942</b>	-	-	-
Engineering and technology	68942	-	68942	-	-	-
<b>Tertiary education</b>	<b>834850</b>	<b>68261</b>	<b>561221</b>	<b>70147</b>	-	<b>135221</b>
Natural sciences	112133	-	110414	-	-	1719
Engineering and technology	463565	-	259916	70147	-	133502
Medical and health sciences	97005	-	97005	-	-	-
Social sciences	129993	67982	62011	-	-	-
Humanities	32154	279	31875	-	-	-
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...



## 12.2. Sources of funds for R&amp;D, 2015

	Total	Own	Government and local authorities	Private and public enterprises	Non-profit institutions	Foreign ordering parties	%
<b>REPUBLIC OF SERBIA</b>	<b>100.0</b>	<b>24.0</b>	<b>50.6</b>	<b>12.8</b>	-	<b>12.6</b>	
Natural sciences	100.0	11.1	52.3	19.2	-	17.4	
Engineering and technology	100.0	27.8	43.6	17.2	-	11.4	
Medical and health sciences	100.0	2.5	48.3	0.4	-	48.8	
Agricultural sciences	100.0	40.4	51.8	6.9	0.1	0.8	
Social sciences	100.0	46.5	51.0	1.2	-	1.3	
Humanities	100.0	13.9	84.0	-	-	2.1	
<b>Business sector</b>	<b>100.0</b>	<b>31.6</b>	<b>9.0</b>	<b>27.4</b>	-	<b>31.9</b>	
Natural sciences	100.0	10.9	7.8	32.1	-	49.2	
Engineering and technology	100.0	44.4	10.3	30.3	-	15.0	
Medical and health sciences	100.0	-	-	0.8	-	99.2	
Agricultural sciences	100.0	90.9	8.1	-	-	1.0	
Social sciences	100.0	25.0	60.1	14.9	-	-	
<b>Government sector</b>	<b>100.0</b>	<b>11.3</b>	<b>74.3</b>	<b>11.3</b>	-	<b>3.0</b>	
Natural sciences	100.0	0.9	71.8	22.5	-	4.7	
Engineering and technology	100.0	9.6	88.4	0.8	-	1.2	
Medical and health sciences	100.0	-	94.6	-	-	5.4	
Agricultural sciences	100.0	46.3	48.7	4.4	-	0.6	
Social sciences	100.0	1.0	95.5	-	-	3.5	
Humanities	100.0	14.8	83.4	-	-	1.8	
<b>Tertiary education</b>	<b>100.0</b>	<b>26.4</b>	<b>67.3</b>	<b>2.4</b>	-	<b>3.9</b>	
Natural sciences	100.0	24.3	70.1	2.5	-	3.1	
Engineering and technology	100.0	6.8	80.3	2.3	-	10.6	
Medical and health sciences	100.0	6.2	93.6	-	-	0.2	
Agricultural sciences	100.0	17.8	68.4	12.4	0.3	1.1	
Social sciences	100.0	51.9	46.1	1.0	-	1.0	
Humanities	100.0	13.2	84.5	-	-	2.3	
<b>Non-profit sector</b>	<b>100.0</b>	<b>83.6</b>	<b>3.4</b>	<b>0.3</b>	<b>0.8</b>	<b>11.8</b>	
Natural sciences	100.0	-	100.0	-	-	-	
Engineering and technology	100.0	97.6	1.7	0.7	-	-	
Medical and health sciences	100.0	100.0	-	-	-	-	
Agricultural sciences	100.0	-	-	-	100.0	-	
Social sciences	100.0	73.2	2.3	-	-	24.4	
<b>SRBIJA – SEVER</b>	<b>100.0</b>	<b>23.4</b>	<b>50.3</b>	<b>13.4</b>	-	<b>12.9</b>	
Natural sciences	100.0	11.0	50.5	20.2	-	18.3	
Engineering and technology	100.0	26.4	44.5	18.1	-	10.9	
Medical and health sciences	100.0	2.5	44.4	0.4	-	52.6	
Agricultural sciences	100.0	39.4	52.3	7.4	0.1	0.8	
Social sciences	100.0	46.9	50.5	1.2	-	1.4	
Humanities	100.0	14.3	83.6	-	-	2.1	
<b>Business sector</b>	<b>100.0</b>	<b>27.8</b>	<b>9.2</b>	<b>29.1</b>	-	<b>34.0</b>	
Natural sciences	100.0	10.5	7.9	32.1	-	49.5	
Engineering and technology	100.0	40.5	10.8	33.0	-	15.7	
Medical and health sciences	100.0	-	-	0.8	-	99.2	
Agricultural sciences	100.0	96.2	3.3	0.1	-	0.4	
Social sciences	100.0	21.9	62.6	15.5	-	-	
<b>Government sector</b>	<b>100.0</b>	<b>11.4</b>	<b>74.0</b>	<b>11.5</b>	-	<b>3.0</b>	
Natural sciences	100.0	0.9	71.8	22.5	-	4.7	
Engineering and technology	100.0	10.0	88.0	0.8	-	1.2	
Medical and health sciences	100.0	-	94.6	-	-	5.4	
Agricultural sciences	100.0	47.4	47.5	4.5	-	0.6	
Social sciences	100.0	1.0	95.5	-	-	3.5	
Humanities	100.0	14.8	83.4	-	-	1.8	
<b>Tertiary education</b>	<b>100.0</b>	<b>28.6</b>	<b>66.1</b>	<b>2.1</b>	-	<b>3.2</b>	
Natural sciences	100.0	27.0	66.6	2.9	-	3.4	
Engineering and technology	100.0	8.3	83.6	0.1	-	8.0	
Medical and health sciences	100.0	7.2	92.8	-	-	-	
Agricultural sciences	100.0	18.3	67.5	12.8	0.3	1.1	
Social sciences	100.0	52.8	45.1	1.1	-	1.0	
Humanities	100.0	13.8	83.8	-	-	2.4	
<b>Non-profit sector</b>	<b>100.0</b>	<b>83.6</b>	<b>3.4</b>	<b>0.3</b>	<b>0.8</b>	<b>11.8</b>	
Natural sciences	100.0	-	100.0	-	-	-	
Engineering and technology	100.0	97.6	1.7	0.7	-	-	
Medical and health sciences	100.0	100.0	-	-	-	-	
Agricultural sciences	100.0	-	-	-	100.0	-	
Social sciences	100.0	73.2	2.3	-	-	24.4	

## 12.2. Sources of funds for R&amp;D, 2015 (continued)

	Total	Own	Government and local authorities	Private and public enterprises	Non-profit institutions	Foreign ordering parties	%
<b>Beogradski region</b>	<b>100.0</b>	<b>25.1</b>	<b>51.2</b>	<b>13.7</b>	-	<b>9.9</b>	
Natural sciences	100.0	12.2	57.6	27.2	-	3.1	
Engineering and technology	100.0	28.7	44.9	12.3	-	14.0	
Medical and health sciences	100.0	0.1	43.1	0.4	-	56.4	
Agricultural sciences	100.0	46.1	44.0	9.2	0.1	0.6	
Social sciences	100.0	55.2	41.8	1.5	-	1.5	
Humanities	100.0	12.3	85.4	-	-	2.3	
<b>Business sector</b>	<b>100.0</b>	<b>33.8</b>	<b>12.3</b>	<b>28.5</b>	-	<b>25.4</b>	
Natural sciences	100.0	19.8	13.0	67.2	-	0.1	
Engineering and technology	100.0	44.6	13.8	21.8	-	19.8	
Medical and health sciences	100.0	-	-	0.8	-	99.2	
Agricultural sciences	100.0	94.3	5.0	0.1	-	0.6	
Social sciences	100.0	25.9	74.1	-	-	-	
<b>Government sector</b>	<b>100.0</b>	<b>11.9</b>	<b>73.1</b>	<b>12.1</b>	-	<b>2.9</b>	
Natural sciences	100.0	0.9	71.8	22.5	-	4.7	
Engineering and technology	100.0	10.4	89.1	0.3	-	0.1	
Medical and health sciences	100.0	-	94.6	-	-	5.4	
Agricultural sciences	100.0	58.3	36.1	5.6	-	-	
Social sciences	100.0	1.0	95.5	-	-	3.5	
Humanities	100.0	14.8	83.4	-	-	1.8	
<b>Tertiary education</b>	<b>100.0</b>	<b>31.6</b>	<b>62.4</b>	<b>2.2</b>	-	<b>3.8</b>	
Natural sciences	100.0	36.2	62.4	-	-	1.4	
Engineering and technology	100.0	5.2	82.5	0.1	-	12.2	
Medical and health sciences	100.0	-	100.0	-	-	-	
Agricultural sciences	100.0	22.2	60.6	15.5	0.4	1.4	
Social sciences	100.0	67.5	29.8	1.9	-	0.8	
Humanities	100.0	10.0	87.3	-	-	2.8	
<b>Non-profit sector</b>	<b>100.0</b>	<b>85.6</b>	<b>2.0</b>	<b>0.3</b>	-	<b>12.1</b>	
Engineering and technology	100.0	97.6	1.7	0.7	-	-	
Medical and health sciences	100.0	100.0	-	-	-	-	
Social sciences	100.0	73.2	2.3	-	-	24.4	
<b>Region Vojvodine</b>	<b>100.0</b>	<b>18.3</b>	<b>47.5</b>	<b>12.5</b>	-	<b>21.7</b>	
Natural sciences	100.0	8.1	32.9	2.8	-	56.1	
Engineering and technology	100.0	19.2	43.4	36.1	-	1.2	
Medical and health sciences	100.0	37.4	62.6	-	-	-	
Agricultural sciences	100.0	12.1	86.2	-	0.1	1.7	
Social sciences	100.0	33.4	64.6	0.8	-	1.3	
Humanities	100.0	40.6	59.4	-	-	-	
<b>Business sector</b>	<b>100.0</b>	<b>13.6</b>	<b>1.8</b>	<b>30.4</b>	-	<b>54.1</b>	
Natural sciences	100.0	1.9	3.2	-	-	94.9	
Engineering and technology	100.0	26.0	-	73.2	-	0.8	
Agricultural sciences	100.0	100.0	-	-	-	-	
Social sciences	100.0	-	-	100.0	-	-	
<b>Government sector</b>	<b>100.0</b>	<b>5.3</b>	<b>88.1</b>	<b>1.6</b>	-	<b>5.0</b>	
Engineering and technology	100.0	7.7	82.4	3.2	-	6.8	
Agricultural sciences	100.0	2.7	94.3	-	-	3.0	
<b>Tertiary education</b>	<b>100.0</b>	<b>23.3</b>	<b>72.6</b>	<b>1.9</b>	-	<b>2.2</b>	
Natural sciences	100.0	16.2	71.6	6.4	-	5.7	
Engineering and technology	100.0	14.2	85.8	0.1	-	-	
Medical and health sciences	100.0	37.4	62.6	-	-	-	
Agricultural sciences	100.0	-	100.0	-	-	-	
Social sciences	100.0	33.6	65.1	-	-	1.3	
Humanities	100.0	40.6	59.4	-	-	-	
<b>Non-profit sector</b>	<b>100.0</b>	-	<b>65.4</b>	-	<b>34.6</b>	-	
Natural sciences	100.0	-	100.0	-	-	-	
Agricultural sciences	100.0	-	-	-	100.0	-	
<b>SRBIJA – JUG</b>	<b>100.0</b>	<b>31.4</b>	<b>54.7</b>	<b>5.6</b>	-	<b>8.3</b>	
Natural sciences	100.0	12.4	85.1	1.1	-	1.4	
Engineering and technology	100.0	38.3	36.9	10.2	-	14.7	
Medical and health sciences	100.0	1.5	97.3	-	-	1.2	
Agricultural sciences	100.0	54.1	44.8	-	-	1.1	
Social sciences	100.0	39.6	60.0	-	-	0.4	
Humanities	100.0	0.6	99.4	-	-	-	



## 12.2. Sources of funds for R&amp;D, 2015 (continued)

	Total	Own	Government and local authorities	Private and public enterprises	Non-profit institutions	Foreign ordering parties	%
<b>Business sector</b>	<b>100.0</b>	<b>76.3</b>	<b>7.3</b>	<b>8.5</b>	-	<b>8.0</b>	
Natural sciences	100.0	70.9	1.7	27.4	-	-	
Engineering and technology	100.0	75.1	6.2	9.3	-	9.4	
Agricultural sciences	100.0	83.6	14.7	-	-	1.7	
Social sciences	100.0	100.0	-	-	-	-	
<b>Government sector</b>	<b>100.0</b>	<b>1.1</b>	<b>98.9</b>	-	-	-	
Engineering and technology	100.0	-	100.0	-	-	-	
Agricultural sciences	100.0	3.0	97.0	-	-	-	
<b>Tertiary education</b>	<b>100.0</b>	<b>10.0</b>	<b>76.4</b>	<b>4.6</b>	-	<b>9.0</b>	
Natural sciences	100.0	9.9	88.7	-	-	1.4	
Engineering and technology	100.0	0.1	65.3	12.2	-	22.4	
Medical and health sciences	100.0	1.5	97.3	-	-	1.2	
Agricultural sciences	100.0	-	100.0	-	-	-	
Social sciences	100.0	38.9	60.8	-	-	0.4	
Humanities	100.0	0.6	99.4	-	-	-	
<b>Region Šumadije i Zapadne Srbije</b>	<b>100.0</b>	<b>29.7</b>	<b>61.5</b>	<b>4.7</b>	-	<b>4.0</b>	
Natural sciences	100.0	15.4	81.8	1.4	-	1.3	
Engineering and technology	100.0	49.8	31.8	10.3	-	8.1	
Medical and health sciences	100.0	4.7	91.7	-	-	3.6	
Agricultural sciences	100.0	3.0	97.0	-	-	-	
Social sciences	100.0	28.3	71.0	-	-	0.7	
Humanities	100.0	-	100.0	-	-	-	
<b>Business sector</b>	<b>100.0</b>	<b>72.3</b>	<b>4.7</b>	<b>13.9</b>	-	<b>9.1</b>	
Natural sciences	100.0	70.9	1.7	27.4	-	-	
Engineering and technology	100.0	72.6	4.4	13.2	-	9.8	
Agricultural sciences	100.0	31.1	68.9	-	-	-	
Social sciences	100.0	100.0	-	-	-	-	
<b>Government sector</b>	<b>100.0</b>	<b>3.0</b>	<b>97.0</b>	-	-	-	
Agricultural sciences	100.0	3.0	97.0	-	-	-	
<b>Tertiary education</b>	<b>100.0</b>	<b>11.8</b>	<b>85.5</b>	<b>0.8</b>	-	<b>1.9</b>	
Natural sciences	100.0	12.5	86.1	-	-	1.4	
Engineering and technology	100.0	0.3	91.4	4.0	-	4.4	
Medical and health sciences	100.0	4.7	91.7	-	-	3.6	
Agricultural sciences	100.0	-	100.0	-	-	-	
Social sciences	100.0	27.8	71.5	-	-	0.7	
Humanities	100.0	-	100.0	-	-	-	
<b>Region Južne i Istočne Srbije</b>	<b>100.0</b>	<b>32.9</b>	<b>48.4</b>	<b>6.5</b>	-	<b>12.2</b>	
Natural sciences	100.0	-	98.5	-	-	1.5	
Engineering and technology	100.0	31.7	39.7	10.1	-	18.5	
Medical and health sciences	100.0	-	100.0	-	-	-	
Agricultural sciences	100.0	85.0	13.2	-	-	1.7	
Social sciences	100.0	53.2	46.8	-	-	-	
Humanities	100.0	0.9	99.1	-	-	-	
<b>Business sector</b>	<b>100.0</b>	<b>79.5</b>	<b>9.2</b>	<b>4.2</b>	-	<b>7.1</b>	
Engineering and technology	100.0	77.5	8.0	5.6	-	8.9	
Agricultural sciences	100.0	85.0	13.2	-	-	1.7	
Social sciences	100.0	100.0	-	-	-	-	
<b>Government sector</b>	<b>100.0</b>	-	<b>100.0</b>	-	-	-	
Engineering and technology	100.0	-	100.0	-	-	-	
<b>Tertiary education</b>	<b>100.0</b>	<b>8.2</b>	<b>67.2</b>	<b>8.4</b>	-	<b>16.2</b>	
Natural sciences	100.0	-	98.5	-	-	1.5	
Engineering and technology	100.0	-	56.1	15.1	-	28.8	
Medical and health sciences	100.0	-	100.0	-	-	-	
Social sciences	100.0	52.3	47.7	-	-	-	
Humanities	100.0	0.9	99.1	-	-	-	
<b>Region Kosovo i Metohija</b>	...	...	...	...	...	...	

## 13.1. Gross domestic expenditure on R&amp;D by groupings of activities, 2015

Thous. RSD

	Gross domestic expenditure	Gross investments	Current expenditure		
			Total	Gross earnings	Material costs
<b>REPUBLIC OF SERBIA</b>	<b>34990573</b>	<b>2783880</b>	<b>32206693</b>	<b>18960762</b>	<b>13245931</b>
Crop and animal production, hunting, hunting and related activities	99541	47	99494	81967	17527
Extraction of crude petroleum and natural gas	99178	-	99178	94082	5096
Mining of metal ores	104404	42549	61855	41831	20024
Mining support service activities	890177	-	890177	879197	10980
Manufacture of food products	34531	9282	25249	9307	15942
Manufacture of chemicals and chemical products	45806	13067	32739	28332	4407
Manufacture of rubber and plastic products	116554	55576	60978	48457	12521
Manufacture of other non-metallic mineral products	30031	27031	3000	3000	-
Manufacture of basic metals	48661	32773	15888	15696	192
Manufacture of fabricated metal products, except machinery and equipment	133696	127127	6569	1440	5129
Manufacture of computer, electronic and optical products	204232	17616	186616	71710	114906
Manufacture of machinery and equipment, n.e.c.	469126	121624	347502	34418	313084
Manufacture of motor vehicles, trailers and semi-trailers	2239	-	2239	2090	149
Manufacture of furniture	24476	316	24160	20847	3313
Other manufacturing	4000	1000	3000	2000	1000
Electricity, gas, steam and air conditioning supply	1199314	1181945	17369	4008	13361
Water collection, treatment and supply	6542	-	6542	6542	-
Remediation activities and other waste management services	6226	1255	4971	3943	1028
Specialised construction activities	22256	-	22256	5968	16288
Wholesale trade, except of motor vehicles and motorcycles	6049	1174	4875	2286	2589
Accommodation	388	388	-	-	-
Telecommunications	55782	8101	47681	29338	18343
Computer programming, consultancy and related activities	103235	11616	91619	88835	2784
Information service activities	424	-	424	374	50
Activities of head offices; management consultancy activities	151193	7915	143278	121635	21643
Architectural and engineering activities; technical testing and analysis	10147	-	10147	2849	7298
Scientific research and development	16662942	695936	15967006	8655716	7311290
Advertising and market research	11104	-	11104	3332	7772
Veterinary activities	77528	3103	74425	61320	13105
Education	14267935	415871	13852064	8578782	5273282
Human health activities	46042	7905	38137	25354	12783
Publishing activities	25726	-	25726	19884	5842
Sports activities and amusement and recreation activities	1480	178	1302	-	1302
Activities of membership organisations	29608	485	29123	16222	12901
<b>Business sector - total</b>	<b>11103915</b>	<b>1941999</b>	<b>9161916</b>	<b>4446535</b>	<b>4715381</b>
Crop and animal production, hunting, hunting and related activities	7219	-	7219	6992	227
Extraction of crude petroleum and natural gas	99178	-	99178	94082	5096
Mining of metal ores	104404	42549	61855	41831	20024
Mining support service activities	890177	-	890177	879197	10980
Manufacture of food products	34531	9282	25249	9307	15942
Manufacture of chemicals and chemical products	45806	13067	32739	28332	4407
Manufacture of rubber and plastic products	116554	55576	60978	48457	12521
Manufacture of other non-metallic mineral products	30031	27031	3000	3000	-
Manufacture of basic metals	48661	32773	15888	15696	192
Manufacture of fabricated metal products, except machinery and equipment	133696	127127	6569	1440	5129
Manufacture of computer, electronic and optical products	204232	17616	186616	71710	114906
Manufacture of machinery and equipment, n.e.c.	469126	121624	347502	34418	313084
Manufacture of motor vehicles, trailers and semi-trailers	2239	-	2239	2090	149
Manufacture of furniture	24476	316	24160	20847	3313
Other manufacturing	4000	1000	3000	2000	1000
Electricity, gas, steam and air conditioning supply	1199314	1181945	17369	4008	13361
Water collection, treatment and supply	6542	-	6542	6542	-
Remediation activities and other waste management services	6226	1255	4971	3943	1028
Specialised construction activities	22256	-	22256	5968	16288
Wholesale trade, except of motor vehicles and motorcycles	6049	1174	4875	2286	2589
Accommodation	388	388	-	-	-
Telecommunications	55782	8101	47681	29338	18343
Computer programming, consultancy and related activities	103235	11616	91619	88835	2784
Information service activities	424	-	424	374	50
Activities of head offices; management consultancy activities	151193	7915	143278	121635	21643
Architectural and engineering activities; technical testing and analysis	10147	-	10147	2849	7298
Scientific and research activities	7316925	281644	7035281	2918026	4117255
Advertising and market research	11104	-	11104	3332	7772
<b>Government sector - total</b>	<b>9569130</b>	<b>434146</b>	<b>9134984</b>	<b>5898056</b>	<b>3236928</b>
Crop and animal production, hunting and related service activities	88042	47	87995	70990	17005
Scientific research and development	9346017	414292	8931725	5737690	3194035
Veterinary activities	77528	3103	74425	61320	13105
Education	11501	8799	2702	2702	-
Human health activities	46042	7905	38137	25354	12783
<b>Tertiary education - total</b>	<b>14260714</b>	<b>407072</b>	<b>13853642</b>	<b>8580065</b>	<b>5273577</b>
Crop and animal production, hunting and related service activities	4280	-	4280	3985	295
Education	14256434	407072	13849362	8576080	5273282
<b>Non-profit sector - total</b>	<b>56814</b>	<b>663</b>	<b>56151</b>	<b>36106</b>	<b>20045</b>
Publishing activities	25726	-	25726	19884	5842
Sports activities and amusement and recreation activities	1480	178	1302	-	1302
Activities of membership organisations	29608	485	29123	16222	12901

## 13.1. Gross domestic expenditure on R&amp;D by groupings of activities, 2015 (continued)

Thous. RSD

	Gross domestic expenditure	Gross investments	Current expenditure		
			Total	Gross earnings	Material costs
<b>SRBIJA – SEVER</b>	32326428	2309878	30016550	17570119	12446431
<b>Business sector - total</b>	<b>10230731</b>	<b>1508742</b>	<b>8721989</b>	<b>4179181</b>	<b>4542808</b>
Crop and animal production, hunting, hunting and related activities	7219	-	7219	6992	227
Extraction of crude petroleum and natural gas	99178	-	99178	94082	5096
Mining support service activities	890177	-	890177	879197	10980
Manufacture of food products	33530	9191	24339	8397	15942
Products of chemicals and chemical products	44140	13067	31073	26941	4132
Manufacture of rubber and plastic products	30281	12667	17614	16632	982
Manufacture of fabricated metal products, except machinery and equipment	23031	23031	-	-	-
Manufacture of computer, electronic and optical products	202080	17616	184464	69603	114861
Manufacture of machinery and equipment, n.e.c.	469126	121624	347502	34418	313084
Electricity, gas, steam and air conditioning supply	1039727	1026064	13663	1405	12258
Remediation activities and other waste management	6226	1255	4971	3943	1028
Specialised construction activities	22256	-	22256	5968	16288
Wholesale trade, except of motor vehicles and motorcycles	2109	-	2109	-	2109
Telecommunications	18711	-	18711	14264	4447
Computer programming, consultancy and related activities	78204	6440	71764	69564	2200
Activities of head offices; management consultancy activities	148971	5693	143278	121635	21643
Architectural and engineering activities; technical testing and analysis	10147	-	10147	2849	7298
Scientific research and development	7094514	272094	6822420	2819959	4002461
Advertising and market research	11104	-	11104	3332	7772
<b>Government sector - total</b>	<b>9460370</b>	<b>434051</b>	<b>9026319</b>	<b>5800840</b>	<b>3225479</b>
Crop and animal production, hunting, hunting and related activities	88042	47	87995	70990	17005
Scientific research and development	9237257	414197	8823060	5640474	3182586
Veterinary activities	77528	3103	74425	61320	13105
Education	11501	8799	2702	2702	-
Human health activities	46042	7905	38137	25354	12783
<b>Tertiary education - total</b>	<b>12578513</b>	<b>366422</b>	<b>12212091</b>	<b>7553992</b>	<b>4658099</b>
Crop and animal production, hunting, hunting and related activities	4280	-	4280	3985	295
Education	12574233	366422	12207811	7550007	4657804
<b>Non-profit sector - total</b>	<b>56814</b>	<b>663</b>	<b>56151</b>	<b>36106</b>	<b>20045</b>
Publishing activities	25726	-	25726	19884	5842
Sports activities and amusement and recreation activities	1480	178	1302	-	1302
Activities of membership organisations	29608	485	29123	16222	12901
<b>Beogradski region</b>	<b>24112725</b>	<b>1969251</b>	<b>22143474</b>	<b>12643605</b>	<b>9499869</b>
<b>Business sector - total</b>	<b>7184036</b>	<b>1304309</b>	<b>5879727</b>	<b>2385358</b>	<b>3494369</b>
Crop and animal production, hunting, hunting and related activities	7219	-	7219	6992	227
Manufacture of food products	5441	814	4627	3369	1258
Manufacture of chemicals and chemical products	27008	4684	22324	21999	325
Manufacture of computer, electronic and optical products	74239	1215	73024	52916	20108
Manufacture of machinery and equipment, n.e.c.	469126	121624	347502	34418	313084
Electricity, gas, steam and air conditioning supply	1026064	1026064	-	-	-
Remediation activities and other waste management services	6226	1255	4971	3943	1028
Specialised construction activities	22256	-	22256	5968	16288
Wholesale trade, except of motor vehicles and motorcycles	2109	-	2109	-	2109
Telecommunications	18711	-	18711	14264	4447
Computer programming, consultancy and related activities	78204	6440	71764	69564	2200
Activities of head offices; management consultancy activities	148971	5693	143278	121635	21643
Architectural and engineering activities; technical testing and analysis	10147	-	10147	2849	7298
Scientific and research activities	5277211	136520	5140691	2044109	3096582
Advertising and market research	11104	-	11104	3332	7772
<b>Government sector - total</b>	<b>8844006</b>	<b>411779</b>	<b>8432227</b>	<b>5399919</b>	<b>3032308</b>
Crop and animal production, hunting, hunting and related activities	88042	47	87995	70990	17005
Scientific research and development	8698421	395028	8303393	5300873	3002520
Education	11501	8799	2702	2702	-
Human health activities	46042	7905	38137	25354	12783
<b>Tertiary education - total</b>	<b>8029180</b>	<b>252596</b>	<b>7776584</b>	<b>4822222</b>	<b>2954362</b>
Crop and animal production, hunting, hunting and related activities	4280	-	4280	3985	295
Education	8024900	252596	7772304	4818237	2954067
<b>Non-profit sector- total</b>	<b>55503</b>	<b>567</b>	<b>54936</b>	<b>36106</b>	<b>18830</b>
Publishing activities	25726	-	25726	19884	5842
Sports activities and amusement and recreation activities	1480	178	1302	-	1302
Activities of membership organisations	28297	389	27908	16222	11686
<b>Region Vojvodine</b>	<b>8213703</b>	<b>340627</b>	<b>7873076</b>	<b>4926514</b>	<b>2946562</b>
<b>Business sector - total</b>	<b>3046695</b>	<b>204433</b>	<b>2842262</b>	<b>1793823</b>	<b>1048439</b>
Extraction of crude petroleum and natural gas	99178	-	99178	94082	5096
Mining support service activities	890177	-	890177	879197	10980
Manufacture of food products	28089	8377	19712	5028	14684
Manufacture of chemicals and chemical products	17132	8383	8749	4942	3807
Manufacture of rubber and plastic products	30281	12667	17614	16632	982
Manufacture of fabricated metal products, except machinery and equipment	23031	23031	-	-	-
Manufacture of computer, electronic and optical products	127841	16401	111440	16687	94753
Electricity, gas, steam and air conditioning supply	13663	-	13663	1405	12258
Scientific research and development	1817303	135574	1681729	775850	905879

## 13.1. Gross domestic expenditure on R&amp;D by groupings of activities, 2015 (continued)

Thous. RSD

	Gross domestic expenditure	Gross investments	Current expenditure		
			Total	Gross earnings	Material costs
<b>Government sector – total</b>	<b>616364</b>	<b>22272</b>	<b>594092</b>	<b>400921</b>	<b>193171</b>
Scientific research and development	538836	19169	519667	339601	180066
Veterinary activities	77528	3103	74425	61320	13105
<b>Tertiary education - total</b>	<b>4549333</b>	<b>113826</b>	<b>4435507</b>	<b>2731770</b>	<b>1703737</b>
Education	4549333	113826	4435507	2731770	1703737
<b>Non-profit sector - total</b>	<b>1311</b>	<b>96</b>	<b>1215</b>	<b>-</b>	<b>1215</b>
Activities of membership organisations	1311	96	1215	-	1215
SRBIJA – JUG	2664145	474002	2190143	1390643	799500
<b>Business sector - total</b>	<b>873184</b>	<b>433257</b>	<b>439927</b>	<b>267354</b>	<b>172573</b>
Mining of metal ores	104404	42549	61855	41831	20024
Manufacture of food products	1001	91	910	910	-
Manufacture of chemicals and chemical products	1666	-	1666	1391	275
Manufacture of rubber and plastic products	86273	42909	43364	31825	11539
Manufacture of other non-metallic mineral products	7000	4000	3000	3000	-
Manufacture of basic metals	48661	32773	15888	15696	192
Manufacture of fabricated metal products, except machinery and equipment	133696	127127	6569	1440	5129
Manufacture of computer, electronic and optical products	2152	-	2152	2107	45
Manufacture of motor vehicles, trailers and semi-trailers	2239	-	2239	2090	149
Manufacture of furniture	24476	316	24160	20847	3313
Other manufacturing	4000	1000	3000	2000	1000
Electricity, gas, steam and air conditioning supply	159587	155881	3706	2603	1103
Water collection, treatment and supply	6542	-	6542	6542	-
Wholesale trade, except of motor vehicles and motorcycles	3940	1174	2766	2286	480
Accommodation	388	388	-	-	-
Telecommunications	37071	8101	28970	15074	13896
Computer programming, consultancy and related activities	25031	5176	19855	19271	584
Information service activities	424	-	424	374	50
Activities of head offices; management consultancy activities	2222	2222	-	-	-
Scientific research and development	222411	9550	212861	98067	114794
<b>Government sector - total</b>	<b>108760</b>	<b>95</b>	<b>108665</b>	<b>97216</b>	<b>11449</b>
Scientific research and development	108760	95	108665	97216	11449
<b>Tertiary education - total</b>	<b>1682201</b>	<b>40650</b>	<b>1641551</b>	<b>1026073</b>	<b>615478</b>
Education	1682201	40650	1641551	1026073	615478
<b>Region Šumadije i Zapadne Srbije</b>	<b>1269158</b>	<b>244875</b>	<b>1024283</b>	<b>740742</b>	<b>283541</b>
<b>Business sector - total</b>	<b>381989</b>	<b>226816</b>	<b>155173</b>	<b>99306</b>	<b>55867</b>
Mining of metal ores	52332	41246	11086	9214	1872
Manufacture of food products	1001	91	910	910	-
Manufacture of chemicals and chemical products	1666	-	1666	1391	275
Manufacture of rubber and plastic products	86273	42909	43364	31825	11539
Manufacture of other non-metallic mineral products	7000	4000	3000	3000	-
Manufacture of basic metals	100	-	100	-	100
Manufacture of fabricated metal products, except machinery and equipment	133696	127127	6569	1440	5129
Manufacture of computer, electronic and optical products	2152	-	2152	2107	45
Manufacture of motor vehicles, trailers and semi-trailers	2239	-	2239	2090	149
Manufacture of furniture	24476	316	24160	20847	3313
Electricity, gas, steam and air conditioning supply	5385	1845	3540	2603	937
Wholesale trade, except of motor vehicles and motorcycles	1300	574	726	726	-
Accommodation	388	388	-	-	-
Computer programming, consultancy and related activities	5176	5176	-	-	-
Activities of head offices; management consultancy activities	2222	2222	-	-	-
Scientific research and development	56583	922	55661	23153	32508
<b>Government sector - total</b>	<b>39818</b>	<b>95</b>	<b>39723</b>	<b>31613</b>	<b>8110</b>
Scientific research and development	39818	95	39723	31613	8110
<b>Tertiary education - total</b>	<b>847351</b>	<b>17964</b>	<b>829387</b>	<b>609823</b>	<b>219564</b>
Education	847351	17964	829387	609823	219564
<b>Region Južne i Istočne Srbije</b>	<b>1394987</b>	<b>229127</b>	<b>1165860</b>	<b>649901</b>	<b>515959</b>
<b>Business sector - total</b>	<b>491195</b>	<b>206441</b>	<b>284754</b>	<b>168048</b>	<b>116706</b>
Mining of metal ores	52072	1303	50769	32617	18152
Manufacture of basic metals	48561	32773	15788	15696	92
Other manufacturing	4000	1000	3000	2000	1000
Electricity, gas, steam and air conditioning supply	154202	154036	166	-	166
Water collection, treatment and supply	6542	-	6542	6542	-
Wholesale trade, except of motor vehicles and motorcycles	2640	600	2040	1560	480
Telecommunications	37071	8101	28970	15074	13896
Computer programming, consultancy and related activities	19855	-	19855	19271	584
Information service activities	424	-	424	374	50
Scientific research and development	165828	8628	157200	74914	82286
<b>Government sector - total</b>	<b>68942</b>	<b>-</b>	<b>68942</b>	<b>65603</b>	<b>3339</b>
Scientific research and development	68942	-	68942	65603	3339
<b>Tertiary education - total</b>	<b>834850</b>	<b>22686</b>	<b>812164</b>	<b>416250</b>	<b>395914</b>
Education	834850	22686	812164	416250	395914
<b>Region Kosovo i Metohija</b>	...	...	...	...	...

# ANNEXES



Law on Official Statistics,  
 "Official Statistics of the RS", number 104/2009..

Code of the survey: 021010

**ANNUAL REPORT ON RESEARCH AND DEVELOPMENT FOR FACULTIES, R&D INSTITUTES IN 2015**

Response obligation is based on Article 26, and punitive provisions for response refusal or provision of incomplete or incorrect data on Article 52 of the Law on Official Statistics („Сл. гласник РС“, бр. 104/2009).  
**The data will be used exclusively for statistical purposes and will not be published as personal data.**  
**All the data are confidential.**

This report is to be filled in by faculties, scientific institutes and R&D institutes that carried out in 2015 R&D activities according to the law on Research and Development Activity, "Official Journal of the RS", numbers 110/05 and 18/2010.  
 The report is to be filled in and transmitted to the competent statistical office **not later than \_\_\_\_\_ 2016**. Before completing the report, read carefully the general instructions on the last page of the questionnaire as well as the explanations with every table. **All financial indicators are to be expressed in thousands dinars.**

**I FULL NAME OF THE REPORTING UNIT**

\_\_\_\_\_

\_\_\_\_\_

Enter the name of the organization as indicated in the Court Register, i.e. application for the registration of scientific organizations and institutions.  
 The research unit should enter the full name of the scientific organization and institution it is incorporated in, as well as its own name; in tables are to be shown data **referring only to the unit**, but not to the whole scientific organization/institution.

--	--	--	--	--	--	--	--	--	--

Registration number

**II ADDRESS – MUNICIPALITY** \_\_\_\_\_

--	--	--	--	--	--	--	--

Street and number \_\_\_\_\_ Telephone \_\_\_\_\_

R&D units should enter **their address**, but not the address of the institution they are incorporated in.

**III ACTIVITY** \_\_\_\_\_  
 Enter the name and code according to the Classification of Activities, 2010

--	--	--	--	--

- IV OWNERSHIP** (circle the corresponding number)
- |                   |   |
|-------------------|---|
| state-owned ..... | 1 |
| private .....     | 2 |
| mixed .....       | 3 |

**V SCIENTIFIC FIELD** \_\_\_\_\_  
 Enter the name and code according to the Classification of Scientific Fields (annexed)

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**1. FULL-TIME AND PART-TIME EMPLOYEES ENGAGED ON R&D ACTIVITIES, EXPRESSED IN NUMBER OF PHYSICAL PERSONS AND FULL-TIME EQUIVALENT, in 2015**

	Total employees engaged on R&D activities				Number of full-time employees engaged on R&D activities		Part-time employees engaged on R&D activities			
	Number of employees		Full-time equivalent		Total	Women	Number of employees		Full-time equivalent	
	Total (5+7)	Women (6+8)	Total (5+9)	Women (6+10)			Total	Women	Total	Women
a	1	2	3	4	5	6	7	8	9	10
01	<b>Total (02+14+18+19+20)</b>									
02	<b>Researchers - total (03 do 13)</b>									
03	Researcher - apprentice									
04	Assistant researcher									
05	Scientific assistant									
06	Senior scientific assistant									
07	Scientific adviser									
08	Senior lecturer									
09	Associate professor									
10	Full professor									
11	Professor of vocational studies									
12	Lecturer									
13	Assistant lecturer									
14	<b>Assistant researcher - total (15 to17)</b>									
15	Assistant researcher									
16	Senior assistant researcher									
17	Assistant adviser									
18	<b>Technicians</b>									
19	<b>Managers</b>									
20	<b>Other personnel (auxiliary)</b>									

Do not enter in the table employees engaged on protection and safety, in restaurants, cleaning personnel and related personnel (concierges, porter, cleaning ladies, cooks, etc.). If an extramural assistant sign with a R&D organization during the year two or more service contracts, i.e. author contracts, this should be counted only once.

In columns 7, 8, 9 and 10 (Part-time employees engaged on R&D activities), are to be shown employees who work only part-time (less than 90%, and more than 10%).

Data in columns 3, 4, 9 and 10 are to be shown **in decimal numbers with one decimal place**.

Instructions for entering the data in columns 3, 4, 9 and 10 **on full-time equivalent**.

**Equivalent: FTE**

Employees in R&D, part-time (less than 90%, and more than 10%)	Number of employees	Full-time equivalent (FTE)
--	---------------------	----------------------------

<b>Total number of employees</b>	<b>8</b>	<b>= 2,7</b>
3 persons work all the year round only half-time	(3 x 0,5)	= 1,5
2 persons work all the year round only 20% of work time	(2 x 0,2)	= 0,4
1 person works full-time	(1 x 0,5)	= 0,5
2 persons employed 8 months with 25% work time	(2 x 0,67 x 0,25)	= 0,3

**Remark:** Full-time employee engaged on R&D activities corresponds to the unit of full-time equivalent (= 1 FTE).

**2. EMPLOYEES ENGAGED ON R&D ACTIVITIES ON SERVICE CONTRACT (SC) OR AUTHOR CONTRACT (AC), EXPRESSED IN NUMBER OF PHYSICAL PERSONS AND FULL-TIME EQUIVALENT, in 2015**

		Employees engaged on AC or AU in R&D field				Full-time employees engaged on AC or AU, in R&D field		Part-time employees engaged on AC or AU, in R&D field			
		Number of employees		Full-time equivalent		Total	Women	Number of employees		Full-time equivalent	
		Total (5+7)	Women (6+8)	Total (5+9)	Women (6+10)			Total	Women	Total	Women
a		1	2	3	4	5	6	7	8	9	10
01	<b>Total (02 to 06)</b>										
02	Researchers										
03	Assistant researchers										
04	Technicians										
05	Managers										
06	Other employees (auxiliary)										

Remarks relative to Table 1 refer also to this table.

**3. FULL-TIME AND PART-TIME EMPLOYEES ENGAGED ON R&D, ACCORDING TO EDUCATIONAL ATTAINMENT, EXPRESSED IN PHYSICAL NUMBER OF PERSONS, in 2015**

		Total		Educational attainment											
				Doctor's degree		Master's degree		Specialization		University education		Vocational education		Secondary and other education	
		All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
a		1	2	3	4	5	6	7	8	9	10	11	12	13	14
01	<b>Total (02 to 06)</b>														
02	Researchers											X	X	X	X
03	Assistant researchers													X	X
04	Technicians														
05	Managers													X	X
06	Other employees (auxiliary)														

**Remark:** The table is to be filled in as follows: in columns 1 and 2, copy the values from columns 1 and 2 of table 1, then proceed with entering the data. Also, the sum of odd columns should equal the data from column 1, and the sum of even column should equal the data from column 2.



**4. EMPLOYEES ENGAGED ON R&D ACTIVITIES, BASED ON SERVICE CONTRACT (SC) AND AUTHOR CONTRACT (AC), BY EDUCATIONAL ATTAINMENT**  
**EXPRESSED IN NUMBER OF PHYSICAL PERSONS**, in 2015

		Total		Educational attainment											
				Doctor's degree		Master's degree		Specialization		University education		Vocational education		Secondary and other education	
		All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
a		1	2	3	4	5	6	7	8	9	10	11	12	13	14
01	<b>Total (02 to 06)</b>														
02	Researchers											X	X	X	X
03	Assistant researchers													X	X
04	Technicians														
05	Managers													X	X
06	Other employees (auxiliary)														

**Remark:** The table is to be filled in as follows: in columns 1 and 2, copy the values from **columns 1 and 2 of table 2**, then proceed with entering the data. Also, the sum of odd columns should equal the data from column 1, and the sum of even column should equal the data from column 2.

**5. FULL-TIME AND PART-TIME EMPLOYEES ENGAGED ON R&D, BY EDUCATIONAL ATTAINMENT,**  
**EXPRESSED IN FULL-TIME EQUIVALENT**, in 2015

		Total		Educational attainment											
				Doctor's degree		Master's degree		Specialization		University education		Vocational education		Secondary and other education	
		All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
a		1	2	3	4	5	6	7	8	9	10	11	12	13	14
01	<b>Total (02 to 06)</b>														
02	Researchers											X	X	X	X
03	Assistant researchers													X	X
04	Technicians														
05	Managers													X	X
06	Other employees (auxiliary)														

**Remark:** The table is to be filled in as follows: in columns 1 and 2, copy the values from **columns 3 and 4 of table 1**, then proceed with entering the data. Also, the sum of odd columns should equal the data from column 1, and the sum of even column should equal the data from column 2.

**6. EMPLOYEES ENGAGED ON R&D ACTIVITIES, BASED ON SERVICE CONTRACT (SC) AND AUTHOR CONTRACT (AC), BY EDUCATIONAL ATTAINMENT  
EXPRESSED IN FULL-TIME EQUIVALENT, in 2015**

		Total		Educational attainment											
				Doctor's degree		Master's degree		Specialization		University education		Vocational education		Secondary and other education	
		All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
a		1	2	3	4	5	6	7	8	9	10	11	12	13	14
01	<b>Total (02 to 06)</b>														
02	Researchers											X	X	X	X
03	Assistant researchers													X	X
04	Technicians														
05	Managers													X	X
06	Other personnel (auxiliary)														

**Remark:** The table is to be filled in as follows: in columns 1 and 2 copy the values from **columns 3 and 4 of table 2**, then proceed with entering the data. Also, the sum of odd columns should equal the data from column 1, and the sum of even columns should equal the data from column 2.

**7. FULL-TIME AND PART-TIME EMPLOYEES ENGAGED ON R&D, BY AGE AND SEX,  
EXPRESSED IN NUMBER OF PHYSICAL PERSONS, in 2015**

		Researchers				Assistant researchers				Technicians				Managers			
		Full-time		Part-time		Full-time		Part-time		Full-time		Part-time		Full-time		Part-time	
		All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
a		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
01	<b>Total (02 to 12)</b>																
02	Under 25 years																
03	25 – 29																
04	30 – 34																
05	35 – 39																
06	40 – 44																
07	45 – 49																
08	50 – 54																
09	55 – 59																
10	60 – 64																
11	65 – 69																
12	70 and over																

In the table, full-time and part-time R&D employees are to be broken down by age groups. It should be noted that **other personnel should not be broken down by age**

Shown are all those who are shown in column 1 from table 1, for "total number of employees" and in column 2 for "women". The data by categories in row 01 of this table should match **with data from table 1** (full-time and part-time employees), as follows:

Full-time employees

Researchers row 02, columns: 05, 06  
 Assistant researchers row 14, columns: 05, 06  
 Technicians row 18, columns: 05, 06  
 Managers row 19, columns: 05, 06

Part-time employees

Researchers row 02, columns: 07, 08  
 Assistant researchers row 14, columns: 07, 08  
 Technicians row 18, columns: 07, 08  
 Managers row 19, columns: 07, 08

**8. FULL-TIME AND PART-TIME RESEARCHERS, BY CITIZENSHIP AND SEX,  
EXPRESSED IN NUMBER OF PHYSICAL PERSONS**

Citizenship (by geographical position of the country)		Total number of researchers in 2015		Researchers who <b>came</b> in Serbia in 2015		Researchers who <b>went</b> abroad in 2015		Planned number of researchers for 2016
		Total	Women	Total	Women	Total	Women	
a		1	2	3	4	5	6	7
01	<b>Total (02 to 05)</b>							
02	Serbia							
03	EU member countries							
04	Other European countries							
05	Other							

In table 8 full-time and part-time **researchers** are to be broken down by citizenship (geographical position of the country).

In columns 3 and 4, are to be shown all the researchers who came from abroad between 01/01/2015 and 21/12/2015 and worked in R&D activities more than 3 months.

In columns 5 and 6 are to be shown all the researchers who left Serbia between 01/01/ 2015 and 31/12/ 2015.

The data in row 01 in columns 1 and 2 of this table should **match the data in table 1 in columns 1 and 2**, i.e.:

Researchers – total

Women – total

**9. EXPENDITURES FOR R&D ACTIVITIES IN 2015 (in thousands RSD)**

Expenditures for R&D			Spent in 2015	Planned for 2016
a			1	2
01	<b>Total expenditure for R&amp;D (02+07+12)</b>			
02	Current costs	<b>Total (03+05+06)</b>		
03		Gross salaries and wages <b>for all R&amp;D employees</b>		
04		Of which gross salaries and wages of researchers		
05		Other personal income of R&D employees (scholarships, prizes, etc.)		
06		Other		
07		<b>Total (08 to 11)</b>		
08		For material costs for R&D work (raw materials, equipment, energy)		
09		For payments based on service contracts and author contracts		
10		For daily allowances, travel costs, etc.		
11		Other operating costs and expenses (without depreciation)		
12		Investment costs	<b>Total (13+14+16+17+18)</b>	
13	For land and buildings			
14	For machinery and equipment			
15	Of which for imported machinery and equipment			
16	For patent, licenses, studies and projects			
17	For software and hardware <sup>1)</sup>			
18	Other			

1) Are to be shown total costs for the acquisition of computers, components and equipment, as well as costs for the acquisition and development of software for own account.

In table 9 are to be shown all funds **spent** in 2015 for R&D activities, as well as planned funds for 2016.

**Remark:** The data in row 01, column 1 (total expenditures for R&D) should equal the data in **table 10, in row 01** (sources of funds spent for R&D activities - total).

**10. SOURCES OF FUNDS SPENT FOR R&D ACTIVITIES IN 2015**

Sources of funds			Amount in thousands RSD
a			1
01	<b>Funds spent for R&amp;D by sources - total (02 to 21)</b>		
02	Domestic funding (from Serbia)	From the Ministry of Science	
03		Planned budgetary funds dedicated R&D	From the Ministry of Education
04			From other ministries
05			Funds for R&D from other government funds, agencies and foundations
06		Funds for R&D from local authorities' bodies	
07		Funds for R&D from enterprises	from "small" (0 - 49 employees)
08			from "medium" (50 - 249 employees)
09			from "large" (250 and more employees)
10		Funds for R&D from non-profit organizations	
11		Funds from patents, licenses, etc. (from inward sale)	
12	Other funds for R&D from own sources		
13	Funds from abroad	Funds from agreements on technological licenses	
14		Funds from services for foreign ordering parties	
15		Funds from joint investment in R&D	
16		Funds for R&D from other countries' governments	
17		Funds for R&D from the university and other tertiary education institutions	
18		Funds for R&D from non-profit organizations	
19		Funds for R&D from the European Commission	
20		Funds for R&D from international organizations	
21		Other	

In table 10 are to be shown funds **obtained** for R&D activities by sources.

**Remark:** The data in row 01 should equal the data in **table 9, row 01, column 1** (total expenditures for R&D).

**11. VALUE OF R&D WORKS (PROJECTS AND STUDIES), BY SCIENTIFIC FIELDS AND TYPE OF RESEARCH (include also funded from own resources – in thousands RSD), 2015**

Scientific field		Total	Type of research		
			Basic	Applied	Experimental (development)
a		1	2	3	4
01	<b>Total</b>				
02	Natural sciences, mathematics				
03	Engineering and technology				
04	Social sciences				
05	Humanities				
06	Medical sciences				
07	Agricultural sciences				
08	Multidisciplinary sciences				

The data in column TOTAL should match the data in column total in table 12.

For on-going projects (non-completed) is to be shown the value of completed phases of work up to the end of 2012.

Use the annexed classification to determine the scientific field of R&D works.

**12. FUNDS FOR R&D BY PRIMARY SOCIO-ECONOMIC OBJECTIVES, 2015 (in thousands RSD)**

Primary socio-economic objectives		Total	Of which budgetary funds
a		1	2
01	<b>Total (02+03+04+05+06+07+08+09+10+11+12+13+20+27)</b>		
02	Development of agriculture, forestry and fishing		
03	Promotion of industrial development technology		
04	Production and rational use of energy		
05	Transport and telecommunications		
06	Urban and rural planning		
07	Combating pollution		
08	Pollution identification and control		
09	Health		
10	Social development and services		
11	Exploitation and exploration of Earth and atmosphere		
12	General advancement of knowledge		
13	Civil space exploration		
14	Defence		

**13. NUMBER OF R&D WORKS (PROJECTS AND STUDIES, BY SCIENTIFIC FIELDS AND TYPES OF RESEARCH (include also projects funded from own resources), 2015**

Scientific field		Total	Type of research		
			Basic	Applied	Experimental (development)
a		1	2	3	4
01	<b>Total</b>				
02	Natural sciences, mathematics				
03	Engineering and technology				
04	Social sciences				
05	Humanities				
06	Medical sciences				
07	Agricultural sciences				
08	Multidisciplinary sciences				

**Remark:** The row "Total" in this table should match the row "Total" in table 14.

**14. NUMBER OF R&D WORKS BY ORDERING PARTIES AND TYPES OF RESEARCH, 2015**

Ordering party		R&D works			
		Total (2 to 4)	Basic	Applied	Experimental (development)
a		1	2	3	4
01	<b>Total (02+09)</b>				
02	Ordering parties from Serbia	<b>Inward – total (03 to 08)</b>			
03		For own account			
04		Enterprises in Serbia			
05		Ministry of Science			
06		Ministry of Education			
07		Other ministries			
08		Other			
09		Ordering parties from abroad	<b>Outward – total (10 to 16)</b>		
10	Enterprises				
11	Other countries' governments				
12	Non-profit organizations				
13	Tertiary education institutions				
14	European Commission				
15	International organizations				
16	Other				

**15. PUBLISHED R&D ARTICLES AND MONOGRAPHS, 2015**

Total (actual number of projects)	Published in publications		
	Own	Others in Serbia	Abroad
1	2	3	4
01			

In column 1 every published paper should be counted only once regardless of the type of publications and the number of times it has been published.

**16. INVENTIONS AND PATENTS, 2015**

R&D intensity	Tested inventions	Patents		Patents – inventions sold		First-time practical use of patents and inventions
		Pending patents in the Patent Office	Patents registered in the Patent Office	In Serbia	Abroad	
a	1	2	3	4	5	6
01 <b>Total</b>						
02 High technology						
03 Medium high technology						
04 Medium low technology						
05 Low technology						

**16a. SMALL INVENTIONS AND PATENTS, 2015**

R&D intensity	Small tested inventions	Small patents		Small patents – inventions sold		First-time practical use of small patents and inventions
		Pending patents in the Patent Office	Patents registered in the Patent Office	In Serbia	abroad	
a	1	2	3	4	5	6
01 <b>Total</b>						
02 High technology						
03 Medium high technology						
04 Medium low technology						
05 Low technology						

on \_\_\_\_\_ 2016

Filled in by:

Manager:

\_\_\_\_\_  
(first name and surname)

(Seal)

\_\_\_\_\_  
(first name and surname)

Contact telephone: [ ] [ ] [ ] [ ] [ ] / [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
(area prefix compulsory)

## GENERAL DEFINITIONS AND EXPLANATIONS FOR FILLING IN THE FORM IR – 2

### COVERAGE

This form serves to collect data on R&D activities which have been carried out in enterprises, as well as in: centers for technology transfer, innovation centers, business and technological incubators, and scientific and technological parks in Serbia in 2015.

An institute is a R&D organization that is engaged in R&D activity of general interest as laid down in the Law. An institute can be founded as an institution or enterprise.

Depending on the type of research and activity, organizational form and funding of own activity; an institute can carry out R&D activity as: scientific institute and R&D institute. As to ownership, an institute can be state-owned, private or in mixed ownership. A scientific institute is an institution which prevailing activity is relative to basic and applied researches, the latter serving to valorize the results of basic researches.

A research and development institute is an organization which primary activity is relative to applied and experimental (development) researches focused on satisfying the needs of direct users of research results.

Covered are all tertiary education institutions (faculties of science, arts academies, universities) whatever the ownership (state-owned, private or mixed).

The status of centers of excellence may be granted to an institute, i.e. tertiary education institution or their organizational part/s if they have achieved in a five-year period ultimate and internationally recognised scientific and professional results in a selected scientific discipline, having consequently developed international, technical and technological co-operation.

If the status of the centre of excellence acquires part/s of an institute, i.e. tertiary education institution, the centre does not have the capacity of a legal person.

Research and development organizations that can get accreditation for these activities are: institutes, faculties, integrated universities, centers of excellence and R&D organizations from the domain of defense and Serbian Armed Forces.

### DEFINITION OF RESEARCH AND DEVELOPMENT ACTIVITY (R&D)

Research and development is a systematic creative work undertaken in view of discovering new stock of knowledge in order to raise the general civilization level of the society and use the knowledge in all social fields.

The scientific activity is realized through basic, applied and experimental (development) researches as well as through training personnel for R&D work.

- **BASIC** research is a creative, systematic activity focused on acquiring new knowledge on the origin and causes of phenomena and facts, without any particular application or use in view. The results of a basic research are often formulated a general principles, theories or rules.

- **APPLIED** research is undertaken whether to establish a possibility to use the results of a research, having in mind its practical application, or to find new methods or ways that facilitate the achievement of a particular objective set in advance. This survey starts from existing knowledge and examines it thoroughly in view of solving specific issues.

- **EXPERIMENTAL (DEVELOPMENT)** research is a creative systematic activity based on the results of the basic and applied research, and practical knowledge directed towards introducing new materials, products, devices, processes and methods.

The main difference between R&D activity and activities other than R&D is in the presence or absence of elements of novelty or innovation **to a greater extent**. If an activity introduces considerable improvements to technological characteristics, components, hardware and software, i.e. applies a new or significantly improved product, process or service, as well as new organizational methods, it is to be obligatorily **included** in this survey.

The coverage **excludes** activities that do not fall into R&D survey:

- routine tests and analyses of all forms, whether serving for the control of hardware, components or products or being focused on their quality and quantity (tests and analysis that are part of a R&D process should be however included);
- market research, operating research, work studies, costs analysis, management activities, etc;
- experimental production where product improvement is not the primary goal;
- design costs aiming at monitoring fashion trends and activities of art modeling;
- legal and administrative operations relative to the application and registration of patents, operations relative to the sale of patents and licenses, experimental activities carried out only for the purpose of patent registration.



## **OBJECTIVES OF R&D ACTIVITY:**

- 1) development of science, technology and education in order to boost economic growth, increase the social product and raise citizens' living conditions;
- 2) preservation and development of general stock of knowledge, as a condition to inclusion to world integration processes;
- 3) preservation and development of total R&D potentials (R&D and educational institutions, scientific personnel and R&D infrastructure);
- 4) raising of the general level of technology in the economy and securing the competitiveness of goods and services on national and international markets;
- 5) establishing international scientific co-operation in view of faster integration into world scientific, economic, social and cultural trends, as well as inclusion in European research area;
- 6) orienting the society towards innovations, creation of cultural ambiance and creative education in order to preserve civilization patrimony and national identity.

## **FUNDING OF R&D ACTIVITY**

Funds for R&D activity are secured from:

- 1) Founder's resources;
- 2) Budget of the Republic;
- 3) Budget of the autonomous province and units of local authorities;
- 4) Resources of enterprises, associations and other organizations;
- 5) Own income of R&D organizations;
- 6) Resources of domestic funds and foundations, gifts of legal and physical persons;
- 7) Resources of foreign foundations, legal and physical persons, donations;
- 8) Other sources provided that the autonomy and dignity of R&D activity is not exposed.

### **Sub-funding of programs and projects of regional significance for the development of R&D activity**

Budgetary funds of the Republic of Serbia can be used to sub-finance programs and projects of regional significance for R&D activity, being:

1. projects of building R&D infrastructure;
2. R&D projects of regional significance (projects on international co-operation, projects on eco-systems and innovation projects carried out by small and medium enterprises);
3. programmes of development of R&D personnel.

## **METHODOLOGICAL BASIS**

Methodological basis for this survey are the international standards set up by OECD and published in the FRASCATI Manual 2002. All international classifications are used and are annexed to the instructions for filling in the Annual Report on Research and Development Activity.

More explanations and instructions are available at the Statistical Office of the Republic of Serbia, Milana Rakica 5, Belgrade, Section of Science, Culture and Other Social Activities Statistics, telephone number: 011 2412922, extension 425 and 357.

## ANNEX

### For filling in the Annual Report on Research and Development – IR

<b>CLASSIFICATION OF SCIENTIFIC FIELDS</b>	
<p><b>1. Natural sciences</b></p> <ul style="list-style-type: none"><li><b>101</b> Mathematics</li><li><b>102</b> Computer and information sciences</li><li><b>103</b> Physical sciences</li><li><b>104</b> Chemical sciences</li><li><b>105</b> Earth and related environmental sciences</li><li><b>106</b> Biological sciences</li><li><b>107</b> Other natural sciences</li></ul> <p><b>2. Engineering and technology</b></p> <ul style="list-style-type: none"><li><b>201</b> Civil engineering</li><li><b>202</b> Electrical engineering, electronic engineering and information engineering</li><li><b>203</b> Mechanical engineering</li><li><b>204</b> Chemical engineering</li><li><b>205</b> Materials engineering</li><li><b>206</b> Medical engineering</li><li><b>207</b> Environmental engineering</li><li><b>208</b> Environmental biotechnology</li><li><b>209</b> Industrial biotechnology</li><li><b>210</b> Nano-technology</li><li><b>211</b> Other engineering and technology</li></ul> <p><b>3. Medical and health sciences</b></p> <ul style="list-style-type: none"><li><b>301</b> Basic medicine</li><li><b>302</b> Clinical medicine</li><li><b>303</b> Health science</li><li><b>304</b> Medical biotechnology</li><li><b>305</b> Other medical sciences</li></ul>	<p><b>4. Agricultural sciences</b></p> <ul style="list-style-type: none"><li><b>401</b> Agricultural sciences, forestry and fisheries</li><li><b>402</b> Animal and dairy science</li><li><b>403</b> Veterinary science</li><li><b>404</b> Agricultural biotechnology</li><li><b>405</b> Other agricultural science</li></ul> <p><b>5. Social sciences</b></p> <ul style="list-style-type: none"><li><b>501</b> Psychology</li><li><b>502</b> Economics and business</li><li><b>503</b> Educational science</li><li><b>504</b> Sociology</li><li><b>505</b> Law</li><li><b>506</b> Political science</li><li><b>507</b> Social and economic geography</li><li><b>508</b> Media and communications</li><li><b>509</b> Other social sciences</li></ul> <p><b>6. Humanities</b></p> <ul style="list-style-type: none"><li><b>601</b> History and archeology</li><li><b>602</b> Language and literature</li><li><b>603</b> Philosophy, ethics and religion</li><li><b>604</b> Arts (history of arts, performing arts, music)</li><li><b>605</b> Other humanities</li></ul>
<p><b>Source:</b> FOS - Fields of Science and Technology, OECD – 2006</p>	

**CLASSIFICATION OF ACTIVITIES – 2010**  
**REVIEW OF THE SECTIONS AND DIVISIONS OF THE CLASSIFICATION OF ACTIVITIES**

CODE	DESCRIPTION OF SECTIONS/DIVISIONS
<b>A</b>	<b>AGRICULTURE, FORESTRY AND FISHING</b>
01	Crop and animal production, hunting and related service activities
03	Fishing and aquaculture
<b>B</b>	<b>MINING AND QUARRYING</b>
05	Mining of coal and lignite
06	Extraction of crude petroleum and natural gas
07	Mining of metal ores
08	Other mining and quarrying
09	Mining support service activities
<b>C</b>	<b>MANUFACTURING</b>
10	Manufacture of food products
11	Manufacture of beverages
12	Manufacture of tobacco products
13	Manufacture of textiles
14	Manufacture of wearing apparel
15	Manufacture of leather and related products
16	Manufacture of wood and of products of wood, except furniture; manufacture of articles of straw and plaiting materials
17	Manufacture of paper and paper products
18	Printing and reproduction of recorded media
19	Manufacture of coke and refined petroleum products
20	Manufacture of chemicals and chemical products
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
22	Manufacture of rubber and plastic products
23	Manufacture of other non-metallic mineral products
24	Manufacture of basic metals
25	Manufacture of fabricated metal products, except machinery and equipment
26	Manufacture of computer, electronic and optical products
27	Manufacture of electrical equipment
28	Manufacture of machinery and equipment, n.e.c.
29	Manufacture of motor vehicles, trailers and semi-trailers
30	Manufacture of other transport equipment
31	Manufacture of furniture
32	Other manufacturing
33	Repair and installation of machinery and equipment
<b>D</b>	<b>ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY</b>
35	Electricity, gas, steam and air conditioning supply
<b>E</b>	<b>WATER SUPPLY; SEWERAGE, WASTE MANGEMENT AND REMEDIATION ACTIVITIES</b>
36	Water collection, treatment and supply
37	Sewerage
38	Water collection, treatment and disposal activities; material recovery
39	Remediation activities and other waste management services
<b>F</b>	<b>CONSTRUCTION</b>
41	Construction of buildings
42	Civil engineering
43	Specialised construction activities
<b>G</b>	<b>WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES</b>
5	Wholesale and retail trade and repair of motor vehicles and motorcycles
46	Wholesale trade, except of motor vehicles and motorcycles
47	Retail trade, except of motor vehicles and motorcycles
<b>H</b>	<b>TRANSPORTATION AND STORAGE</b>
49	Land transport and transport via pipelines

CODE	DESCRIPTION OF SECTIONS/DIVISIONS
50	Water transport
51	Air transport
52	Wharehousing and support activities for transportation
53	Postal and courier activities
<b>I</b>	<b>ACCOMMODATION AND FOOD SERVICE ACTIVITIES</b>
55	Accommodation
56	Food and beverage service activities
<b>J</b>	<b>INFORMATION AND COMMUNICATION</b>
58	Publishing activities
59	Motion picture, video and television programme, production, sound recording and music publishing activities
60	Programming and broadcasting
61	Telecommunications
62	Computer programming, consultancy and related activities
63	Information service activities
<b>K</b>	<b>FINANCIAL AND INSURANCE ACTIVITIES</b>
64	Financial service activities, except insurance and pension funding
65	Insurance, reinsurance and pension funding, except compulsory social insurance
66	Activities auxiliary to financial services and insurance activities
<b>L</b>	<b>REAL ESTATE ACTIVITIES</b>
68	Real estate activities
<b>M</b>	<b>PROFESSIONAL, SCIENTIFIC, INNOVATION AND TECHNICAL ACTIVITIES</b>
69	Legal and accounting activities
70	Activities of head offices; management consultancy activities
71	Architectural and engineering activities; technical testing and analysis
72	Scientific and development
73	Advertising and market research
74	Other professional, scientific and technical activities
75	Veterinary activities
<b>N</b>	<b>ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES</b>
77	Rental and leasing activities
78	Employment activities
79	Travel agency, tour operator and other reservation service and related activities
80	Security and investigation activities
81	Services to buildings and landscape activities
82	Office administrative, office support and other business support activities
<b>P</b>	<b>EDUCATION</b>
85	Education
<b>Q</b>	<b>HUMAN HEALTH AND SOCIAL WORK ACTIVITIES</b>
86	Human health activities
87	Residential care activities
88	Social work activities without accommodation
90	Creative, arts and entertainment activities
91	Libraries, archives, museums and other cultural activities
92	Gambling and betting activities
93	Sports activities, amusement and recreation activities
<b>S</b>	<b>OTHER SERVICE ACTIVITIES</b>
94	Activities of membership organisations
95	Repair of computers and personal and household goods
96	Other personal service activities
<b>T</b>	<b>ACTIVITIES OF HOUSEHOLDS AS EMPLOYERS; UNDIFFERENTIATED GOODS AND SERVICE – PRODUCING ACTIVITIES OF HOUSEHOLDS FOR WON USE</b>
97	Activities of households as employers of personnel
98	Undifferentiated goods – and services – producing activities of households for own use
<b>U</b>	<b>ACTIVITIES OF EXTRATERRITORIAL ORGANIZATIONS AND BODIES</b>
99	Activities of extraterritorial organizations and activities

**Classification of manufacturing according to research and development intensity**  
According to OECD methodology

**High technology**

Aircrafts and spacecrafts  
Pharmaceuticals  
Office accounting and computing machinery  
Radio, TV and telecommunication equipment  
Medical, precision and optical instruments

**Medium low technology**

Coke, refined petroleum products and nuclear fuel  
Rubber and plastics  
Other non-metallic mineral products  
Building and repairing of ships and boats  
Basic metals  
Manufacture of fabricated metal products, except machinery and equipment

**Medium high technology**

Electrical machinery and apparatus  
Motor vehicles, trailers and semi-trailers  
Chemicals, excluding pharmaceuticals  
Transports equipment, n.e.c.  
Machinery and apparatus

**Low technology**

Manufacturing, n.e.c.  
Wood and furniture  
Paper, printing industry  
Textile industry

**CLASSIFICATION OF SOCIO-ECONOMIC OBJECTIVES**

According to OECD methodology -- NABS 2007

*(Nomenclature for the analysis and comparison of scientific programmes and budget)*

<b>Objective code number</b>	<b>SOCIO-ECONOMIC OBJECTIVE</b>
<b>001</b>	<b>Exploration and exploitation of the Earth</b>
	<ul style="list-style-type: none"> <li>- Exploration of the earth crust and mantle, seas, oceans and atmosphere and their exploitation</li> <li>- Climatic and meteorological research, polar exploration</li> <li>- Mineral, oil and natural gas prospecting</li> <li>- Exploration and exploitation of the sea-bed</li> <li>- Hydrology</li> <li>- Seas and oceans</li> <li>- Atmosphere</li> </ul>
<b>002</b>	<b>Environment</b>
	<ul style="list-style-type: none"> <li>- Control of pollution, identification and analysis of the sources of pollution</li> <li>- Pollutants, their dispersal in the environment and their effect of all living organisms</li> <li>- Development of monitoring facilities for the measurement of all kinds of pollution</li> <li>- Elimination and prevention of all kinds of pollution in all types of environment</li> <li>- Protection of atmosphere and climate</li> <li>- Waste management</li> <li>- Treatment of water</li> <li>- Protection of soil and underground water</li> <li>- Reduction of noise and vibration</li> <li>- Protection of species and habitats</li> <li>- Protection against natural hazards</li> <li>- Radioactive pollution</li> </ul>
<b>003</b>	<b>Exploration and exploitation of space</b>
	<ul style="list-style-type: none"> <li>- R&amp;D related to civil space</li> <li>- Applied research programmes</li> <li>- Launch systems</li> <li>- Space laboratories and space travel</li> </ul>
<b>004</b>	<b>Transport, telecommunications and other infrastructures</b>
	<ul style="list-style-type: none"> <li>- Infrastructure and land development, including the construction of buildings</li> <li>- Protection against harmful effects in town and country planning</li> </ul>

Objective code number	SOCIO-ECONOMIC OBJECTIVE
	<ul style="list-style-type: none"> <li>- Transport systems</li> <li>- Telecommunication systems</li> <li>- General planning of land use</li> <li>- Construction and planning of buildings</li> <li>- Civil engineering (bridges, roads, machinery, ...)</li> <li>- Water supply</li> </ul>
<b>005</b>	<b>Production and rational utilisation of energy</b>
	<ul style="list-style-type: none"> <li>- Production, storage, transportation, distribution and rational use of all forms of energy</li> <li>- Processes designed to increase the efficiency of energy production and distribution</li> <li>- Efficient use of energy, study of energy conservation</li> <li>- CO2 capture and storage</li> <li>- Renewable energy sources</li> <li>- Nuclear fission and fusion</li> <li>- Hydrogen and fuel gas</li> <li>- Other power and storage technologies</li> </ul>
<b>006</b>	<b>Industrial production and technology</b>
	<ul style="list-style-type: none"> <li>- Improvement of industrial production and technology</li> <li>- Increasing economic efficiency and competitiveness</li> <li>- All manufactures</li> <li>- Recycling (metal and non-metal)</li> </ul>
<b>007</b>	<b>Health</b>
	<ul style="list-style-type: none"> <li>- Prevention, surveillance and control of communicable and non-communicable diseases</li> <li>- Monitoring the health situation</li> <li>- Health promotion</li> <li>- Occupational health</li> <li>- Public health legislation and regulations</li> <li>- Health care for vulnerable and high-risk populations</li> </ul>
<b>008</b>	<b>Agriculture</b>
	<ul style="list-style-type: none"> <li>- Promotion of agriculture, forestry and fisheries</li> <li>- Fertilizers, biocides, biological pest control and mechanization of agriculture</li> <li>- Impact of forestry on the environment</li> <li>- Development and productivity of food productivity and technology</li> <li>- Agriculture, forestry and fisheries</li> <li>- Veterinary and other agricultural sciences</li> </ul>
<b>009</b>	<b>Education</b>
	<ul style="list-style-type: none"> <li>- General education, including training, pedagogy and didactics</li> <li>- Special education (for gifted persons, those with learning disabilities)</li> <li>- Pre- and primary school</li> <li>- Secondary education</li> <li>- Tertiary education</li> </ul>
<b>010</b>	<b>Culture, recreation, religion and mass media</b>
	<ul style="list-style-type: none"> <li>- Impact of cultural activities, religion and leisure on life in society</li> <li>- Racial and cultural integration and socio-cultural changes in these areas.</li> <li>- Covers: sociology, theology, art, sport and leisure.</li> <li>- Culture covers: language, social integration, libraries, archives and external cultural policy.</li> <li>- Recreational and sporting services</li> <li>- Cultural services</li> <li>- Broadcasting and publishing activities</li> </ul>

Objective code number	SOCIO-ECONOMIC OBJECTIVE
	- Religious and other community services
<b>011</b>	<b>Political and social systems, structures and processes</b>
	<ul style="list-style-type: none"> <li>- Socio-political system</li> <li>- Public administration issues and economic policy</li> <li>- Regional studies and multi-level governance</li> <li>- Social changes, processes and conflicts</li> <li>- Development of social security and social assistance systems</li> <li>- Social aspects of the organization of work</li> <li>- Gender-related discrimination</li> <li>- Development of methods of combating poverty on local, national and international level</li> <li>- Protection of specific categories of population</li> <li>- Methods of providing social assistance</li> </ul>
<b>012</b>	<b>General advancement of knowledge: R&amp;D financed from General University Funds:</b>
<b>0121</b>	<b>R&amp;D related to natural sciences</b>
	- Mathematics, computer and information science, physics, chemistry, biology, earth and environmental sciences, other natural sciences
<b>0122</b>	<b>R&amp;D related to engineering sciences</b>
	- Civil engineering (bridges, roads, machinery,...), electrical engineering, electronic engineering, information engineering, mechanical engineering, chemical engineering, technology, medical engineering, environmental engineering, biotechnology, nano-technology, other technologies.
<b>0123</b>	<b>R&amp;D related to medical sciences</b>
	- General medicine, clinical medicine, medical biotechnology and other medical sciences
<b>0124</b>	<b>R&amp;D related to agricultural sciences</b>
	- Agriculture, forestry, fishery, animal and dairy science, veterinary science, agricultural biotechnology, other agricultural sciences
<b>0125</b>	<b>R&amp;D related to social sciences</b>
	- Psychology, economics and business, educational sciences, sociology, law, political sciences, economic and social geography, media and communications, other social sciences
<b>0126</b>	<b>R&amp;D related to humanities</b>
	- History and archeology, languages and literature, philosophy, religion and ethics, art (fine arts, history of arts, applied arts, music, performing arts) and other humanities
<b>013</b>	<b>General advancement of knowledge: R&amp;D financed from other sources than GUF</b>
<b>0131</b>	<b>R&amp;D related to natural sciences</b>
	- Mathematics, computer and information science, physics, chemistry, biology, earth and environmental sciences, other natural sciences
<b>0132</b>	<b>R&amp;D related to engineering sciences</b>
	- Civil engineering (bridges, roads, machinery,...), electrical engineering, electronic engineering, information engineering, mechanical engineering, chemical engineering, technology, medical engineering, environmental engineering, biotechnology, nano-technology, other technologies.
<b>0133</b>	<b>R&amp;D related to medical sciences</b>
	- General medicine, clinical medicine, medical biotechnology and other medical sciences
<b>0134</b>	<b>R&amp;D related to agricultural sciences</b>
	- Agriculture, forestry, fishery, animal and dairy science, veterinary science, agricultural biotechnology, other agricultural sciences
<b>0135</b>	<b>R&amp;D related to social sciences</b>
	- Psychology, economics and business, educational sciences, sociology, law, political sciences, economic and social geography, media and communications, other social sciences
<b>0136</b>	<b>R&amp;D related to humanities</b>
	- History and archeology, languages and literature, philosophy, religion and ethics, art (fine arts, history of arts, applied arts, music, performing arts) and other humanities
<b>014</b>	<b>Defence</b>



Republic of Serbia  
Statistical Office of the Republic of Serbia

## **MANUAL**

**for filling in the questionnaire for „Annual Report on R&D” for: business entities and centres of excellence, faculties, R&D institutes and non-profit organisations/associations.**

**(Forms: IR-1, IR-2, IR-3).**

Belgrade, February 2016



## Manual

### **for filling in „Annual report on R&D for: business entities and centres of excellence, faculties, R&D institutes and non-profit organisations - associations. (Forms IR-1, IR-2 and IR-3).**

The objective of this manual is to make easier the filling in of the questionnaire as well as to improve the quality of the latter. The questionnaires are to be completed for all institutions and/or entities having at least one full-time researcher, scientist or engineer (annual FTE) engaged in R&D.

The manual explains gradually each part of the questionnaire and presents through examples how the questionnaire should be completed properly.

As an example of a properly filled in questionnaire, shown below is a tertiary education institution that belongs to University (as a reporting unit). The data displayed in the mentioned examples are arbitrary and serve only as a demonstration.

Forms IR-1, IR-2, and IR-3 are completely identical, in terms of design and content.

#### **First page of the questionnaire / form IR**

The questionnaire refers to the measurement of entries in R&D: R&D employees and IR expenditure. R&D employees are classified by educational level, titles, age and sex, expressed as the real number of persons and full-time equivalent (FTE). R&D expenditure presents generally so-called internal expenditure, i.e. expenditure on R&D within a reporting unit or sector which the unit belongs to. Encompassed are expenditure and investments in order to obtain the obtain information about who finances and who is conduct R&D. As the result of R&D, shown are also scientific works, projects and studies.

The first page of the IR questionnaire (1, 2 and 3) contains information on the name, registration number, address, activity and field of science of the reporting unit. The main difference between R&D activity and activities that are not R&D is in the presence or absence of elements of novelty or innovations to a larger extent. If an activity improves significantly technical characteristics, components and materials, software, user-oriented or other characteristics, i.e. uses a new or considerably advanced products, process or service, as well as new organizational methods in business and labour organization, one should include it in this survey.

The code of the corresponding activity is to be copied from the annexed Classification of Activities 2010 which is transmitted to the reporting unit along with the R&D questionnaire/form. Also, the code of the field of science is to be indicated on the basis of the Classification of Fields of Science being also annexed.

**Table number 1**

The first table to be filled in is on page two of the questionnaire bearing number 1 and entitled: “Full-time and part-time employees engaged in R&D, expressed in number of physical persons and full-time equivalent (FTE) (in 201\_.)“

		Total number of employees engaged in R&D				Number of full-time employees engaged in R&D activities		Number of part-time employees engaged in R&D activities			
		Number of employees		Full-time equivalent		Number of employees		Full-time equivalent			
		All (5+7)	Women (6+8)	All (5+9)	Women (6+10)	All	Women	All	Women	All	Women
a		1	2	3	4	5	6	7	8	9	10
01	<b>Total (02+14+18+19+20)</b>	54	29	32,5	18,5	11	8	43	21	21,5	10,5
02	<b>Researchers – total (03 to 13)</b>	52	28	31,5	18	11	8	41	20	20,5	10
03	Researcher apprentice	4	3	4	3	4	3				
04	Assistance researcher	5	4	5	4	5	4				
05	Scientific assistant	1	1	0,5	0,5	0	0	1	1	0,5	0,5
06	Senior scientific assistant										
07	Senior adviser	2	1	2	1	2	1				
08	Senior lecturer	6	4	3	2			6	4	3	2
09	Associate professor	8	4	4	2			8	4	4	2
10	Full professor	17	7	11	5			17	7	11	5
11	Professor of applied studies										
12	Lecturer										
13	Assistant lecturer	9	4	2	0,5			9	4	2	0,5
14	<b>Assistant researcher - total (15 to 17)</b>	2	1	1	0,5			2	1	1	0,5
15	Assistant researcher	2	1	1	0,5			2	1	1	0,5
16	Senior assistant researcher										
17	Assistant adviser										
18	<b>Technicians</b>										
19	<b>Managers</b>										
20	<b>Other personnel (support)</b>										

Table 1 should contain the total number of employees engaged in R&D activities full-time or part-time, by title, sex, and number of physical persons and full-time equivalent (FTE).

One should indicate in the table the number of employees being engaged in R&D, and the sum of full-time and part-time employees.

For part-time employees one should indicate the real amount of time spent on R&D activities in relation to full-time employees. The unit of measure for the data in question is full-time equivalent. The original name in English is Full-time Equivalent, abbreviated FTE. The abbreviation FTE will be used throughout the manual for Full-time Equivalent.

In concrete terms, our example shows that there are 43 employees being part-time engaged in R&D (the data is indicated in column 7 in table 1) and only 21.5 are engaged FTE. This means that their real contribution to R&D is 21.5 full-time employees being engaged in R&D.

Full-time equivalent (FTE) is the unit of measure of employees that makes possible the comparability of employees even if they work different hours of work during the week/year.

The employee working full-time is to be counted as one (1) full-time equivalent or abbreviated FTE = 1. The employee who does not work full-time is assigned a proportional value in relation to her/his hours

worked. For example: an employee not working full-time, but 20 hours a week, has FTE of 0.5 because full-time implies 40 hours of work per week. Numerically shown:  $20/40 = 0.5^1$

The data relative to full-time equivalent, in columns 3, 4, 9 and 10, are shown in decimal numbers with one decimal.

Also, the page of the IR form with table 1 on it contains additional instructions for indicating data in columns 3, 4, 9 and 10 about full-time equivalent.

The second example shows that there are 54 employees being engaged in R&D activities. Among those 54 persons 29 are women. Full-time equivalent for the total number of employees is 32.5, of which 18.5 is FTE for women.

Titles under numbers from 03 to 13 in the category “researchers – total” are to be added up, which in the example amounts to 52 employees, of which 28 women. The full-time equivalent for this category is the summation value 31.5 FTE, of which the value of 18 FTE accounts for women.

Employees bearing the title assistant researcher are to be indicated in row 15 in the table. In our example, there are two employees, of which one is a woman. As the data concerning those persons are indicated in columns 7 and 8, which refer to part-time employees, it is evident from the example that both of them are engaged part-time in R&D activities. The two persons have an FTE of 1, of which 0.5 FTE accounts for the woman. The two assistant researchers work are engaged only part-time in R&D activities during the year.

As rows 16 and 17 concerning senior assistant researcher and assistant adviser are blank, the value in row 14 “Assistant researcher – total” is 2 employees with full-time equivalent 1.

At the end of table 1, one should add up the values under “Researchers - total”, “Assistant researchers”, “Technicians”, “Managers” and “Other personnel (support)”. Considering that, except for categories “Researcher - total (02)” and “Assistant researcher - total” (14), there are no data in the other categories, one should add up the values of the cited items and obtain the sum in the first row (01) “Total”: 54 employees, of which 29 women, the full-time equivalent of the former being 32.5, and of the latter 18.5.

Also, the sum of columns 5 and 7 should equal the data from column 1, and the sum of columns 6 and 8 should equal the data from column 2.

Explanations from the Frascati Manual, OECD international standard used as a methodological basis in the R&D survey, are provided to better understand this table.

“There are three stages in evaluating R&D employees:

- Identification of the types of employees to be evaluated,
- Establishing their number,
- Establishing their activity in FTE,

Full-time equivalent (FTE) can be shown as:

*Researcher/year*

One FTE researcher can be presented also as researcher/year. Therefore, for persons who spend 30% of their time in R&D activities and the rest of it in other activities (teachers, university administration...) FTE should be 0.3. Similarly, if a FTE employee is engaged in a R&D institution for a six month period, the FTE will be 0.5. Knowing that the working hours vary between sectors, as well as between institutions, it is impossible to express FTE as researcher/hours.

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<sup>1</sup>[http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Glossary:Full-time\\_equivalent](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Full-time_equivalent)

*FTE at a specific date*

In some cases it is more practical to express the FTE of R&D employees at a specific date. However, if there are considerable variations, it is necessary to make exceptions in order to secure comparability with FTE over a period of time. If fixed date approach is used, it is necessary to provide data for the first or for the last date which the expenditure refers to. The use of a two year average is recommended for comparison of expenditure data. Theoretically, FTE is determined for all engaged R&D personnel.

In practice, all the persons who participate with more than 90% of time should be counted as 1 FTE, while those who are engaged with less than 10% should be excluded from the evaluation.<sup>2</sup>

**Table 2**

In table 2 entitled: *“Employees engaged in R&D activities on service contract (SC) or author contract (AC), expressed in physical number of persons and full-time equivalent (FTE), in 201\_“* one should indicate the number of employees being engaged in R&D activities on service contract or author contract by titles/occupation.

		Employees engaged on SC and AC in R&D activities				Full-time employees engaged on SC and AC in R&D activities		Part-time employees engaged on SC and AC in R&D activities			
		Number of employees		Full-time equivalent		All	Women	Number of employees		Full-time equivalent	
		All (5+7)	Women (6+8)	All (5+9)	Women (6+10)			All	Women	All	Women
<i>a</i>		1	2	3	4	5	6	7	8	9	10
01	<b>All (02 to 06)</b>	1	1	0,3	0,3			1	1	0,3	0,3
02	Researchers	1	1	0,3	0,3			1	1	0,3	0,3
03	Assistant researchers										
04	Technicians										
05	Managers										
06	Other personnel (support)										

Table 2 follows the same principle as in table 1, except that certain categories of occupation are not broken down by types of titles that belong to a related category of occupation.

Our example shows one employee who was engaged as researcher on service contract and was actually involved in R&D activities during 85 working days. It is worth knowing that one calendar year has on average 252 working days when calculating FTE. The aforesaid is used to determine the full-time equivalent:

$$85/252 = 0.34.$$

As FTE is expressed with one decimal, the obtained quotient 0.34 is rounded to 0.3, which is at the same time the FTE of the activities performed in R&D by the employee.

Also, the sum of columns 5 and 7 should equal the data from column 1, and the sum of columns 6 and 8 should equal the data from column 2.

<sup>2</sup> **Frascati manual**, Belgrade, Organisation for Economic Co-operation and Development, 2000, p. 58-62

**Table 3**

In table 3 entitled: "Full-time and part-time employees engaged in R&D activities, by educational attainment, expressed in physical number of persons (in 201\_)" one should indicate the number of employees by title and educational level. Read the remark below table 3: The table is to be filled in as follows: in columns 1 and 2, copy the values from columns 1 and 2 of table 1, and then proceed with entering the data. Also, the sum of odd columns should equal the data from column 1, and the sum of even column should equal the data from column 2.

Also, the sum of odd columns should equal the data from column 1, and the sum of even columns should equal the data from column 2.

	Total		Educational level												
			Doctor's degree		Master's degree		Specialisation		University education		Applied education		Secondary and other education		
	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	
<i>a</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
01	<b>Total (02 to 06)</b>	54	29	36	18	4	2			14	9				
02	Researcher	52	28	34	17	4	2			14	9	X	X	X	X
03	Assistant researcher	2	1	2	1									X	X
04	Technician														
05	Manager													X	X
06	Other personnel (support)														

**Table 4**

In table 4 entitled: *“Employees engaged in R&D activities on service contract (SC), author contract (AC), by educational level expressed in number of physical persons, in 201\_”* one should indicate the total number of employees who were engaged on the mentioned contract, by occupation and educational level.

	Total		Educational level												
			Doctor's degree		Master's degree		Specialisation		University education		Applied education		Secondary and other education		
	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	
a	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
01	Total (02 to 06)	1	1	1	1										
02	Researcher	1	1	1	1							X	X	X	X
03	Assistant researcher													X	X
04	Technician														
05	Manager													X	X
06	Other personnel (support)														

The example shows that one female employee, was engaged on R&D activities on service contract. The mentioned person is a researcher (title) and holds a doctoral degree (educational level).

The table is to be filled in as follows: copy into columns 1 and 2 of this table the values of columns 1 and 2 of table 2, then continue with entering other data.

Also, the sum of odd columns should equal the data from column 1, and the sum of even columns should equal the data from column 2.

**Table 5**

In table 5 entitled: *“Full-time and part-time employees engaged in R&D activities, by educational level, expressed in full-time equivalent (in 201\_)”* one should indicate data expressed in full-time equivalent, by title and educational level.

The table is to be filled in as follows: copy into columns 1 and 2 of this table the values from columns 3 and 4 of table 1, then continue with entering other data.

Also, the sum of odd columns should equal the data from column 1, and the sum of even columns should equal the data from column 2.

Total		Educational level													
		Women		Doctoral degree				Doctoral degree				Doctoral degree			
All	Wo-men			All	Wo-men	All	Wo-men	All	Wo-men	All	Wo-men	All	Wo-men	All	Wo-men
<i>a</i>		1	2	3	4	5	6	7	8	9	10	11	12	13	14
01	<b>Total (02 to 06)</b>	32,5	18,5	21,5	11	4	2			7	5,5				
02	Researcher	31,5	18	20,5	10,5	4	2			7	5,5	X	X	X	X
03	Assistant researcher	1	0,5	1	0,5									X	X
04	Technician														
05	Manager													X	X
06	Other personnel (support)														

Having in mind the aforesaid remarks, when filling in the tables, one should first copy FTE from columns 3 and 4 of table 1 into columns 1 and 2 of table 5. Once the total FTE of 32.5 copied into column 1 and FTE of 18.5 into column 2 of table 5, one should copy from the same columns of table 1 the values relative to the titles researcher and assistant researcher into table 5. The data for researchers are FTE of 31.5 and 18 and FTE of 1 and 0.5 for assistant researchers. Then these values should be broken down into educational levels.

**Table 6**

In table 6 entitled: “*Employees engaged in R&D activities on service contract (SC) or author contract (AC), by educational level, expressed in full-time equivalent, (in 201\_)*” one should indicate the full-time equivalent by title and educational level for employees engaged on R&D activities on service contract or author contract.

Total		Educational level													
		Doctor's degree		Master's degree		Specialisation		University education		Applied education		Secondary and other education			
All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women		
<i>a</i>		1	2	3	4	5	6	7	8	9	10	11	12	13	14
01	<b>Total (02 to 06)</b>	0,3	0,3	0,3	0,3										
02	Researcher	0,3	0,3	0,3	0,3							X	X	X	X
03	Assistant researcher													X	X
04	Technician														
05	Manager													X	X
06	Other personnel (support)														

In table 4 the example shows that one female person is engaged on R&D activities on service contract and that this person is a researcher (title) holding a doctoral degree (educational level). The in table 2 one can notice that the FTE is 0.3 in relation to full-time. Therefore, the value 0.3 is to be copied in corresponding boxes in table 6.

The value 0.3 can be the result of work, where the researcher in question is engaged 2.5 hours in R&D activities, or 12 hours a week or about 30% of the working hours on annual level.

**Table 7**

In table 7 entitled: “*Full-time and part-time employees engaged in R&D activities, by age and sex, expressed in number of physical persons, (in 201\_)*” one should cover the number of employees engaged in R&D activities by titles and age groups.

	Researcher				Assistant researcher				Technician				Manager			
	Full-time employee		Part-time employee		Full-time employee		Part-time employee		Full-time employee		Part-time employee		Full-time employee		Part-time employee	
	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women	All	Women
<i>a</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
01	<b>Total (02 to 12)</b>		11	8	41	20		2	1							
02	Less than 25		1	1												
03	25 – 29		6	4	4	1										
04	30 – 34		2	2	9	4										
05	35 – 39				8	4		1	1							
06	40 – 44				4	4										
07	45 – 49				4	2										
08	50 – 54		1	1	3											
09	55 – 59				1			1								
10	60 – 64				8	5										
11	65 – 69		1													
12	70 and over															

In the columns of table 7 employees categories are broken down by titles then the categories are divided into subcategories: *full-time employees and part-time employees*. The rows show age groups where employees should be indicated by age in given intervals. At the end, each row in the column should be added up for all the titles in order to obtain “*Total (02 to 12)*” under the ordinal number 01. Other (support) personnel are not to be classified by age.

The data in this table should equal the data presented in table 1, as follows:

*Full-time employees:*

- Researchers: row 02, columns: 05, 06
- Assistant researchers: row 14, columns: 05, 06
- Technicians: row 18, columns: 05, 06
- Managers: row 19, columns: 05, 06

*Part-time employees:*

- Researchers: row 02, columns: 07, 08



- Assistant researchers: row 14, columns: 07, 08
- Technicians: row 18, columns: 07, 08
- Managers: row 19, columns: 07, 08

**Table 8**

In table 8 entitled: “*Full-time and part-time researchers, by citizenship and age, expressed in number of physical persons*” one should indicate the number of researchers by citizenship (geographical position of a country). It is essential to emphasize with this table that the number in question refers to the **number of researchers**, not to the total number of employees. These data are particularly important to monitor the **mobility of researchers**.

Citizenship (by geographical position of the country)		Total number of researchers in 2014		Researchers who <b>came</b> in Serbia in 2014		Researchers who <b>went</b> abroad in 2014		Planned number of researchers for 2015
		Total	Women	Total	Women	Total	Women	
a		1	2	3	4	5	6	7
01	<b>Total (02 to 09)</b>	52	28	1	1			55
02	Serbia	52	28					
03	EU member countries							
04	Other European countries							
05	North America							
06	Central and South America							
07	Asia							
08	Africa							
09	Other							

In columns 3 and 4 one should indicate all the researchers who came from abroad and were engaged in R&D more than 3 months between 01/01/ 201(4)- 31/12/201(4).

In columns 5 and 6 one should indicate all the researchers who left Serbia between 01/01/2014- 31/12/2014.

Data in row 01 in columns 1 and 2 of this table should **equal the data in table 1 in columns 1 and 2**, as follows:

Researchers – all and researchers – women (row 02).

**Table 9**

In table 9 entitled: “Expenditure for R&D activities in 201\_ (in thous. RSD) “one should indicate all funds spent on R&D activity in 201\_, as well as those planned for the following year.

Expenditures for R&D			Spent in 2014	Planned for 2015
<i>a</i>			<i>1</i>	<i>2</i>
01	<b>Total expenditure for R&amp;D (02+07+12)</b>		39307	
02	Current costs	<b>All (03+05+06)</b>	32785	
03		Gross salaries and wages <b>for all R&amp;D employees</b>	32785	
04		Of which gross salaries and wages of researchers	31690	
05		Other personal income of R&D employees (scholarships, prizes, etc.)		
06		Other		
07		<b>All (08 to 11)</b>	5989	
08		For material costs for R&D work (raw materials, equipment, energy)	2369	
09		For payments based on service contracts and author contracts	609	
10		For daily allowances, travel costs, etc.	1100	
11		Other operating costs and expenses (without depreciation)	1911	
12		Investment costs	<b>All (13+14+16+17+18)</b>	533
13	For land and buildings			
14	For machinery and equipment		533	
15	Of which for imported machinery and equipment		65	
16	For patent, licenses, studies and projects			
17	For software and hardware <sup>1)</sup>			
18	Other			

In this table spent funds are grouped in two main categories: one refers to current costs, and the second to investment costs. The current costs are further broken down in subcategories named “*labour costs and employees’ remunerations*” and “*other current costs* “. The categories and subcategories in question are further broken down in classes of costs. The subcategory “of which *gross salaries and wages of researchers* “is not counted in the sum of ALL (row 02) because it is part of gross salaries of all R&D employees.

*Labour costs of R&D personnel* represent the largest item of current costs. *Other current costs* include costs in materials and equipment necessary for R&D over a year. Additional costs and administrative costs are to be counted in this group of costs, but with the deduction of costs of activities other than R&D. Labour costs comprise social and pension contributions for R&D personnel. Costs of indirect services are also to be included, whether originating from the same reporting units or not (costs of storage, repair, maintenance of premises, printing of reports, etc.).

*Investment costs* are total annual costs of immovables used for R&D for the reporting unit. They are to be reported for the period they have incurred and do not comprise depreciation. They are made of: costs for land and buildings, instruments and equipment. Costs for land and buildings: land refers to land necessary for R&D work (land for testing, laboratories and pilot installations) and for buildings destined to be improved, modified and repaired. The part of these costs being difficult to determine, estimation method is used. The subcategory “of which: *for imported machines and equipment* “ under investment costs is not to be counted in the sum of investment costs (ALL, row 12) as it represents the part of total investments into machines and equipment.

By indicating data under corresponding classes of costs in the example, one can see the purpose of expenditures. The funds are expressed in **thousands dinars**.

**Table 10**

In table 10 entitled: “Sources of funds spend on R&D activity in 201\_” one should indicate the sources of financing R&D.

Sources of funds			Amount in thousands RSD	
<i>a</i>			<i>1</i>	
01	<b>Funds spent for R&amp;D by sources - total (02 to 21)</b>		39307	
02	Domestic funding (from Serbia)	Planned budgetary funds dedicated to R&D	37315	
03		From the Ministry of Science		
04		From the Ministry of Education		
05		From other ministries		
06		Funds for R&D from other government funds, agencies and foundations		
07		Funds for R&D from local authorities' bodies	202	
08		Funds for R&D from enterprises	from "small" (0 - 49 employees)	
09			from "medium" (50 - 249 employees)	
10			from "large" (250 and more employees)	
11		Funds for R&D from non-profit organizations		
12	Funds from patents, licenses, etc. (from inward sale)			
13	Other funds for R&D from own sources			
14	Funds from abroad	Funds from agreements on technological licenses		
15		Funds from services for foreign ordering parties	1567	
16		Funds from joint investment in R&D		
17		Funds for R&D from other countries' governments		
18		Funds for R&D from the university and other tertiary education institutions		
19		Funds for R&D from non-profit organizations		
20		Funds for R&D from the European Commission		
21		Funds for R&D from international organizations	223	
	Other			

The data in row 01 should equal the data in table 9, in row 1, column 1 (*total expenditure for R&D*). The amounts are to be indicated in thousands of dinars.

The sources are divided into two categories: the first category refer to domestic funding and the second to funding from abroad.

Within categories there are subcategories of funding. Under domestic funding (from the Republic of Serbia), several sources are proposed (ministries, funds, agencies) grouped under “*budgetary funds dedicated to R&D*” and “*funds for R&D from enterprises* “. In row 12 indicated are funds from own sources spent on R&D activity. The amounts of total funds as well as budgetary funds (rows 01 to 06) are further broken down in table 12.

The example show funds for R&D from the Ministry of Science and a minor part from local authorities, as well as funds received from international organisations.

**Table 11**

In table 11 entitled: “Value of R&D works (projects and studies), by fields of science and types of research (including also projects funded from own resources – in thous. RSD), 201\_“one should indicate the amount of funds spent on R&D, broken down by types of research and fields of science.

Fields of science		Total	Types of research		
			Basic	Applied	Development
a		1	2	3	4
01	<b>All</b>	39307	37 739		1568
02	Natural sciences, mathematics	39307	37 739		1568
03	Engineering and technology				
04	Social sciences				
05	Humanities				
06	Medical sciences				
07	Agricultural sciences				
08	Multidisciplinary sciences				

For ongoing projects (not completed), one should indicate the value of finishing stages of works up to 201\_. It is important to stress out that the data in column “Total“ should equal the data in column “Total“ in table 12. Also, it should be identical to the data indicated in table 9 under ordinal number 1 “Total expenditure for R&D in 201\_”

Use the annexed classification to determine the type of research a work belongs to.

- **BASIC RESEARCH** is a creative, systematic activity focused on acquiring new knowledge on the origin and causes of phenomena and facts, without any particular application or use in view. The results of a basic research are often formulated as general principles, theories or rules.
- **APPLIED RESEARCH** is undertaken whether to establish a possibility to use the results of a research, having in mind its practical application, or to find new methods or ways that facilitate the achievement of a particular objective set in advance. This survey starts from existing knowledge and examines it thoroughly in view of solving specific issues.
- **DEVELOPMENT RESEARCH** is a creative systematic activity based on the results of the basic and applied research, and practical knowledge directed towards introducing new materials, products, devices, processes and methods.

The main difference between the R&D activity and activities other than R&D is the presence or absence of elements of novelty or innovation to a greater extent. If an activity introduces significant improvement in technical characteristics, components and materials, software, user-orientation or other functional characteristics, i.e. uses a new or considerably improved product, process or service, as well as new organizational methods in business and work organization should be included in this survey.

The example above show the total funds invested in natural sciences and mathematics. A minor amount is invested in R&D, and more than 95% in basic researches.

**Table 12**

In table 12 entitle: “Funds for R&D by primary socio-economic objectives, 201\_ (in thous. RSD) “should indicate the total funds spent by primary socio-economic objectives and the amount of budgetary funds.

Primary socio-economic objectives		Total	Of which budgetary funds
<i>a</i>		<i>1</i>	<i>2</i>
<b>01</b>	<b>All (02+03+04+05+06+07+08+09+10+11+12+13+20+27)</b>	39307	37315
<b>02</b>	Exploration and exploitation of the Earth		
<b>03</b>	Environment		
<b>04</b>	Exploration and exploitation of space		
<b>05</b>	Transport, telecommunications and other infrastructure		
<b>06</b>	Production and rational utilization of energy		
<b>07</b>	Industrial production and technology		
<b>08</b>	Health		
<b>09</b>	Agriculture		
<b>10</b>	Education		
<b>11</b>	Culture, recreation, religion and mass media		
<b>12</b>	Political and social systems, structures and processes		
<b>13</b>	General advancement of knowledge:- <b>R&amp;D financed from General University Funds</b> (total 14 to 19):	39307	37315
14	R&D related to natural sciences, mathematics	39307	37315
15	R&D related to engineering sciences		
16	R&D related to medical sciences		
17	R&D related to agricultural sciences		
18	R&D related to social sciences		
19	R&D related to humanities		
<b>20</b>	General advancement of knowledge:- <b>R&amp;D financed from other sources than GUF</b> (total 21 to 26):		
21	R&D related to natural sciences, mathematics		
22	R&D related to engineering sciences		
23	R&D related to medical sciences		
24	R&D related to agricultural sciences		
25	R&D related to social sciences		
26	R&D related to humanities		
<b>27</b>	Defence		

The amounts of funds are distributed in 13 categories. The category “General advancement of knowledge” is divided in two groups. The first group: **R&D financed from general university funds**, is then broken down in fields of science. The specified category of funds represents the amount of resources from university funds, financed from public sources.

The second group: **R&D financed from other sources than GUF** show the amount of funds spent on R&D from other sources, other than public.

In the example above the total amount of funds for financing R&D has been invested in “general advancement of knowledge”. Knowing the fact that the reporting unit is a faculty within the University, and that the funds are budgetary funds), “General advancement of knowledge: **R&D financed from general university funds** are to be indicated in the category under ordinal number 13.

The data in the first row of column 2 of table 12 should equal the sum of the data under ordinal numbers 02 to 06 in table 10, budgetary funds for R&D.

Also, it is important that the total funds for/from R&D by primary socio-economic objectives under ordinal number 01 “All” in table 12 equal to the values specified in table 10 in row 01 “All”.

**Table 13**

In table 13 entitled: “Number of R&D works/projects and studies), by fields of science and type of research (to include also projects financed from own funds), 201\_“one should indicate the number of R&D works by field of science and type of research.

With this table, one should make sure that the indicated number of researches is entered under headings relative to their financial value in table 11.

Fields of science		Total	Types of research		
			Basic	Applied	Development
a		1	2	3	4
01	<b>All (02 to 08)</b>	7	5		2
02	Natural sciences, mathematics	7	5		2
03	Engineering and technology				
04	Social sciences				
05	Humanities				
06	Medical sciences				
07	Agricultural sciences				
08	Multidisciplinary sciences				

This example shows seven works which belong to the field of science: natural sciences, mathematics. Five works belong to basic researches and two to development researches. By comparing tables 13 and 11 it is obvious that the tables match because the number of works in table 13 is indicated under the same headings as in table 11 relative to their value.

It is particularly important to check that the row “All” in table 13 matches the row “All” in table 14.

**Table 14**

In table 14 entitled: “Number of R&D works by ordering party and type of research, 201\_“one should indicate the works by ordering party. The ordering party may be from Serbia or from abroad.

Ordering party		R&D works			
		Total (2 to 4)	Basic	Applied	Development
a		1	2	3	4
01	<b>All (02+09)</b>	7	5		2
02	Ordering party from Serbia	<b>Inward – all (03 to 08)</b>	5	5	
03		For own account			
04		Enterprises in Serbia			
05		Ministry of Science	4	4	
06		Ministry of Education			
07		Other ministries			
08		Other	1	1	
09		Ordering party from abroad	<b>Outward – all (10 to 16)</b>	2	
10	Enterprises		1		1
11	Other countries' governments				
12	Non-profit organisations				
13	Tertiary education institutions				
14	European Commission				
15	International organisations		1		1
16	Other				

The example shows that out of seven works, five are ordered from Serbia, and two from abroad. The number in row 01 “All” is distributed according to the type of works.

**Table 15**

In table 15 entitled: “*Published R&D articles and monographies, 201\_*” the reporting units are required to indicate the number of R&D works published in publications, whether own, someone else’s in Serbia or abroad. Every published work is to be counted only once, whatever the type of publication and times it has been published.

Total		Published in publications		
		Own	Someone else’s in Serbia	Abroad
1		2	3	4
01	141		62	79

**Table 16**

In table 16 entitled: “*Inventions and patents, 201\_* „ one should indicated the number of inventions, number of pending patents in the Patent Office and registered patents in the Intellectual Property Office, number of inventions / patents sold in the country and abroad, as well as the number of inventions and patents being used for the first time in practice. The listed categories are further distributed according to R&D intensity.

R&D intensity	Tested inventions	Patents		Patents – inventions sold		First-time practical use of patents and inventions
		Pending patents in the Patent Office	Patents registered in the Patent Office	In Serbia	Abroad	
a	1	2	3	4	5	6
01	<b>Total (02 to 05)</b>	4				
02	High technology					
03	Medium high technology	4				
04	Medium low technology					
05	Low technology					

**High R&D intensity (“high technology”)** would largely correspond to R&D costs/sale above 4%;

**Medium R&D intensity** (“medium technology”) is R&D costs/sale ranging from 1 to 45 and **Low R&D intensity** (“low technology”) is R&D costs/sale below 1%.

According to the Law of Patents, a patent is the right which is recognized as an invention from any technical domain, which is new, has an inventive level and is applicable in industry. This is a subjective right that belongs to a physical or legal person provided the fulfilment of material and formal conditions stipulated by the law. An invention being protected by patent may be a product, procedure, use of a product or procedure applicability.

Small patent is any patent that is new, applicable in industry and has a lower level than the inventive one, but that surpasses routine technical use by professionals.

**Table 16**

In table 16a entitled: "Small inventions and patents, 201\_" one should indicate the number of small tested inventions and patents according to the same principle as in the previous table 16.

R&D intensity	Small tested inventions	Small patents		Small patents – inventions sold		First-time practical use of small patents and inventions
		Pending patents in the Patent Office	Patents registered in the Patent Office	In Serbia	Abroad	
<i>a</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
01	<b>Total (02 to 05)</b>					
02	High technology					
03	Medium high technology					
04	Medium low technology					
05	Low technology					

The example shows that there four patents pending in the Patent Office (table 16), that they belong to medium high R&D intensity. Further, the reporting does not have pending, registered or sold small patents and small inventions (table 16a).

At the end of the questionnaire one should indicate the date of data entry in the questionnaire, the interviewer's name and surname, contact telephone and electronic mail, as well as the name and surname of the manager of the reporting unit.

For more information please contact the Statistical Office of the Republic of Serbia in Belgrade, at: ++381 (0)11 2412 922, extension 425 or 357

Annex: - Classification of Fields of Science

- Classification of Primary Socio-economic Objectives

- Classification of Activities CA-2010



Statistical bulletin – Research and Development Activity in the Republic of Serbia, 2015

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