

Final Draft indicators for Competitiveness and Innovation sector

Area	Indicators	Definition	Unit	Source	Baseline	EU28 benchmark	Balkan benchmark
Basic performance	1. Number of enterprises	Number of registered legal or natural persons which are active during at least a part of the reference period	Number	http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_StrukturiStat/225_StrDelMk_03byactivity_en.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef - (Select Column1: total, Column 2: relevant years, Column 3: 11110 Number of Enterprises)	Baseline: 55,359 enterprises in 2017 55,469 in 2016 54,738 in 2015	The indicator is not relevant for benchmarking.	The indicator is not relevant for benchmarking.
	2. Number of enterprises per inhabitants (100,000)	Number of registered legal or natural persons which are active during at least a part of the reference period compared to the estimated population at the end of the year	Enterprise/100,000 inhabitants	Numerator: http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_StrukturiStat/225_StrDelMk_03byactivity_en.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef - (Select Column1: total, Column 2: relevant years, Column 3: 11110 Number of Enterprises) Denominator:	Numerator: 55,359 enterprises Denominator: 2,075,301 inhabitants, Baseline 2017: (55,359 / 2,075,301)*100,000 ; i.e. 2,667 enterprises / 100,000 inhabitants	<u>Numerator:</u> http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sbs_na_sca_r2&lang=en - (Select: NACE2: Total business economy; repair of computers, personal and household goods; except financial and insurance activities; Economic indicator: Enterprises - number). 2016: total in EU28: 24,425,954 enterprises	SERBIA: <u>Numerator:</u> http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=sbs_na_sca_r2&lang=en (Select: NACE2: Total business economy; repair of computers, personal and household goods; except financial and insurance activities; Economic indicator: Enterprises - number).

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				http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_Naselenie_ProcenkiNaselenie/115_Popis_RM_1_Star_Dec_eng.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Select: Column 1: age; Column 2: relevant years; Column 3: total)	(55,469 / 2,073,702) * 100,000 = 2,674.8 enterprises / 100,000 inhabitants in 2016 (54,738 / 2,071,278) * 100,000 = 2,642.7 enterprises / 100,000 inhabitants in 2015	Denominator: https://ec.europa.eu/eurostat/databrowser/view/tps00001/default/table?lang=en (NOTE: data is provided for 1 st of January, but we need the end of year data; thus the 1st of January data of the NEXT YEAR is used for calculation!) 2016: EU28 population at the end of the year: 511,373,278 inhabitants EU28 Benchmark: (24,425,954 / 511,373,278) * 100,000 = 4,776 enterprises / 100,000 inhabitants in 2016 (23,500,331 / 510,181,874) * 100,000 = 4,606 enterprises / 100,000 inhabitants in 2015 (23,550,382 / 508,520,205) * 100,000 = 4,631 enterprises / 100,000 inhabitants in 2014	2017: total number of enterprises in Serbia: 85,546 Denominator: https://ec.europa.eu/eurostat/databrowser/view/tps00001/default/table?lang=en (NOTE: data is provided for 1 st of January, but we need the end of year data; thus the 1st of January data of the NEXT YEAR is used for calculation!) 2017: population of Serbia: 7,001,444 inhabitants Benchmark: (85,546 / 7,001,444) * 100,000 = 1,221.8 enterprises / 100,000 inhabitants in 2017 (90,905 / 7,040,272) * 100,000 = 1,291.2 enterprises / 100,000 inhabitants in 2016

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	3. Number of employees the private sector	Number of persons who work for an employer and who have a contract of employment and receive compensation in the form of wages, and salaries.	Number of employees in private sector	http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_StruktorniStat/275_StrDelMk_04bysizeclass_en.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Select: Column1: B to S9; column2: relevant years; Column3: 16130 Number of Employees; Sum of the values of the sub-categories.)	Baseline: 388,972 employees in the private sector in 2017 378,737 in 2016 369,237 in 2015	The indicator is not relevant for benchmarking.	The indicator is not relevant for benchmarking.
Entrepreneurship	4. Enterprise survival rate	Number of SME companies actives in the fourth year of life, divided by the total number of new SMEs in the year of reference.	%	http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_DelovniSubj_DemografijaNaPretprijatija/275_DelSub_Mk_04AN_en.px/table/tableViewLayout2/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Select: Column 1: Total; Column 2: year; Column 3: 4-year survival rate (%))	Baseline: for companies established in 2013, the survival rate for 4 years later is 50.2% For companies established in 2012: 38% For companies established in 2011: 40.8%	Established in 2012 and active in 2016 EU28: 49.09% (no data for EU28 for previous years) Germany: 42.85% in 2013 43.77 % in 2012 43.19% in 2011 Sweden: 67.39 % in 2013 68.03 % in 2012 66.28 % in 2011	No data available in Eurostat for the Balkan countries.

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						<p>Slovenia: 54.58 % in 2013 54.88 % in 2012 54.03 % in 2011</p> <p>https://ec.europa.eu/eurostat/web/structural-business-statistics/data/database</p> <p>(Select Business demography, business demography by size class; Open the table and select: Size classes: total; NACE: business activities except activities of holding companies; Economical indicator: Survival rate 4 number of enterprises in the reference period newly born in t – 4 having survived)</p> <p>NOTE: The data provided by Eurostat excludes holding companies, however as it is not typical in North-Macedonia to have big holding companies, the data provided by Eurostat is</p>	

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Internationalisation	5. Export companies' rate	Number of exporting companies divided by the total number of companies	%	<p>Numerator: http://www.stat.gov.mk/pdf/2019/7.1.19.08_mk.pdf for 2017 (T – 02, page 3)</p> <p>http://www.stat.gov.mk/pdf/2018/7.1.18.08.pdf for 2016 (T-02) (Page 3)</p> <p>http://www.stat.gov.mk/pdf/2017/7.1.17.08.pdf for 2015 (T – 02, page 3)</p> <p>Denominator: http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_StruktumiStat/225_StrDelMk_03byactivity_en.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef - (Select: Column1: Total; Column 2: relevant years; Column 3:11110 Number of enterprises)</p>	<p>2017: Numerator: number of exporting companies: 3,493</p> <p>Denominator: total number of companies: 55,359</p> <p>Baseline: (3,493 / 55,359) * 100 = 6,3 % in 2017</p> <p>2016: (3,489/55,469) *100 = 6.3%</p> <p>2015: (3,396 / 54,738) * 100 = 6.2 %</p>	<p>considered relevant for benchmarking.</p> <p>No relevant data available.</p>	<p>No regional benchmark available.</p>

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	6. Level of the export of services and goods over GDP	Value of total export of goods and services / GDP	%	<p>Numerator: http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_BDP_BDPInvesGodisni_BDPsporedESS2010/325_NacSmA_Mk_06cM2_ml.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef</p> <p>(Select: Column 1: export of goods and services; Column 2: current price; Column 3: relevant years)</p> <p>Denominator: makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_BDP_BDPInvesGodisni_BDPsporedESS2010/325_NacSmA_Mk_06cM2_ml.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef</p> <p>(Select: Column 1: gross domestic product;</p>	<p>Baseline 2017 in current prices:</p> <p>Numerator: 341,597 million Dinars</p> <p>Denominator: 616,600.million Dinars</p> <p>Baseline 2017: 55.4%</p> <p>(301,346million / 594,795million) * 100 = 50.66 % in 2016</p> <p>(272,423million / 558,954million) * 100 = 48.73% in 2015</p>	<p>https://ec.europa.eu/eurostat/databrowser/view/tet00003/default/table?lang=en</p> <p>46.4% (2018) 45.8% (2017) 43.9 % (2016)</p>	<p>Albania: https://ec.europa.eu/eurostat/databrowser/view/tet00003/default/table?lang=en 31.7 % (2018) 31.6 % (2017) 29.0 % (2016)</p> <p>Serbia: https://ec.europa.eu/eurostat/databrowser/view/tet00003/default/table?lang=en 50.9 % (2018) 50.5 % (2017) 48.6 % (2016)</p> <p>Bosnia and Herzegovina https://ec.europa.eu/eurostat/databrowser/view/tet00003/default/table?lang=en 41.4 % (2018) 40.1 % (2017) 35.6 % (2016)</p>

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				Column 2: current prices; Column 3: year)			
Environment	7. Green Houses Gases (GHG) over GDP	CO2-eq in Kg/GDP in one year	Kg of CO2-eq /Dinars	<p>SSO: Numerator: http://www.moepp.gov.mk/?page_id=3700&language=en</p> <p>Denominator: http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_BDP_BDPInvesGodisni_BDPsporedESS2010/325_NacSmA_Mk_06c_M2_ml.px/table/tableViewLayout2/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef – (Select: GDP; reference year 2005; year); Constant price 2005</p>	<p>Baseline 2014: Numerator: 9,023 Gg CO2-eq = 9,023,000,000 Kg CO2 eq.</p> <p>Denominator: 407,536 million Dinars</p> <p>i.e.0.0221 Kg CO2-eq/Dinar</p>	<p>GHG CO2 eq.: 2014: 4,436,292 T = 4,436,292,000,000 Kg</p> <p>https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer</p> <p>Denominator: https://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tec00001&language=en</p> <p>GDP, 2014 current prices: 14,071,549.7million euro</p> <p>In constant price 2005. It must be divided by 1.14252 (price index)</p> <p>https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do</p>	

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						GDP deflator value!! Baseline: 4,436,292.000,000 Kg of CO2 eq. divided by 14,071,549.7million euro Divided by 1.14252 (price index to transform to constant price 2005, 2014: 0.00027 Kg CO2 eq / Euro (approx. 0.0016 Kg CO2 eq/dinar) (exchange rate: 1Euro = 61 dinars)	
Innovation capacities	8. Research and development expenditure (public and private) over GDP	Total R&D expenditure made in the country divided by GDP.	%	https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS	Baseline 2017: 0.35 % 0.43 % in 2016 0.44 % in 2015 0.51 % in 2014	2016: 2.03% 2015: 2.03 % 2014: 2.03 % https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS	Serbia: 0.93 % in 2017 0.891 % in 2016 0.865 % in 2015 https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS Montenegro: 0.374 % in 2015 0.363 % in 2014 0.374 % in 2013 https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS

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							Albania: 0.154 % in 2008 0.087 % in 2007 https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS
	9. Research & Development expenditure by the business Sector	Research & Development Expenditure by the Business Sector	Dinars	http://www.stat.gov.mk/Publikacii/2.4.18.14.pdf T-11: Total expenditures for R&D by sector of performance and by type of expenditure, 2017	clarification with SSO needed	The indicator is not relevant for benchmarking.	The indicator is not relevant for benchmarking.
	10. Business Sector employees working in Research & Development	Number of employees (including external staff also) working on R&D in the business sector	Number	http://www.stat.gov.mk/Publikacii/2.4.18.14.pdf T-01: Persons in paid employment in R&D by type of employment and sector of performance, 2017. Data related to the number of employees in the Business sector (sum of persons in paid employment and external collaborators)	Baseline 2017: 550 persons	The indicator is not relevant for benchmarking.	The indicator is not relevant for benchmarking.

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	11. Research & Development expenditure per inhabitants	Euro spent in R&D per inhabitants	Euro/inhabitant	<p>Numerator: http://www.stat.gov.mk/Publikacii/2.4.18.14.pdf – Table T 12 Total R&D for 2017</p> <p>http://www.stat.gov.mk/Publikacii/2.4.17.14.pdf (table 12) – for 2016</p> <p>http://www.stat.gov.mk/Publikacii/2.4.16.16.pdf (table 12) – for 2015</p> <p>Denominator: http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_Naselenie_ProcenkiNaselenie/115_Popis_RM_1_Star_Dec_eng.px/table/tableViewLayout2/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef</p> <p>ANOTHER SOURCE: https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database</p>	<p>Baseline 2017 Numerator: 2,190,511 thousand Dinars</p> <p>Denominator: 2,075,301 i.e.: 1,055 Dinar/inhabitants</p> <p>17.3 Euro/inhabitant (exchange rate: 1 Euro = 61 Dinars)</p> <p>(2,592,368 / 2,073,702) = 1,250 dinars / inhabitants 20.5 Euro / inhabitants in 2016 (exchange rate: 1 Euro = 61 Dinars)</p> <p>(2,482,428,000 / 2071278) = 1,198,5 dinars per inhabitants 19.65 euro / inhabitants in 2015</p> <p>In Eurostat:</p>	<p>https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Research and development / Statistics on research and development / R&D expenditure at national and regional level / Intramural R&D expenditure (GERD) by sectors of performance; Select: All sectors; Euro per inhabitant)</p> <p>EU28: 619.9 Euro/inhabitant in 2017 598.7 Euro / inhabitant in 2016 594 Euro/ inhabitant in 2015</p>	<p>Serbia: 48.6 euro / inhabitants in 2017 43.6 Euro / inhabitant in 2016 40.7 Euro / inhabitant in 2015</p> <p>Montenegro: 20.6 Euro / inhabitant in 2016 22 Euro / inhabitant in 2015 20.2 Euro / inhabitant in 2014</p> <p>https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Research and development / Statistics on research and development / R&D expenditure at national and regional level / Intramural R&D expenditure (GERD) by sectors of performance; Select: All sectors; Euro per inhabitant)</p>

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				(Select: Science and technology / Research and development / Statistics on research and development / R&D expenditure at national and regional level / Intramural R&D expenditure (GERD) by sectors of performance; Select: All sectors; Euro per inhabitant)	17.2 Euro / inhabitant in 2017 20.3 Euro / inhabitant in 2016 19.5 Euro / inhabitant in 2015		
	12. Innovative business entities rate	The proportion of companies that develop innovative activities		https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Community Innovation Survey / Results of the Community Innovation Survey 2016 / Enterprises by NACE Rev 2 activity and size class; <u>Select:</u> Innovation core activities; %; Enterprises that have either introduced an	Baseline: 37.4% in 2016	https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Community Innovation Survey / Results of the Community Innovation Survey 2016 / Enterprises by NACE Rev 2 activity and size class; <u>Select:</u> Innovation core activities; %; Enterprises that have either introduced an innovation or have any kind of innovation activity) EU28: 50.6 % in 2016	Serbia: 43.4 % in 2016 Data could be found at the Eurostat website: https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Community Innovation Survey / Results of the Community Innovation Survey 2016 / Enterprises by NACE Rev 2 activity and size class; <u>Select:</u> Innovation core activities; %; Enterprises that have either introduced an innovation or have any kind of innovation activity)

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				innovation or have any kind of innovation activity) AND http://www.stat.gov.mk/pdf/2018/2.1.18.10.pdf (T.1.)		(In the previous Innovation Community Survey, there is no EU28 value, also the categories are not exactly the same to compare)	
	13. Rate of innovative business entities in cooperation with other business entities and/or institutions	Rate of innovative business entities in cooperation with other business entities and/or institutions	%	https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Community Innovation Survey / Results of the Community Innovation Survey 2016 / Product and/or process innovative enterprises engaged in co-operation by co-operation partner, NACE REV 2 activity and size class; Select: Innovation core activities; cooperation partners: private	Baseline 2016: -cooperation with private research institutions: no data - cooperation with public research institutions: no data - cooperation with universities: 5.6 % - cooperation with any other type of organization: 24.4%	EU28 (2016): -cooperation with private research institutions: no data - cooperation with public research institutions: 8.4%; - cooperation with universities: 13.8 % https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Community Innovation Survey / Results of the Community Innovation Survey 2016 / Product and/or process innovative enterprises engaged in co-operation by co-operation partner, NACE REV 2 activity and	Serbia (2016): -cooperation with private research institutions: 11.4% - cooperation with public research institutions: 12.5% % - cooperation with universities: 14.5 % - cooperation with any other type of organization: 26% https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Community Innovation Survey / Results of the Community Innovation Survey 2016 / Product and/or process innovative enterprises engaged in co-operation by co-operation

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				research institutions; public research institutions; universities).		size class; Select: Innovation core activities; cooperation partners: private research institutions; public research institutions; universities).	partner, NACE REV 2 activity and size class; Select: Innovation core activities; cooperation partners: private research institutions; public research institutions; universities).
	14. Patents requested per inhabitants (1,000,000)	Number of patents requested from SOIP (State Office of Industrial Property) per million inhabitants	Number of requests per million inhabitants	<p>Numerator: Number of patents requested from SOIP (State Office of Industrial Property): data available on request at the SOIP – It is not a published data)</p> <p>AND http://www.ippo.gov.mk/Search/FederatedPatentRegister.aspx</p> <p>Denominator: http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_Naselenie_ProcenkiNaselenie/115_Popis_RM_1_Star_Dec_eng.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Select age, year, total)</p>	clarification with SOIP needed	<p>EU28:106.84 patent / million inhabitants in 2017</p> <p>109.71 patent / million inhabitants in 2016</p> <p>112.55 patent / million inhabitants in 2015</p> <p>https://ec.europa.eu/eurostat/databrowser/view/tsc00009/default/table?lang=en</p>	No data available in Eurostat.

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R&D+I	15. Public expenditure in R&D+I over GDP	Total public expenditure in R&D+I in relation to GDP	%	https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Research and development / Statistics on research and development / R&D expenditure at national and regional level / Intramural R&D expenditure by sectors of performance and source of funds / Select: source of funds: government sector AND higher education sector; % of GDP; sector of performance: all sectors)	In 2015: government sector sources: 0.23% Higher education sector sources: 0.11% Baseline: 0.23% + 0.11%; e.g. 0.34% in 2015 In 2016: government sector sources: 0.2 % higher education sources: 0.1 % Baseline: 0.2 % + 0.1 %; e.g. 0.3 % in 2016	EU28: Government sector sources: 0.64% Higher education sources: 0.02 % Benchmark: 0.63 % + 0.02 % = 0.66% in 2015 (0.65 + 0.02) = 0.67 in 2014 https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Research and development / Statistics on research and development / R&D expenditure at national and regional level / Intramural R&D expenditure by sectors of performance and source of funds / Select: source of funds: government sector AND higher education sector; % of GDP; sector of performance: all sectors) AND fresher data, but not directly from the database:	Montenegro: 0.22% + 0.02 % = 0.24 % in 2015 0.17 % + 0.02 % = 0.19 % in 2014 Serbia: 0.41 % + 0.21 % = 0.62 % in 2017 0.38 % + 0.27 % = 0.65 % in 2016 0.41 % + 0.19 % = 0.6 % in 2015 https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Research and development / Statistics on research and development / R&D expenditure at national and regional level / Intramural R&D expenditure by sectors of performance and source of funds / Select: source of funds: government sector AND higher education sector; % of GDP; sector of performance: all sectors)

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						<p>2016: 0,7% (government + higher education spending compared to GDP) https://ec.europa.eu/eurostat/statistics-explained/index.php?title=R_%26_D_expenditure#R_26_D_expenditure_by_source_of_fundsm (Excel table, Figure 3.)</p>	
	<p>16. Rate of employed people in R&D</p>	<p>Number of employed people in the R&D sector in FTE (full time equivalent) divided by the total number of employees.</p>	<p>%</p>	<p>https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Research and development/ Statistics on research and development / R&D personnel at national and regional level / Total R&D personnel and researchers by sectors of performance, as a % of total employment; Select: Professional position: total; Sector of performance: all</p>	<p>Numerator: 1,869.56</p> <p>Denominator: 740,648</p> <p>Baseline: (1,869.56 / 740,648) * 100 = 0.25% in 2017</p> <p>0.29 % in 2016 0.29 % in 2015</p>	<p>Baseline: 1.38 % in 2017 1.35 % in 2016 1.33 % in 2015</p> <p>https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Research and development/ Statistics on research and development / R&D personnel at national and regional level / Total R&D personnel and researchers by sectors of performance, as a % of total employment; Select: Professional position: total; Sector of performance: all sectors; % of total employment, FTE</p>	<p>Serbia: 0.78% in 2017 0.83 % in 2016 0.87 % in 2015</p> <p>Montenegro: 0.28 % in 2016 0.31 % in 2015 0.28 % in 2014</p> <p>https://ec.europa.eu/eurostat/web/science-technology-innovation/data/database (Select: Science and technology / Research and development/ Statistics on research and development / R&D personnel at national and regional level / Total R&D personnel and researchers by sectors of performance, as a % of total employment; Select: Professional position:</p>

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				sectors; % of total employment, FTE OR Numerator: http://www.stat.gov.mk/Publikacii/2.4.18.14.pdf (T.16.) Denominator: http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat_PazarNaTrud_AktivnosNaNaselenie/007_PazTrud_Mk_sopstvenost1_anq.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef (Select: employed, total, year, total)			total; Sector of performance: all sectors; % of total employment, FTE
Digitalization	17. Enterprises using cloud computing services	Rate of enterprises with 10+ employees using cloud computing services over the total number of	%	http://www.stat.gov.mk/pdf/2018/8.1.18.31.pdf - for 2018 http://www.stat.gov.mk/pdf/2016/8.1.16.29.pdf - for 2016	Baseline: 2018: 11.1 % 2016: 6.9 %	EU28: 2018: 26 % 2016: 21 % 2014: 19 % https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database	Serbia: 2018: 15 % 2017: 9 % https://ec.europa.eu/eurostat/web/digital-economy-and-society/data/database (select: Digital economy and society / ICT usage in

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		enterprises with 10+ employees				(select: Digital economy and society / ICT usage in enterprises / E-businesses / Cloud computing services; Select: All enterprises without financial sector (10+ employees, % of enterprises, buy cloud computing services over internet)	enterprises / E-businesses / Cloud computing services; Select: All enterprises without financial sector (10+ employees, % of enterprises, buy cloud computing services over internet)
	18. SMEs selling on-line	Rate of SMEs selling online over the total number of SMEs	%	http://www.stat.gov.mk/pdf/2018/8.1.18.31.pdf - for 2018 http://www.stat.gov.mk/pdf/2017/8.1.17.31.pdf - for 2017 http://www.stat.gov.mk/pdf/2016/8.1.16.29.pdf - for 2016	2018: - enterprises with 10+ employees providing online ordering opportunity: 21 % - enterprises with 10+ employees got e-sales orders: 5.7 % - enterprises with 10+ employees selling at least 1 % of turnover online: 2.1 % 2017: - enterprises with 10+ employees providing online	EU28: 38.3% of SMEs selling at least 1% of turnover online in 2015 https://ec.europa.eu/growth/tools-databases/dem/monitor/data-explorer/smes-selling-online NOTE: This indicator is not exactly the same as the one defined for North Macedonia, as this indicator takes into consideration only those enterprises, which sell min. 1 % of their annual turnover online. (and it is a proportion of all the SMEs)	No data available for regional benchmark.

Area	Indicators	Definition	Unit	Source	Baseline	EU28 benchmark	Balkan benchmark
					<p>ordering opportunity: 20.8 %</p> <ul style="list-style-type: none"> - enterprises with 10+ employees got e-sales orders: 6 % - enterprises with 10+ employees selling at least 1 % of turnover online: 1.7 % <p>2016:</p> <ul style="list-style-type: none"> - enterprises with 10+ employees providing online ordering opportunity: 19.6 % - enterprises with 10+ employees got e-sales orders: 7.4 % - enterprises with 10+ employees selling at least 1 % of turnover online: 2.7 % 	(no data found for previous years.)	

Area	Indicators	Definition	Unit	Source	Baseline	EU28 benchmark	Balkan benchmark
International rankings	19. Distance to frontier	Doing Business Index	rank	https://www.doingbusiness.org/en/rankings - 2018 https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2018-Full-Report.pdf - 2017 https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB17-Report.pdf - 2016	2018: 10th 2017: 11th 2016: 10th	Data is available at EU MSs level: https://www.doingbusiness.org/en/rankings - 2018 https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2018-Full-Report.pdf - 2017 https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB17-Report.pdf - 2016 Benchmark: average of the ranks of the 28 EU MSs: 37th in 2018 34 th in 2017 30 th in 2016	Serbia: 48 th in 2018 43 th in 2017 47 th in 2016 Kosovo: 44 th in 2018 40 th in 2017 60 th in 2016 Albania: 63 rd in 2018 65 th in 2017 58 th in 2016 Bosnia and Herzegovina: 89 th in 2018 86 th in 2017 81 th in 2016 https://www.doingbusiness.org/en/rankings - 2018 https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB2018-Full-Report.pdf - 2017 https://www.doingbusiness.org/content/dam/doingBusiness/media/Annual-Reports/English/DB17-Report.pdf - 2016

Area	Indicators	Definition	Unit	Source	Baseline	EU28 benchmark	Balkan benchmark
							ss/media/Annual-Reports/English/DB17-Report.pdf - 2016
	20. European innovation scoreboard index	European Innovation Scoreboard Index		https://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en	39.9% - relative to EU 2018 in 2018 NOTE: “ Results should not be compared across years due to data revisions. Time series using the most recent data allow performance to be tracked over time.”	Data is available at EU MSs level: https://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en Benchmark: average of the values of the 28 EU MSs: 89.4 % in 2018	Serbia: 58.5 % relative to EU 2018 in 2018 https://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en
	21. Global Competitiveness Index	Global Competitiveness Index		http://reports.weforum.org/global-competitiveness-report-2018/competitiveness-rankings/?doing_wp_cr on=1561719846.16750311851501464843752018 - 2018 http://reports.weforum.org/global-competitiveness-index-2017-	2018: 84th in the rank; score: 56.6 out of 100 2017: not on the list 2016: 68 th in the rank	Data is available at EU MSs level: Benchmark: average of the 28 EU MSs: rank: 30th in the rank in 2018 score: 72 out of 100 in 2018 2017: 36th in the rank 2016: 37th in the rank	Serbia: 65th in the rank; score: 60.9 out of 100 in 2018 78 th in 2017 90 th in 2016 Montenegro: 71st in the rank; score: 59.6 out of 100 77 th in 2017 82 nd in 2016 Bosnia and Herzegovina: 91st in the rank; score: 54.2 out of 100 in 2018

Area	Indicators	Definition	Unit	Source	Baseline	EU28 benchmark	Balkan benchmark
				<p>2018/competitiveness-rankings/ - 2017</p> <p>http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf - 2016</p>		<p>http://reports.weforum.org/global-competitiveness-report-2018/competitiveness-rankings/?doing_wp_cron=1561719846.1675031185150146484375 – 2018</p> <p>http://reports.weforum.org/global-competitiveness-index-2017-2018/competitiveness-rankings/ - 2017</p> <p>http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf - 2016</p>	<p>103rd in 2017 107th in 2016</p> <p>Albania: 76th in the rank; score: 58.1 out of 100 in 2018 75th in 2017 80th in 2016</p> <p>Balkan average (Serbia, Montenegro, Albania, Bosnia-Herzegovina): 84th in the rank; score: 56.6 out of 100 in 2018 83rd in 2017 90th in 2016</p> <p>http://reports.weforum.org/global-competitiveness-report-2018/competitiveness-rankings/?doing_wp_cron=1561719846.1675031185150146484375 – 2018</p> <p>http://reports.weforum.org/global-competitiveness-index-2017-2018/competitiveness-rankings/ - 2017</p> <p>http://www3.weforum.org/docs/GCR2016-2017/05FullReport/TheGlobalCompetitivenessReport2016-2017_FINAL.pdf - 2016</p>

Area	Indicators	Definition	Unit	Source	Baseline	EU28 benchmark	Balkan benchmark
							CompetitivenessReport2016-2017_FINAL.pdf - 2016