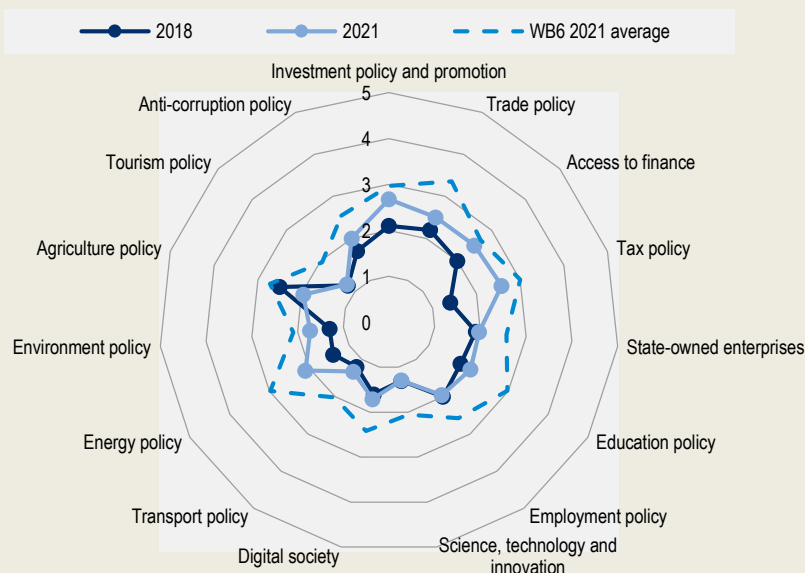


21 Bosnia and Herzegovina profile

Key findings

Figure 21.1. Scores for Bosnia and Herzegovina (2018 and 2021)



Note: Dimensions are scored on a scale of 0 to 5. Scores for 2021 are not directly comparable to the 2018 scores due to the addition/removal of relevant qualitative indicators. Therefore, changes in the scores may reflect the change in methodology more than actual changes to policy. The reader should focus on the narrative parts of the report to compare performance over time. See Scoring approach section for information on the assessment methodology. Scores for Dimension 5 (Competition policy) are not included in the figure due to different scoring methodology (see Scoring approach).

Since the 2018 Competitiveness Outlook, Bosnia and Herzegovina has improved its performance in 11 of the 15 policy dimensions¹ scored in the assessment (Figure 21.1). Although this clearly indicates progress in the design of policies to enhance its competitiveness – at least in about two-thirds of the dimensions covered in this assessment – if they are to have a lasting impact then their effective and continuous implementation, monitoring and upgrading should remain a key priority. The biggest improvement in scores since the previous assessment have been in the dimensions of tax policy, trade policy, investment policy and promotion, education policy, and energy policy, for which Bosnia and Herzegovina also achieved the highest scores. These improved scores are explained by the following key achievements:

- Tax policy has been strengthened, with greater international co-operation and easier administrative procedures.** Bosnia and Herzegovina has increased its international co-operation on tax matters by joining international instruments such as the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS), the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS, and the Convention on Mutual Administrative Assistance in Tax Matters. Both entities – the Republika Srpska (RS) and the Federation of Bosnia and Herzegovina (FBiH) – have adopted laws on free zones, providing investors with substantial tax incentives. Authorities at all levels have made efforts to digitalise filing procedures for taxpayers (e-filing). At the state level, e-filing has been mandatory for value-added tax (VAT) and excise duties since 2019. In the entities, the share of electronically filed taxes seems to be increasing. For example, in the RS 57% of tax returns were filed electronically over January-April 2020, compared to 43% in 2019. This should help increase the efficiency of the tax administration and speed up procedures for taxpayers.

- **Trade policy has also seen greater regional co-operation and stronger public consultation procedures.** Bosnia and Herzegovina signed the Central European Free Trade Agreement (CEFTA) Additional Protocol 6 along with the other WB6 economies in December 2019, thereby committing to liberalising trade in services with the other parties. Co-ordination between the public and private sectors over trade has also been improved, most notably through the establishment of the state-level Trade Facilitation Committee in 2018, as well as an e-consultations website in 2017, where the public can comment on draft legislation before it is adopted.
- **The investment climate for foreign investors has improved,** though significant challenges to attracting foreign investment remain. The complex legal and regulatory system is difficult for foreign investors to navigate, though some progress has been made in this area. At the entity level, the RS has established district commercial courts to improve local contract enforcement. This saw the case backlog fall to 3 935 in 2019, down from 7 910 in 2017. The RS has also eased business registration procedures, reducing the time needed from 23 days to 3 and the number of procedures from 11 to 5, as well as reducing the cost. Both state-level and entity-level institutions have been targeting foreign investors through proactive campaigns. There have also been efforts to encourage investment for green growth, such as the adoption of the Law on the Use of Renewable Energy Sources and Efficient Cogeneration at the state level in 2014, which encourages private investment in electricity production. The entities have also been active in this area, with the FBiH adopting several laws and regulations, including the Law on Electricity and the Regulation on Incentive Fees to Promote Electricity from Renewable Energy Sources, while the RS has used the state-level law to strengthen its green growth framework.
- **Frameworks for developing pre-university education have been improved.** Most notably, Bosnia and Herzegovina developed a common core curriculum for pre-university education in 2018, which should provide a common framework for the development of curricula across the economy. A new state-level strategy on vocational education and training (VET) is being developed. Its adoption is greatly needed since the last VET strategy expired in 2015. It would provide for policies to strengthen VET curricula and standards to be co-ordinated across the economy's education systems. Another significant positive development was Bosnia and Herzegovina's participation in the 2018 Programme for International Student Assessment (PISA), providing essential information to measure student learning outcomes and the performance of the education system.
- **Efforts have been made to improve energy security and promote renewables.** By investing in key natural gas infrastructure expansion projects, Bosnia and Herzegovina aims to increase energy security by diversifying its import routes for natural gas, reducing its reliance on a single route. The economy has also strengthened its legislative and policy frameworks for developing non-hydro renewable energy generation, for which it has significant potential. New wind and solar projects were connected to the grid for the first time in 2018 and 2019 and are expected to increase the share of non-hydro renewables in the electricity generation mix. This should further strengthen energy supply security by increasing domestic generation. Progress reports monitoring the implementation of the National Renewable Energy Action Plan (adopted in 2016) were published in 2017 and 2019 and Bosnia and Herzegovina is in the process of drafting its National Energy and Climate Plan. This should integrate energy and climate objectives and ought to be adopted by the end of 2021.

Priorities

Despite these achievements, Bosnia and Herzegovina has made the least progress since the previous assessment and its performance is the lowest overall of all the WB6 economies. Priority dimensions for improvement are tourism policy; environment policy; science, technology and innovation; transport

policy; and digital society. In order to improve its performance in those areas Bosnia and Herzegovina should consider the following:

- **Improve tourism governance frameworks.** Tourism is becoming increasingly important for Bosnia and Herzegovina – its direct and indirect contribution to GDP increased by 6.85% from 2017 to 2019. The authorities will need to undertake key reforms to make the sector more competitive and to capitalise on its rapid growth. Vertical co-ordination and co-operation between the state level and entities in tourism policy making is weak, despite efforts to improve it (i.e. the creation of the Tourism Working Group in 2007). Many municipalities lack the financial resources to fully exploit their tourism potential and engagement with private sector stakeholders remains insufficient both at the state and local levels. Lack of policy co-ordination also means that the economy lacks an overall international tourism marketing strategy, reducing its global visibility as a tourist destination. The availability of a qualified workforce is also a challenge, contributing to Bosnia and Herzegovina's low rank in the Travel and Tourism Competitiveness Index (for example it fell six places in the human resources and labour market category in 2019). Tourism policy should thus also focus on education, specifically strengthening VET for tourism.
- **Do more to improve the environmental quality of life.** Even though Bosnia and Herzegovina has made some progress in the environment policy dimension since the last assessment, it continues to underperform and has the lowest score of the WB6 economies. Quality of life is affected by outdated water infrastructure, sometimes containing hazardous materials. Air quality is also poor; Bosnia and Herzegovina has one of the highest concentrations of air pollution in Europe. The mean annual exposure to particulate matter (PM_{2.5}) of 30 micrograms per cubic metre (µg/m³) is more than twice the World Health Organization's recommended highest levels (10 µg/m³), and higher than the averages in the EU (13.1 µg/m³), the OECD (12.5 µg/m³) and the WB6 economies (25.77 µg/m³). These factors have a negative impact on the health and general well-being of the population, and should be urgently addressed. The energy and transport sectors are heavy polluters, as well as the primary sources of Bosnia and Herzegovina's greenhouse gas emissions (70% and 23% of CO₂ emissions respectively). Reducing emissions from these sectors will thus be key to improving the environmental quality of life for Bosnia and Herzegovina's residents, as well as meeting its international commitments under the Paris Agreement.
- **Improve co-ordination on science, technology and innovation across all levels of government.** A variety of factors explain Bosnia and Herzegovina's underperformance in this policy dimension, but most notable is the lack of co-ordination and co-operation across the various government levels (state, entities and cantons). This factor also hampers the public financing of research and innovation as the absence of a clear co-ordinated policy framework makes it difficult to identify and optimise public investment opportunities. Overall, gross domestic spending on research and development has remained low, at 0.2% of GDP, in recent years. Increased co-operation between the entities and the state level should help to better co-ordinate international co-operation efforts and improve the allocation of funding. Brain drain is reducing human capital for research and development and efforts to counter this should be increased, including additional funding incentives.
- **Develop a tool to identify, select, prioritise and implement transport investment projects.** Although Bosnia and Herzegovina has a single project pipeline for transport projects, it needs further development, as it has not been updated since 2018. There are no economy-wide cost-benefit analysis guidelines for transport projects, or any accompanying survey, analysis and technical instructions. These need to be developed and updated every few years to help prioritise and control investment.

- **Increase digitalisation efforts.** The information and communication technology (ICT) sector in Bosnia and Herzegovina has significant potential but is challenged by a lack of qualified professionals. While this can partly be attributed to brain drain, the authorities should ensure that education curricula include relevant ICT skills and competencies. Bosnia and Herzegovina has done little to align with the EU's digital competence framework for students and professionals. There is also a lack of policy documents and support programmes for ICT promotion by the private sector. In order to stimulate the economic potential of the ICT sector, the authorities should look to develop such strategies and support programmes.

1: Please note that Dimension 5 (Competition policy) is excluded from the key findings section as it uses different scoring model (See the Scoring approach section for information on the assessment methodology).

Economic context

Key economic features

Bosnia and Herzegovina (BiH) is a small open economy with a diversified production and export base. Services account for the largest share of the Bosnian economy, contributing 55.7% to gross domestic product (GDP) and responsible for 50.3% of employment. Wholesale and retail trade dominate the services industry, along with public administration. At nearly 9.4% of GDP, the public sector in BiH is the largest in the region (United Nations, n.d.^[1]). Industry contributes 23.9% to GDP and is responsible for 31.7% of employment, with the highest contribution coming from the manufacturing sector (15.3% of GDP and 17.7% of employment) (United Nations, n.d.^[1]; ILO, 2020^[2]). Agriculture, forestry and fishing contributed only 5.6% to GDP in 2019, but still account for 18% of employment, which shows there is significant scope to boost agricultural productivity and achieve economy-wide productivity gains through the reallocation of labour from agriculture to other more productive sectors (World Bank, 2020^[3]).

Over the past decade, the growth drivers of Bosnia and Herzegovina's economy have diversified, but the economy remains mostly consumption driven, with strong contribution from the public sector. Between 2010 and 2020, the contribution of exports to GDP grew from 29.7% to 32%, driven by the growth in machinery and power exports, as well as higher service exports, including construction and tourism (European Commission, 2019^[4]; United Nations, n.d.^[1]). This led to a decline in the current account deficit from 9.5% of GDP in 2011 to 3% in 2019. The high growth in exports also led to a decline in consumption's share of GDP, although it remained high compared to regional and global peers, with public consumption accounting for 19.5% of GDP and private consumption 76% of GDP in 2019 (World Bank, 2021^[5]). The large public sector, inflated by the complex political and economic structure and the still significant state-owned enterprise (SOE) sector, represents a drag on the economy (see Structural economic challenges).

Over the past decade, the contribution of investment to GDP has been stagnant at below 20%, lower than most economies in the region. Bosnia and Herzegovina was also the lowest recipient of foreign direct investment (FDI) in the region over the past five years (2% of GDP between 2015 and 2019). The largest share of FDI inflows went into the non-tradable sector, including financial services, wholesale and retail trade, energy, and real estate; while export-oriented FDI went mainly to raw materials with limited value-added (Central Bank of Bosnia and Herzegovina, 2020^[6]). Moreover, most FDI inflows in recent years have been reinvested earnings into existing FDI investments, while greenfield investment has been very low and concentrated mainly in the tourism sector (European Commission, 2019^[4]). As a result, the structural transformation of the economy has been relatively limited over the past decade.

Bosnia and Herzegovina's economy is characterised by relatively weak productivity. Across all sectors, labour productivity, measured as output per worker, is less than one-third of the European Union (EU) average (World Bank, 2020^[3]). Moreover, the growth in productivity has slowed down considerably, reflecting limited gains from the reallocation of labour from less to more productive sectors, as well as

weaker sector productivity growth. This shows that significant structural constraints are preventing the flow of capital and other inputs to the most productive sectors and firms. These constraints include a fragmented market and challenging business environment, lack of skills, infrastructure gaps, and limited access to finance (see Structural economic challenges). Low productivity combined with high wage growth in the public and private sector have resulted in the weakening of labour cost competitiveness.

Table 21.1. Bosnia and Herzegovina: Main macroeconomic indicators (2015-2020)

Indicator	Unit of measurement	2015	2016	2017	2018	2019	2020
GDP growth ¹	% year-on-year	4.1	3.4	3.0	3.1	2.9	-4.5
GDP per capita ²	Current international \$	12.0	13.1	13.8	14.9	15.8	15.6
National GDP ²	USD billion	16.2	16.9	18.1	20.2	20.2	19.8
Inflation ¹	Consumer price index, annual % change	-1.0	-1.1	1.3	1.4	0.6	-1.1
Current account balance ¹	% of GDP	-4.9	-4.6	-4.7	-3.3	-3.0	-3.1
Exports of goods and services ¹	% of GDP	34.2	35.0	39.3	41.5	39.8	32.1
Imports of goods and services ¹	% of GDP	51.7	51.0	54.9	55.9	54.3	45.9
Net FDI ¹	% of GDP	1.7	1.8	2.2	2.9	1.9	1.8
Public and publicly guaranteed debt ³	% of GDP	41.9	42.3	37.7	35.6	34.5	39.6*
External debt ⁴	% of GDP	62.9	63.8	72.0	64.5	65.4	...
Unemployment ¹	% of total labour force	27.7	25.4	20.5	18.4	15.7	18.0
Youth unemployment ²	% of total labour force ages 15-24	63.2	55.0	46.5	39.3	34.0	...
International reserves ¹	in months of imports of G&S	6.8	7.2	7.1	7.3	7.8	10.0
Exchange rate (if applicable local currency/euro) ¹	Value	1.96	1.96	1.96	1.96	1.96	1.96
Remittance inflows ²	% of GDP	11.1	10.9	11.2	11.2	11.2	9.2
Lending interest rate ⁵	% annual average	5.79	5.24	4.38	3.79	3.29	3.07
Stock markets (if applicable) ¹	Average index	701	692	627	621	772	769

Note: G&S = goods and services; *estimates for 2020.

1. (EC, 2021^[7]) EU Candidate Countries' and Potential Candidates' Economic Quarterly (CEEQ) Q1 2021, https://ec.europa.eu/info/sites/default/files/economy-finance/tp048_en.pdf.

2. (World Bank, 2021^[8]) World Bank WDI data <https://databank.worldbank.org/source/world-development-indicators>.

3. (World Bank, 2020^[9]) World Bank Western Balkans Regular Economic Report <https://www.worldbank.org/en/region/eca/publication/western-balkans-regular-economic-report>.

4. (EBRD, 2020^[10]) *Transition Report 2020-21*, <https://2020.tr-ebrd.com/countries>.

5. (IMF, n.d.^[11]) IMF Data <https://data.imf.org/regular.aspx?key=61545855>.

Labour market performance has been improving in Bosnia and Herzegovina, but the outcomes are still weak relative to OECD and EU benchmarks. Employment remains low at just 38.5%, particularly for women (30.4%), whose labour force participation is also very limited at 37.44%. Unemployment (18%) is one of the highest in the region, and there is a very high share of long-term unemployed (76% as of 2019). Meanwhile, the share of youth not in education, employment or training (NEET) is 21.2% (World Bank, 2020^[3]). Weak job creation and limited opportunities are fuelling significant emigration, especially of young and highly educated people, which is further exacerbating skills gaps and limiting long-term growth perspectives.

To create more robust, sustainable and inclusive growth over the coming decade, Bosnia and Herzegovina needs to address the significant structural challenges that undermine domestic and foreign investment, global value chain (GVC) integration, and innovation. This includes reducing the fragmentation of the domestic market, improving the business climate, strengthening the skills of the population and reducing outstanding infrastructure gaps.

Sustainable development

Over the past decade, Bosnia and Herzegovina has made progress in reaching the targets of the United Nations' Sustainable Development Goal (SDG) Agenda 2030, but considerable challenges remain (Table 21.2). On the positive side, Bosnia and Herzegovina has achieved the 2030 SDG target in one area: poverty (SDG 1), where the headcount ratios (the proportion of the population living below the poverty threshold, which are set at USD 1.90 and USD 3.20 per day in BiH) below the 2030 targets. In all other areas, moderate or significant progress is still needed to reach the SDG targets by the end of this decade (Sachs et al., 2021^[12]).

Table 21.2. Bosnia and Herzegovina's progress towards achieving the SDGs

SDG	Current assessment	Trends
1 – No poverty	SDG achieved	On track or maintaining SDG achievement
2 – Zero hunger	Significant challenges remain	Stagnating
3 – Good health and well-being	Significant challenges remain	Moderately improving
4 – Quality education	Information unavailable	Information unavailable
5 – Gender equality	Significant challenges remain	Moderately improving
6 – Clean water and sanitation	Significant challenges remain	Moderately improving
7 – Affordable and clean energy	Significant challenges remain	Moderately improving
8 – Decent work and economic growth	Significant challenges remain	Moderately improving
9 – Industry, innovation and infrastructure	Significant challenges remain	Stagnating
10 – Reduced inequalities	Significant challenges remain	Information unavailable
11 – Sustainable cities and communities	Major challenges remain	Stagnating
12 – Responsible consumption and production	Significant challenges remain	Information unavailable
13 – Climate action	Significant challenges remain	Stagnating
14 – Life below water	Challenges remain	Moderately improving
15 – Life on land	Significant challenges remain	Stagnating
16 – Peace, justice and strong institutions	Significant challenges remain	Moderately improving
17 – Partnerships for the goals	Challenges remain	On track or maintaining SDG achievement

Source: (Sachs et al., 2021^[12]), *Sustainable Development Report 2021: the Decade of Action for the Sustainable Development Goals*, <https://s3.amazonaws.com/sustainabledevelopment.report/2021/2021-sustainable-development-report.pdf>.

Moderate challenges remain in two SDG areas: life below water (SDG 14) and partnerships for the goals (SDG 17). While marine biodiversity has improved, progress is needed to reduce marine pollution and improve the sustainability of fishing practices. With respect to partnerships for the goals, moderate progress is also needed to strengthen Bosnia and Herzegovina's national statistical system (Sachs et al., 2021^[12]).

Significant gaps remain in all other areas. This includes the SDG on hunger (SDG 2), where more progress is needed to reduce high and rising obesity levels and the high use of nitrogen fertiliser in crop production. In the area of health and well-being (SDG 3), performance is impacted by, for example, gaps in health coverage, the high prevalence of non-communicable diseases, high death rates attributable to air and ambient air pollution, and high traffic-related deaths. Regarding the SDG on clean water and sanitation (SDG 6), significant progress is needed to improve wastewater treatment, and some progress is needed to achieve universal access to basic drinking water services. In the area of affordable and clean energy (SDG 7), significant gaps remain regarding access to clean fuels and the emissions associated with the production of electricity and heating for households. Relatedly, the high emissions associated with energy consumption have a significant negative impact on sustainable cities and communities (SDG 11) and the climate-related SDG (SDG 13). High unemployment limits performance regarding the SDG on decent work and economic growth (SDG 8), while the SDG on industry, innovation and infrastructure (SDG 9) is negatively impacted by weaknesses in the trade and transport infrastructure, as well as low investment in research and development (R&D). Inequality (SDG 11), as measured by the Gini coefficient and the Palma ratio, remains above the SDG target (Sachs et al., 2021^[12]).

Structural economic challenges

Bosnia and Herzegovina faces a number of key structural challenges that undermine its competitiveness, investment and GVC integration.

Better skills are needed to foster economic upgrading and a competitive export-oriented economy

Bosnia and Herzegovina's economy suffers from deficiencies in human capital, which reflect weaknesses in the quality of education and its relevance to labour market needs.

- **Low education quality** is exemplified in student performance on international assessments such as the Programme for International Student Assessment (PISA), where Bosnia and Herzegovina is in the bottom quartile of participating economies (62 out of 78 economies). Fewer than half of BiH students attained the minimum level of proficiency across the three testing subjects (only 46% for reading, 42% for mathematics and 43% for science), which is well below the OECD average of over 75% for all three subjects (OECD, 2018^[13]).
- **High spending on education and very low student-to-teacher ratios** have not led to improved education quality. There is also high spending on non-teaching staff, who account for one-third of all staff in primary schools (World Bank, 2020^[14]). Therefore, more efficient and better targeted spending on education is needed to improve education outcomes.
- **Low enrolment rates relative to peer economies across all education levels**, from early childhood education to tertiary education, also negatively affect outcomes (Agency for Statistics of Bosnia and Herzegovina, n.d.^[15]).
- **There is a lack of alignment of education with labour market needs.** In the latest Business Environment and Enterprise Performance Survey (BEEPS), 24% of firms identified an inadequately educated workforce as a major constraint (World Bank, 2019^[16]). Meanwhile, in the 2019 Balkan Barometer survey, 30% of respondents noted that the skills acquired during their education did not meet the needs of their job. The most deficient skills noted in the survey included digital skills (32% of respondents), communication skills (30%) and other cognitive skills, including the ability to learn on the job (27%), and creativity, innovation and risk taking (27%) (Regional Cooperation Council, 2019^[17]). These gaps reflect deficiencies in education quality and relevance, especially in vocational education and training (VET) and tertiary education, as well as an underdeveloped adult education system to support the upskilling and reskilling of the population.
- **High emigration and brain drain** exacerbate skills gaps challenges, as does **low labour force participation** among certain groups, such as women and youth.

The fragmented market and complex business environment undermine investment and increase the costs of doing business

Over the past decade, BiH has made progress in reducing the regulatory and administrative burden on businesses; however, there are still many outstanding challenges that result in the relatively low ranking in the World Bank's Doing Business assessment relative to peer economies (90 out of 191 economies globally) (World Bank, 2020^[18]):

- **The fragmentation of the market** creates considerable additional administrative and operational burdens for businesses in Bosnia and Herzegovina. If a business wants to operate at the level of the entire economy, it must be registered in both entities – the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS) – and the Brčko District. Depending on the business, it may also need to obtain the same type of licence or other documentation multiple times to meet the legal and regulatory requirements of each entity. Doing business is further complicated by differing legislation across cantons within the same entity. For example, each of the ten cantons

in the FBiH have different regulations and administrative procedures (World Bank, 2017^[19]). Different quality control rules and procedures also make it more challenging to trade between entities, and progress on creating a single economic area has stalled due to political disagreements (European Commission, 2019^[4]).

- **The difficulties involved in starting a business and obtaining licences and permits** reflect the complexities of the market fragmentation described above. Starting a business in BiH is much more cumbersome and costly than in most economies in the world. According to the latest World Bank Doing Business assessment, where BiH is ranked 184 out of 190 economies on the indicator for starting a business, it takes on average about twice as many procedures to register a business in BiH than in peer economies in the Europe and Central Asia (ECA) region. Starting a business also takes eight times as long in BiH (80 days in BiH compared to 12 days for the ECA) and costs three times as much as in the average ECA economy (14% of income per capita in BiH compared to 4% in the ECA). Likewise, obtaining a construction permit is lengthier and costlier in BiH than in most global economies, and as a result BiH is ranked 173 out of 190 economies on this indicator in the Doing Business index (World Bank, 2020^[20]).
- **Contract enforcement is slow, costly and unreliable.** Contract enforcement takes on average 595 days, which is slower than the ECA average (495 days), and well behind global leaders (120 days). The process is slowed down by the overburdened court system, which has a significant backlog of cases, as well as the lack of specialised commercial courts (European Commission, 2019^[4]). The lack of alternative methods of dispute resolution also negatively impacts the speed and cost of enforcement. The cost of enforcement is high in BiH at 36% of the claim value, compared to the ECA average of 26.6% (World Bank, 2017^[19]).
- **Confidence is lacking in the judicial system's fair and impartial decision making**, which raises uncertainty in contract enforcement. In the latest Regional Cooperation Council (RCC) barometer survey, 60% of respondents stated that they do not trust the court system, while 70% stated that they do not believe that the judiciary is independent of political influence. Likewise, 76% of respondents stated that they do not believe the law is applied equally to everyone (Regional Cooperation Council, 2019^[17]).

Transport infrastructure deficiencies undermine investment, trade and GVC integration

- **Road and railway density is low compared to regional peers and the EU**, and the quality of infrastructure in both transport modes is relatively weak due to considerable underinvestment and inadequate maintenance (Eurostat, n.d.^[21]). Road infrastructure projects have been poorly selected and implemented (Atoyan et al., 2018^[22]). Underinvestment in the expansion, maintenance and upgrading of the outdated rail infrastructure is partly due to the lack of unbundling, whereby the two highly indebted, overstaffed and inefficient publically owned railway companies remain in charge of both the infrastructure and operations of the railways. The poor infrastructure also prevents the opening of the market for private operators (European Commission, 2019^[4]).
- **Access to finance** remains a significant obstacle to the investment, innovation and internationalisation of small and medium-sized enterprises (SMEs), as in most economies in the region. Over the past decade, improvements in macroeconomic and financial sector stability have helped credit growth in the private sector; however, although large enterprises and established SMEs are well served by the banking sector and have benefitted from lower interest rates and better lending conditions, most micro and small enterprises, as well as start-ups, remain underserved. Thus, even though over 95% of SMEs in Bosnia and Herzegovina own a bank account, only about 50% have a bank loan. The financing gap is particularly large for micro-enterprises, nearly 50% of which need, but are unable to get, external financing (World Bank, 2018^[23]). These enterprises usually cannot meet banks' stringent loan requirements, including high collateral requirements at over 212% of the loan amount (World Bank, 2020^[24]). Meanwhile, alternatives to bank lending are either very limited or non-existent – see Access to finance (Dimension 3).

Cross-cutting and sector-specific constraints undermine the growth of key sectors

- **Agriculture:** Agriculture is an important sector in Bosnia and Herzegovina, but its contribution to GDP is undermined by weak productivity. Agriculture, forestry and fisheries account for just 5.6% of GDP, but 18% of employment. As a result, output per agricultural worker in BiH is just over one-fifth of the output per worker in the EU. Productivity is undermined by high land fragmentation, limited access to technology and inadequate (rural) infrastructure – see Agriculture policy (Dimension 14).
- **Manufacturing:** Upgrading and diversifying the manufacturing sector could play a key role in boosting exports and GVC integration. Analyses of the capabilities embodied in the current export basket reveal considerable long-term potential for growth in the automotive industry (vehicle and engine parts), machinery and metal processing. Over the short to medium term there is growth potential in boosting exports of agro-food, chemicals, metal, and wood and paper products (OECD, 2019^[25]). The growth of the manufacturing sector is constrained by, for example, gaps in infrastructure, customs and logistics, lack of skills, and the business environment.
- **Information and communication technology (ICT) services:** This sector is relatively small, contributing just 5% to BiH's GDP, but has strong potential for further growth. As in other regional economies, it is constrained by, for example, the limited size of the domestic market, insufficient supply of skilled workers, weak collaboration between the sector and relevant educational institutions, and lack of access to finance, particularly financing for start-ups and high-risk venture capital.

The well-being of current and future generations is strongly impacted by environmental factors

- **Air pollution** is a critical challenge in urban centres in Bosnia and Herzegovina. Citizens are exposed to the second highest level of air pollution in the Western Balkan region, after North Macedonia, and Sarajevo suffers from one of the highest levels of air pollution in Europe. Air pollution is particularly acute in the winter months when heating from burning solid fuels compounds the polluting effects from other sources. The large share of old vehicles on the road further contributes to the pollution problem (OECD, n.d.^[26]).
- **Climate change** exacerbates the natural hazards to which Bosnia and Herzegovina is vulnerable. It is also expected to have a significant economic impact on the agriculture, water and hydropower sectors. However, the transition to a low-carbon economy is slow. Despite high potential in numerous renewable energy sources, including hydro, solar and wind power, Bosnia and Herzegovina remains highly dependent on fossil fuels for its energy supply. In 2017, coal accounted for over 60% of total primary energy generation. Moreover, the efficiency of energy consumption is relatively low, and estimates indicate that energy consumption could be reduced by 60% through energy efficiency related refurbishments in public and commercial buildings (World Bank, 2020^[14]).

More inclusive growth is needed to improve the well-being of all citizens

- Despite robust growth and poverty reduction over the past two decades, Bosnia and Herzegovina still faces many well-being challenges. Inequality has increased and poverty remains an important issue, with 17% of the population living below the national poverty line (World Bank, 2020^[3]). Regional disparities in poverty, access to services and well-being outcomes are also quite stark. Certain minority groups, such as the Roma, face considerable gaps in, for example, access to education and educational outcomes, access to health and public services, and adequate housing (UNICEF, n.d.^[27]).

COVID-19 has exacerbated structural challenges

Bosnia and Herzegovina's economy has been strongly impacted by the COVID-19 pandemic. In 2020, real GDP declined by 4.5%, driven by a sharp decline in exports (-7.6%), investment (-6.0%) and private consumption (-4.0%). The contraction was moderated by the decline in imports (-13.3%) and higher government spending (European Commission, 2021^[28]). The sectors most critically affected by the pandemic include wholesale and retail trade, transport, and accommodation services (Agency for Statistics of Bosnia and Herzegovina, 2020^[29]).

The labour market was also strongly affected by the crisis, even if the impact was moderated by fiscal support measures implemented by the government. The unemployment rate rose from 15.4% in 2019 to 18% in 2020 reversing almost entirely the gains of the previous year. Employment, meanwhile, declined by 2.8% due to the impact on the trade, accommodation and manufacturing sectors, continuing the decline of the previous year (European Commission, 2021^[28]).

Many of the abovementioned structural challenges have played a role in either amplifying the impact of the COVID-19 pandemic or limiting the scope of the policy responses to assuage its impact. The crisis has, therefore, provided important lessons on how to build more resilient economies and institutions:

- **Fiscal policy:** Governments around the world have taken rapid and unprecedented action to address the health crisis and the fall in economic activity caused by the outbreak of COVID-19. Containing and mitigating the spread of the virus has been the priority of many governments. With containment measures in place, immediate policy reactions have focused on alleviating hardships and maintaining the productive capacity of the economy (OECD, 2020^[30]). Among its responses to the COVID-19 pandemic, Bosnia and Herzegovina carried out a number of tax policies:
 - Flexible tax debt payments for companies that experienced more than a 20% drop in revenue as a result of COVID-19.
 - Wage subsidy scheme paid to the employer of BAM 245 (Bosnian mark; EUR 120) per month, per employee. To benefit from this scheme, businesses must have suffered a 20% drop of revenue as a result of COVID-19.
 - Exemption of corporate income tax (CIT) and personal income tax (PIT) payments for 2020.
 - Deferral of the interest rate for late payments of tax debts and suspension of enforcement proceedings until 30 July 2020.
 - Support for individuals and businesses that encounter difficulties for loan repayments due to COVID-19. Measures include a moratorium until the end of the state of emergency, a six month grace period and the approval of additional amounts to overcome liquidity difficulties.
 - Establishment of a public loan guarantee scheme with initial reserves of up to BAM 80 million (EUR 40 million).
 - Exemption of value-added tax (VAT), customs duties and other indirect taxes for imported vaccines, medicines and medical material.
 - Social security contribution (SSC) subsidy scheme of BAM 244 per employee for companies until the end of the state of emergency.
 - When comparing the six Western Balkan (WB6) economies, Bosnia and Herzegovina implemented a relatively wide set of responses to COVID-19. Its comprehensive COVID-19 response package broadly aligns with practices of OECD/G20 countries (OECD, 2020^[30]), which widely implemented wage subsidy schemes, public loan guarantee schemes or deferral of loan payments. This fiscal response has been critical in preventing a significant economic fallout from COVID-19, especially on labour market outcomes, but has resulted in considerable narrowing of the fiscal space. In the context of weaker prospective revenue in the wake of the crisis, particularly if recovery is slow, the need to improve the efficiency of public spending will be critical over the coming months, as will be the prioritisation of expenditure that can support

recovery and promote productivity growth and structural transformation for stronger and more resilient long-term growth. This includes increasing public investment, which has suffered significantly due to high and rising current expenditure. The crisis has also highlighted the importance of rebuilding fiscal buffers in the post-crisis period, which will involve the better management of expenditure and tackling some of the structural constraints that undermine revenue performance.

- **Innovation and technology adoption:** The COVID-19 crisis has starkly demonstrated the importance of firm adaptability to meet new challenges and changing circumstances. It has also revealed the advantages that firms have when they embrace digitalisation and modern practices. The resilience of the post-COVID-19 recovery will therefore depend on the extent to which the structural issues limiting firm innovation and technology adoption are addressed (see Structural economic challenges), and how much digitalisation and digital skills become mainstreamed.
- **Access to finance:** The crisis has highlighted the significance of having a well-developed and diversified financial sector that can respond to the financing needs of enterprises not only in times of crisis, but also during the recovery phase. As in the rest of the region, the main instruments for providing additional liquidity for enterprises during the crisis came via support from the government through subsidised lending or lending guarantees. A robust financial sector comprised of diversified financial institutions that can provide financing for riskier and innovative ventures, not just established enterprises, will be very important during the recovery phase and beyond.
- **Informality:** The large size of the informal sector, and significant informal employment within the formal sector, have limited the scope of the measures aimed to protect the income and employment of those in the most affected sectors (ILO, 2020^[31]). Informality is widespread in the sectors most affected by the crisis, including retail trade and tourism (ILO, 2020^[31]), and those involved have not been able to benefit from government subsidies, favourable loan terms and loan guarantees, and other support measures. Developing a more resilient economy also depends on how incentives for formalisation can be enhanced, and the oversight and sanctioning of non-compliance can be improved.

EU accession process

Bosnia and Herzegovina began the process of EU accession in July 2008 with the signing of the Stabilisation and Association Agreement (SAA) and the entry into force of the Interim Agreement on Trade. The SAA entered into force in June 2015, and Bosnia and Herzegovina submitted its EU membership application in February 2016. Bosnia and Herzegovina currently holds the status of “potential candidate country for EU accession”.

The European Commission adopted its Opinion on Bosnia and Herzegovina’s EU membership application in May 2019, identifying 14 key priorities for the economy to fulfil to open EU accession negotiations. The EU Council endorsed the Opinion and key priorities in December 2019. The Opinion constitutes a comprehensive roadmap for deep reforms in the areas of democracy/functionality, the rule of law, fundamental rights and public administration reform (European Commission, n.d.^[32]). The EU and BiH authorities meet annually to discuss a wide range of policy issues and agree on follow-up actions. Progress reports assess the readiness of BiH to move closer to the EU. The findings and recommendations published in this Competitiveness Outlook provide the monitoring and guidance needed for Bosnia and Herzegovina to prepare and meet the requirements of its candidate status, and provide a good basis for assessing the critical challenges that the economy faces as a starting point for the development of its Economic Reform Programme (Box 21.1).

Box 21.1. Economic reform programmes

Since 2015, all EU candidate countries and potential candidates prepare Economic Reform Programmes (ERPs) which play a key role in improving economic policy planning and steering reforms to sustain macroeconomic stability, boost competitiveness, and improve conditions for inclusive growth and job creation. The ERPs contain medium-term macroeconomic projections (including for GDP growth, inflation, trade balance and capital flows), budgetary plans for the next three years and a structural reform agenda.

The structural reform agenda includes reforms to boost competitiveness and improve conditions for inclusive growth and job creation in the following areas:

1. Public Financial Management
2. Green transition
3. Digital transformation
4. Business environment and reduction of the informal economy
5. Research, development and innovation
6. Economic integration reforms
7. Energy market reforms
8. Transport market reforms
9. Agriculture, industry and services
10. Education and skills
11. Employment and labour market
12. Social protection and inclusion
13. Healthcare systems

The structural reforms part of the ERPs is organised in two parts:

- A first part identifies and analyses the three key challenges across those 13 areas. The identification and prioritisation of key challenges imply a clear political commitment at the highest level to address them and the ERPs should propose a relevant number of reform measures to decisively tackle each of them in the next three years.
- A second part provides an analysis of the remaining areas (not included as key challenges) and may propose additional reforms to address them.

The European Commission and the European Central Bank then assess these programmes, which form the basis for a multilateral economic policy dialogue involving the enlargement economies, EU Member States, the Commission and the European Central Bank. The dialogue culminates in a high-level meeting during which participants adopt joint conclusions that include economy-specific policy guidance reflecting the most pressing economic reform needs. The findings of the Competitiveness Outlook provide guidance to the six Western Balkans EU candidates and potential candidates in identifying the key obstacles to competitiveness and economic growth, and in developing structural reform measures to overcome them.

Source: (European Commission, 2021^[33]), Guidance for the Economic Reform Programmes 2022-2024 of the Western Balkans and Turkey, https://ec.europa.eu/neighbourhood-enlargement/sites/default/files/erp_2022-2024_guidance_note.pdf; (European Commission, 2018^[34]), Economic Reform Programmes: Western Balkans and Turkey, <https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/20180417-erp-factsheet.pdf>.

EU financial and development support

The EU represents the largest source of external financial assistance in Bosnia and Herzegovina. Since 2007, the EU has provided EUR 1.19 billion in assistance aimed at, for example, strengthening democracy and the rule of law; competitiveness, innovation, agriculture and rural development; and education, employment and social policy. EUR 2.4 billion has also been provided through loans from the European Investment Bank (EIB) since 1999. The Western Balkans Investment Framework (WBIF) has provided EUR 284.3 million in grants that have leveraged investments of an estimated EUR 3.6 billion (European Commission, 2021^[35]).

In addition to grant funding and lending, the EU also provides important support through guarantees that support public and private investment by reducing the risks and costs associated with those investments. The new Western Balkans Guarantee Facility is expected to mobilise up to EUR 20 billion in investment over the coming decade (European Commission, 2020^[36]).

The EU's Connectivity Agenda seeks to support investments in sustainable transport and clean energy. Set up under the WBIF, the latest package, which was presented at the Western Balkans Summit in Sofia on 10 November 2020, completes the delivery of the EU's 2015 pledge to finance EUR 1 billion of investment in support of better connectivity in the Western Balkan region. It also represents the first step in the implementation of the flagship projects under the EU's Economic and Investment Plan for the region, from which Bosnia and Herzegovina is expected to receive up to EUR 144.3 million between 2021 and 2024 (European Commission, 2020^[37]).

The EU has also been instrumental in supporting Bosnia and Herzegovina's response to the COVID-19 pandemic. EUR 80.5 million in bilateral assistance from the Instrument for Pre-Accession Assistance (IPA) 2014-2020 was provided to BiH to cover the urgent needs of the health sector and to support the economic and social recovery following the crisis. EUR 455 million was also provided to support economic recovery through the regional economic reactivation package. BiH and other Western Balkan economies have also received aid to access COVID-19 vaccines (EUR 70 million), as well as EUR 7 million of European Commission/World Health Organization joint assistance to support vaccination readiness and health sector resilience (European Commission, 2021^[35]).

Scope and methods

Process

Following the first two Competitiveness Outlook assessments, published in 2016 and 2018, the third Competitiveness Outlook assessment cycle for the WB6 economies was launched virtually (due to the COVID-19 pandemic) on 3 April 2020. The OECD team introduced Bosnia and Herzegovina's Competitiveness Outlook State-level, Entity and Statistical Office Co-ordinators² to the new digitalised assessment frameworks (see Assessment methodology and process chapter for details). The two primary documents for assessing each of the 16 policy dimensions – the qualitative questionnaire and statistical data sheet – were explained in depth, giving particular attention to new questions and indicators. The OECD team also explained digital solutions to be used to disseminate the material together with the detailed guidelines, tutorials and information on the assessment process, methodology and timeline.

Following the launch of the assessment, the Ministry of Foreign Trade and Economic Relations disseminated the materials among all Policy Dimension Co-ordinators and Statistical Office contact points at the state level, in the FBiH and the RS. Where additional guidance was needed, the OECD team held teleconferences with Dimension Co-ordinators and Statistical Office contact points in April and May 2020.

All Dimension Co-ordinators and Statistical Office contact points completed the assessment between April and May 2020. They assigned a score (see Scoring approach) to each qualitative indicator used to assess

the policy dimension in question, accompanied by a justification. The completed assessments (qualitative questionnaires and statistical data sheets) were returned to the OECD team between May and July 2020.

The OECD reviewed the inputs and, where necessary, requested additional information from the Ministry of Foreign Trade and Economic Relations, Policy Dimension Co-ordinators, and Statistical Office contact points. The updated assessment materials were sent back to the OECD between July and September 2020. In addition, the OECD organised policy roundtable meetings between October and November 2020 to fill in any remaining data gaps, to get a better understanding of the policy landscape, and to collect additional information for indicators where necessary.

Based on the inputs received, the OECD compiled the initial key findings for each of the 16 policy dimensions. It then held consultations on these findings with local non-government stakeholders (including chambers of commerce, academia and NGOs) in November 2020. As a follow up, the OECD presented the preliminary findings, recommendations and scores to the Competitiveness Outlook State-level Co-ordinator, Entity Co-ordinators,³ Policy Dimension Co-ordinators and Statistical Office contact points at a virtual meeting on 10 February 2021. The draft Competitiveness Outlook economy profile of Bosnia and Herzegovina was made available to the authorities in Bosnia and Herzegovina for their review and feedback from late-February to mid-March 2021.

Scoring approach

Each policy dimension and its constituent parts are assigned a numerical score ranging from 0 to 5 according to the level of policy development and implementation, so that performance can be compared across economies and over time. Level 0 is the weakest and Level 5 the strongest, indicating a level of development commensurate with OECD good practice (Table 21.3).

For further details on the Competitiveness Outlook methodology, as well as the changes in the last assessment cycle, please refer to the Assessment methodology and process chapter.

Table 21.3. Competitiveness Outlook scoring system

Level 5	Level 4 plus independent impact evaluation. Results of monitoring and impact evaluation inform policy framework design and implementation updates in line with OECD good practice
Level 4	Level 3 plus evidence that the framework is monitored and, if necessary, adjusted accordingly
Level 3	Level 2 plus some concrete indications that the policy framework is being implemented effectively
Level 2	Framework specifically addressing the policy area concerned is solidly in place, officially adopted by the government or parliament (where applicable). The framework includes policy features necessary for it to have an impact
Level 1	Existing draft or pilot policy framework with signs of government activity addressing the policy area concerned
Level 0	No framework (e.g. law, institution, project, initiative) exists for the policy topic concerned

Exceptions

Unlike the other 15 policy dimensions, competition policy (Dimension 5) is assessed using yes/no answers to 71 questions in a dedicated questionnaire. A “yes” response (coded as 1) indicates that a criterion has been adopted, whereas a “no” (coded as 0) indicates the criterion has not been adopted. The overall score reflects the number of criteria adopted. Moreover, some qualitative indicators which have been added to this edition of the assessment for the first time, are not scored due to the recent character of the policy practice they capture and the unavailability of relevant data.

Investment policy and promotion (Dimension 1)

Introduction

Bosnia and Herzegovina's performance in the investment dimension has improved since the last assessment (Figure 21.1). The economy's score has increased from 2.2 in the 2018 Competitiveness Outlook to 2.7 in the 2021 assessment, with progress made on both investment policy and investment promotion and facilitation. However, Bosnia and Herzegovina still scores low in comparison to the other WB6 economies, ranking fifth before Kosovo (Table 21.4).

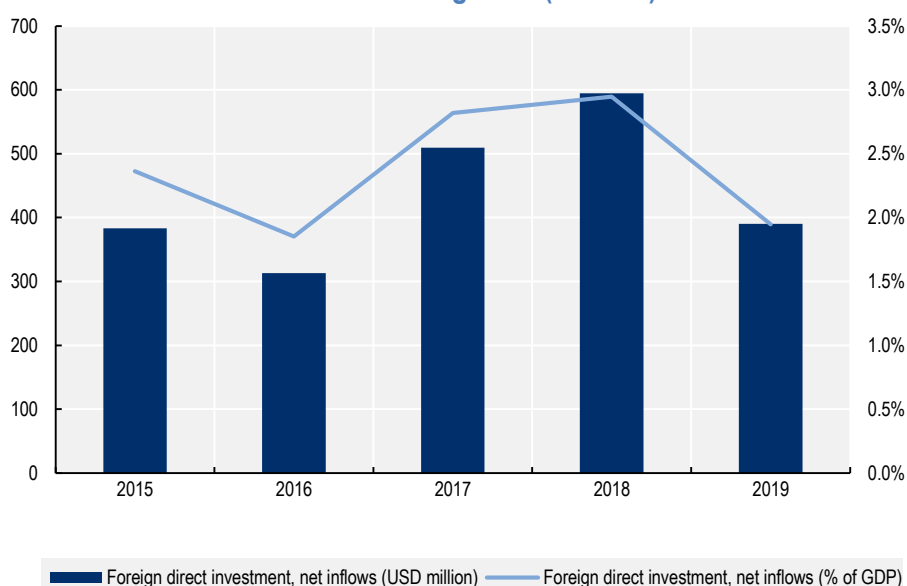
Table 21.4. Bosnia and Herzegovina's scores for investment policy and promotion

Dimension	Sub-dimension	Score	WB6 average
Investment policy and promotion dimension	Sub-dimension 1.1: Investment policy framework	2.9	3.2
	Sub-dimension 1.2: Investment promotion and facilitation	2.7	3.0
	Sub-dimension 1.3: Investment for green growth	2.0	2.0
Bosnia and Herzegovina's overall score		2.7	3.0

State of play and key developments

In 2019, Bosnia and Herzegovina attracted USD 390 million in net FDI inflows, representing 1.9% of its GDP (Figure 21.2). In relative terms, this performance is well below other WB6 economies: Montenegro (8.4%), Serbia (8.3%), Albania (8.2%), and Kosovo and North Macedonia (3.8%). However, the performance of BiH remains slightly better than similar “upper middle-income” economies,⁴ which average 1.6% of GDP, and the OECD average of 1.5%. The stock of portfolio investment in 2019 totalled USD 8.8 billion. Manufacturing (34% of total FDI stock) and banking (25%) are the largest beneficiaries of FDI, followed by telecommunications and trade (12% each). In terms of the origin of FDI, most investment originates in Austria, Croatia, Serbia, Slovenia and the Netherlands (World Bank, 2020^[3]).

Figure 21.2. Net FDI inflows to Bosnia and Herzegovina (2015-19)



Source: (World Bank, 2020^[3]), *World Development Indicators*, <https://databank.worldbank.org/source/world-development-indicators>.

StatLink  <https://doi.org/10.1787/888934255475>

Sub-dimension 1.1: Investment policy framework

Overall, Bosnia and Herzegovina's **legal framework for investment** activities and conduct of business is complex and lacking clarity. The economy is decentralised and entities have a high degree of autonomy in setting their own investment policies, regulations and institutions. The economy's framework for attracting FDI is harmonised and coherent overall, as the Law on Foreign Direct Investment in Bosnia Herzegovina and the entities' foreign investment laws are aligned on key principals, and the three laws are virtually uniform (UNCTAD, 2015^[38]). Entity-level foreign investment laws provide more detailed provisions to facilitate implementation. However, secondary legislation and regulations affecting business activities can differ at the entity and canton levels for both local and foreign investors.

The economy is trying to improve the regulatory framework at both the state and entity level. At the state level, the Ministry of Foreign Trade and Economic Relations (MoFTER) implements FDI policy reforms, undertakes activities to remove regulatory and administrative barriers to doing business, monitors FDI flows, and undertakes activities to improve the investment climate in order to create a more favourable business environment for foreign investors. At the entity level, the Ministry of Economy and Entrepreneurship of Republika Srpska, which is also responsible for activities aimed at stimulating foreign investment, is notably implementing a regulatory impact assessment procedure for its legislation that includes the impact of legislation on the business environment.

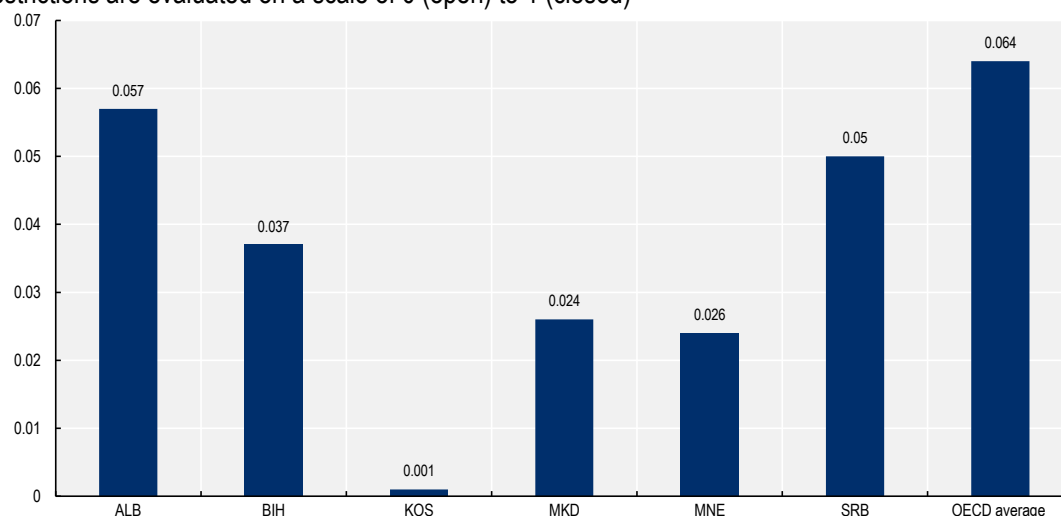
Public involvement in policy making varies, as the legal framework is uneven across the economy and is not applied consistently. The meaningful and systematic participation of stakeholders in policy making is hindered by the absence of a strategic framework for co-operation with civil society. Although public consultations and debates are organised for each law to enhance public oversight in Republika Srpska, the European Commission reports that transparency and access to information are lacking in the general economy, as "the legislative framework does not fully establish standards for monitoring and reporting on key government planning documents at each level of government, thus preventing public scrutiny over government work" (Bosnia and Herzegovina, EU report, 2020) (European Commission, 2020^[39]).

In Bosnia and Herzegovina, the market is open and **exceptions to national treatment** are limited. The economy's score in the OECD FDI Regulatory Restrictiveness Index (Figure 21.3), which assesses and benchmarks market access and exceptions to national treatment, was 0.037 in 2019, below the OECD average of 0.064 (a low score indicates a less restrictive regime). The economy's rules regarding foreign investors are unlikely to constitute a major impediment to attracting investments. The economy maintains some restrictions, primarily for arms production in the military and in the media sector, where foreign ownership should not exceed 49% of equity. However, if the government finds that investment in these sectors has not violated the economy's security, the amount of investment may go over 49%. Real estate remains another restrictive sector, as the economy maintains discriminatory restrictions to real estate ownership by legal entities established abroad. Foreigners must register as a local company to purchase property, or be a citizen of an economy with a reciprocal land ownership agreement. The ownership of agricultural land is not permitted for either domestic or foreign investors.

The state and the entities do not provide a negative list of activities that are restricted or conditioned for foreign investors, and the economy could benefit from clarifications and improvement of the legibility of the legal framework for foreign investors that outline which discriminatory conditions apply. Foreign investors still need to review many sectoral laws and regulations to understand the applicable market access and treatment conditions, and English versions of legislation are not always available on the official websites.

Figure 21.3. FDI Regulatory Restrictiveness Index (2019)

Restrictions are evaluated on a scale of 0 (open) to 1 (closed)



Source: (OECD, 2020^[40]), *FDI Regulatory Restrictiveness Index (database)*, <http://www.oecd.org/investment/fdiindex.htm>.

Investor protection against expropriation without fair compensation is guaranteed at the state level by the Law on the Policy of Foreign Direct Investment of Bosnia, which stipulates that expropriation can occur only when in the public's interest. Additional protection is also enshrined in the Constitution of Republika Srpska and its Law on Foreign Investment, and the Law on Foreign Investment for the Federation of Bosnia and Herzegovina.⁵ The economy has also signed a large number of bilateral investment treaties that constitute an additional layer of protection for foreign investors.

Expropriations are under the competence of the entities, which provide additional details on the execution of expropriation, compensation fees and judicial resources in their legislation. The laws on expropriation⁶ at the entity level clearly define the modalities and procedures of the expropriation, as well as the calculation of compensation and recourses. For instance, in the FBiH the Law on Expropriation stipulates that before making a decision on expropriation, the body in charge of the expropriation shall hear the owner of the real estate about the related facts. It also provides for a two-month deadline to agree on a compensation fee before the matter is transferred to a competent court. Meanwhile, RS recognises the concept of indirect expropriation in its Law on Expropriation and its Law on Out-of-Court Procedure, which regulates the procedure for determining compensation for expropriated real estate if the parties do not reach an agreement on the amount of compensation in accordance with the Law on Expropriation.

The business community does not perceive unlawful expropriation to be a major concern in Bosnia and Herzegovina. Risks for companies are mostly related to the unpredictability of the legal framework, the inconsistent application of laws and, at times, the modification of existing contracts with foreign companies by the authorities. Concerns have been raised over land or property ownership, where disputes can arise due to the lack of clarity of titles and cadastres. While this does not lead to expropriation risks, it weakens the overall environment for property protection and sends a less reassuring signal to prospective investors. However, relevant institutions in Republika Srpska are making additional efforts to reduce inconsistencies and clarifications on ownership and real estate through the establishment of a single, reliable and up-to-date record on real estate and ownership rights. Although efforts have been made to establish a single register since the adoption of the Law on Survey and Cadastre of Republika Srpska in 2012, there is no update on implementation progress for this assessment cycle.

Foreign investors have the same rights and remedies before the national court system as domestic investors. The justice system has been going through a comprehensive and thorough overhaul to align with EU standards. A 2014-2018 strategy for justice reform was adopted that included reforms aimed at supporting economic growth by improving the effectiveness, efficiency and transparency of the judiciary to ensure the faster registration of business entities and resolution of disputes between business entities, as

well as the improvement of areas defining issues of bankruptcy and liquidation of business entities and protection of property rights. However, progress implementing this strategy has been difficult as it has encountered resistance from political actors and the judiciary itself.

Commercial courts and justice departments often lack sufficient resources and adequately trained judges to handle specialised commercial cases. Procedures for enforcing contracts remain overly bureaucratic and cumbersome, and contract disputes are often not resolved quickly or cost effectively. This is illustrated by the economy's ranking in the enforcing contracts dimension of the 2020 Doing Business index (93 out of 190 economies) (World Bank, 2020^[3]). The judiciary also suffers from a substantial backlog in court cases and problems establishing property rights, in particular real estate registration in some areas (European Commission, 2020^[39]).

Some progress at the entity level to improve contract enforcement has been recorded. For instance, Republika Srpska has established six district commercial courts that, among other things, have jurisdiction over property rights and SMEs in the entity. Meanwhile the Law on Civil Procedure regulates the small claims procedure if the claim does not exceed BAM 5 000 (approximately USD 3 000) in cash. In 2019, the number of backlogged cases in the business department of the district commercial courts was 3 935, down from 6 240 in 2018 and 7 910 in 2017. The percentage of unresolved cases in relation to the total number of pending cases in 2019 was 33.3%. Republika Srpska states that judges in commercial district courts must have at least five years' experience as a judge, prosecutor, lawyer or other relevant legal experience after passing the bar examination. Judges and public prosecutors are regularly trained at a public institution, the Centre for Education of Judges and Public Prosecutors, on the topic of commercial disputes.

Bosnia and Herzegovina's legislation offers **dispute settlement** options including alternative dispute resolution mechanisms and has shown a pro-arbitration stance, which is likely to reassure foreign investors that they can easily enforce their rights and contracts in the event of a dispute. The economy has ratified the Convention on the Settlement of Investment Disputes between States and Nationals of Other States (ICSID Convention), and the 1958 Convention on the Recognition and Enforcement of Foreign Arbitral Awards (New York Convention), which means that foreign arbitral awards are recognised in the economy. There have only been four cases of investor-state dispute being brought before international arbitration, mainly involving large investors.

Bosnia and Herzegovina has 39 bilateral investment treaties in place, most of which were concluded around 15-20 years ago and do not contain modern provisions such as the right of the state to regulate, more precise definitions of fair and equitable treatment or indirect expropriation, transparency in arbitral procedures, exceptions from free transfers, standards of labour, health and environment, corporate social responsibility, and promotion of foreign investment (UNCTAD, 2020^[41]). The Council of Ministers has set up a moratorium on the conclusion of new investment treaties until the model treaty is revised to reflect modern provisions, including those related to the investment-state dispute mechanism (in line with EU standards and international best practice). Bosnia and Herzegovina has also established a Permanent Negotiating Body for the Peaceful Resolution of International Investment Disputes, prior to which the economy attempted to address the problems and concerns of investors in aftercare programmes, or ad hoc.

At the entity level, additional measures are provided for alternative dispute mechanisms, but their use remains very low. In Republika Srpska, foreign courts, foreign commercial courts and foreign arbitrations are recognised by the competent district courts. In addition to the Law on Civil Procedure, the Law on the Chamber of Commerce established the Foreign Trade Arbitration, the Arbitration and the Court of Honour to handle investor disputes. Moreover, Article 25 of the Law on Foreign Investments of Republika Srpska stipulates that foreign investment disputes should be resolved before these competent courts unless it is otherwise agreed to use arbitration or substitute courts. However, the overall use of alternative dispute mechanisms in the economy remains low, and further alignment with EU standards and best practices is necessary (European Commission, 2020^[39]).

Bosnia and Herzegovina has a sound **intellectual property (IP) rights legal framework**. It is a member of the World Intellectual Property Organization (WIPO) and adheres to the main international treaties and conventions on IP rights, such as the Patent Co-operation Treaty, the Paris Convention, the Madrid Protocol and the Hague Agreement. It has progressively introduced IP-specific legislation over the past ten years to align with EU standards and requirements. Regarding copyright and neighbouring rights, the legislative framework is largely aligned with the EU *acquis* (European Commission, 2020^[39]). The Institute for Intellectual Property of Bosnia and Herzegovina (IIP) operates as an independent administrative body and is the main body responsible for IP implementation and promotion. The institute has a large mandate that includes IP registration, participation in IP policy, legislation making and awareness raising. It is also tasked with the co-ordination of IP implementation and enforcement in the economy. The IIP operates in compliance with the main international conventions and agreements on intellectual property ratified by the economy, and its operations are comparable to international standards. For example, a patent can be obtained within 2.5 to 4 years from the date of filing, the registration of the trademark right is 18 months and the time for the registration of industrial designs is below 6 months. The institute operates an online platform available in English for submitting applications and payments of fees and costs, a help desk, and a database for searching. Its website also contains key legislation, the necessary information related to intellectual property protection procedures, and examples of patent applications. The IIP keeps a separate register for each of the publicly available industrial property rights.

IP implementation and enforcement remains challenging in Bosnia and Herzegovina. IP enforcement is particularly problematic as enforcement agencies and the judicial system have insufficient capacity and resources, and there is limited co-operation. In 2019, the economy adopted the Strategy for the Enforcement of Intellectual Property Rights in Bosnia and Herzegovina for the period 2018-2022, which sets out guidelines and measures to reinforce the development and improvement of the legislative and institutional framework for IP enforcement, as well as the establishment of inter-institutional co-operation. In February 2020, the Council of Ministers adopted a decision to establish an Inter-agency Co-operation Body for the Acquisition and Enforcement of IP Rights. However, progress to mobilise the body has been slow as the strategy has yet to be implemented, and prosecutors, judges and court panels handling cases involving intellectual property law need to be more specialised to handle them more efficiently and consistently (European Commission, 2020^[39]).

Intellectual property rights awareness raising and access to information is lacking in the economy. There is generally little awareness of IP rights and obligations in Bosnia and Herzegovina. The IIP regularly organises ad hoc awareness-raising workshops on IP rights and protection matters, but lacks the resources and capacity to do so on a systematic or far-reaching basis.

Sub-dimension 1.2: Investment promotion and facilitation

Bosnia and Herzegovina's **investment promotion agency structure and strategy** needs streamlining, and there needs to be better inter-institutional co-operation between the entities. The Foreign Investment Promotion Agency of Bosnia and Herzegovina (FIPA) is a state agency mandated with investment promotion. According to the law that established FIPA, the agency reports to the Council of Ministers. The FIPA Steering Board is composed of nine members: two representatives of the Council of Ministers, one member of each entity, one representative of the foreign trade chamber, two representatives of the business community of each entity and two representatives of foreign investors. It proposes the strategic goals of the agency in co-operation with the Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, entity governments, and the Brčko District. The board also proposes business and action plans and oversees strategy implementation. FIPA prepares medium-term plans and annual work plans with specific goals and objectives, and reports on the realisation of planned activities. These plans and reports are approved by the Council of Ministers.

FIPA is understaffed, with only seven staff members working on investment promotion activities. Staff report that the top three challenges they face in the execution of their mission are inadequate resources,

lack of political support and inadequacy/instability of mandate. The agency's work also suffers from the absence of formal co-ordination mechanisms between the relevant and numerous bodies involved in FDI attraction activities, including the Ministry of Foreign Affairs, MoFTER, the foreign trade chamber, and entity governments and ministries. The Ministry of Economy and Entrepreneurship of Republika Srpska also lacks sufficient resources to cover its investment promotion duties; however, it is a member of the FIPA steering board and regularly submits updated information on reform projects, promotion projects and promotional materials.

Investment promotion activities are conducted at state and entity levels. For instance, the Ministry of Economy and Entrepreneurship of Republika Srpska conducts investment promotion and export promotion activities that include attracting foreign investment, post-investment care, monitoring and evaluation of realised investments, and the creation and maintenance of a single database with resources (projects/locations) attractive to foreign investors.

FIPA assists foreign investors seeking partnerships with local firms or local suppliers on an ad hoc basis. It provides investors with useful sectoral information and data, and organises events connecting foreign and local firms. However, creating and reinforcing linkages between foreign affiliates and local enterprises is primarily conducted at the entity level. For instance, the Strategy for the Development of Small and Medium Enterprises of Republika Srpska for the period 2016-2020 supports cluster development through the identification of potential cluster initiatives,⁷ and supports their development and functioning by reinforcing linkages with foreign firms and universities.

Investment facilitation services and activities can improve the relatively complex business environment in Bosnia and Herzegovina, but there are challenges involved as regulations differ among the entities and between cantons. This is reflected in the 2020 World Bank's Doing Business Index, which ranks BiH 90 out of 190 economies, well behind other WB6 economies. Establishing a business in BiH can be an extremely burdensome and time-consuming process for investors. Based on the Index, the economy is among the most difficult environments in the world with regards to starting a business (ranking 184 out of 190 economies) (World Bank, 2020^[3]). For example, it takes 80 days to start a business in Bosnia and Herzegovina compared to 15 days in North Macedonia, 7 days in Serbia and 4.5 days in Albania. Investors also report difficulties dealing with construction permits and registering property, as entities, cantons and municipal levels of government each establish their own laws and regulations on business operations, which creates redundant and inconsistent procedures that lead to inefficiencies and corruption.

At the state level, government efforts have included the recent reduction of costs related to the establishment of businesses, as well as the acceleration of the creation of one-stop shops in all administrative units. FIPA has a limited investment facilitation role as it does not have a mandate to register a company for an investor or obtain permits and licences, but acts as an intermediary body to help investors navigate the economy's complex administration system. The agency does, however, play an important role in promoting and maintaining public-private dialogue and collecting private sector feedback, notably regarding the business environment and the challenges faced by businesses.

Key efforts and investment facilitation activities are operated by the entities. For instance, Republika Srpska has operated a business registration one-stop shop at the Agency for Intermediary, IT and Financial Services since 2013, and through its 11 regional offices. Ongoing reforms have led to a significant reduction in the time necessary for business registration, from 23 to 3 days, as well as a reduction in the number of procedures from 11 to 5. The cost of starting a business has also been reduced. For instance, for a single-member limited liability company, registration costs range from EUR 50 to 100, down from EUR 600 to 750. The online registration of business entities (for limited liability companies and entrepreneurs) is in the final stage of development. Republika Srpska has also developed a comprehensive electronic database of administrative procedures and formalities for business activities, and all legislation is subject to a regulatory impact assessment process, which, since 2019, pays attention

to administrative burdens for business entities and invites the Ministry of Economy and Entrepreneurship to provide an opinion on the implementation of regulation in this context.

Bosnia and Herzegovina has developed solid **investor targeting** strategies and actions plans. FIPA focuses primarily on promoting the image of the economy as an attractive investment destination for foreign investors. Using the network of embassies and representations, FIPA conducts missions abroad aimed at economy branding and promoting key economic sectors in general, while initiating contacts with potential investors. In co-operation with the International Financial Corporation and the World Bank, FIPA and the FBiH launched an outreach programme in 2016 targeting investment in the agriculture and automotive industries. At the state level, Bosnia and Herzegovina has successfully conducted three outreach missions to Italy, Germany and the Netherlands, with one more postponed due to COVID-19. FIPA aids the FBiH with the implementation of investor targeting programmes and aftercare support, while RS conducts outreach missions independently.

Investor targeting activities are more actively conducted at the entity level. For instance, Republika Srpska defined key sectors for attracting foreign investment, namely agriculture and food, industry, renewable energy, tourism and ICT, in its Investment Strategy 2016-2020. In 2017, it began a more targeted approach through outreach campaigns, for example in the fruit and vegetable processing sector, where it targeted German companies in 2017 and Austrian companies in 2018. The Ministry of Economy and Entrepreneurship also organised training for local self-government units in investor outreach and proactive investor aftercare in 2018, and is co-operating with World Bank training in this area.

Bosnia and Herzegovina's **investor incentives** regime is complex and multi-layered. At the state level, incentives provided to investors are limited and primarily concern customs exemptions on the import of foreign investors' equipment⁸ as part of shared capital. Most incentives are managed at the entity level. Tax incentives for investment are not consolidated under the authority of one government body, as incentives related to indirect taxation are at the state level of responsibility and incentives for direct taxation are under the competence of the entities. The economy has nevertheless established some mechanisms aimed at avoiding overlaps and inconsistencies in the application of tax incentive policies. At the state level, the State Aid Council publishes information on the amount of state aid provided every year, but statements on the individual names or companies of the largest beneficiaries are not available.

At the entity level, the Federation of Bosnia and Herzegovina provides tax incentives for investors in its four active free economic zones, which function as fully private organisations. Free trade zones are part of the customs territory of FBiH and have the status of a legal entity. The users of free zones do not pay taxes and contributions, except those related to salaries and wages. Investors are free to invest capital in the free zone, transfer their profit and re-transfer capital with no charge. To ensure the development objective of existing free zones, investors must submit annual reports on operations to the entity ministries and MoFTER. The ministries check if companies based in the free zones meet the requirement that the percentage of exported goods must be over 50%.

In Republika Srpska, the Law on Free Zones was adopted in February 2021. In addition to this law, Republika Srpska provides a wide range of investment incentives to investors. All incentives are listed on the website of the Ministry of Economy and Entrepreneurship and include: 1) funds for the development of the economy, including incentives for increasing the salaries of employees in business entities and incentives for direct investments; 2) incentives provided through the programme of support for employment; 3) tax incentives provided in the Law on Income Tax and the Law on Corporate Income Tax; 4) banking privileges, including subsidised loans; 5) sectoral incentives provided by line ministries; and 6) municipal-level incentives. The Ministry of Finance evaluates the cost and benefits of investment incentives when they are proposed, and this evaluation is part of the mandatory clarification before the incentive is adopted by the government and the National Assembly. A register of incentives that aims to provide a clear and comprehensive overview of planned, approved and implemented incentives for the economy of Republika Srpska, is being developed.

Overall, the incentive regime remains overly complex, and distinct incentives are applied in the different entities. This makes the overall incentive scheme confusing for investors and may lead to harmful internal and regional tax competition. It should also be noted that the renewal of incentives is often permitted without appropriate scrutiny.

FIPA has an active but limited role in providing **aftercare services**, and seems more focused on policy advocacy and high-level public-private partnership (PPP) dialogue than direct firm assistance. Post-investment investor support is recognised as a key component of the agency's mandate, along with policy advocacy and drafting proposals for legislation and legal measures aimed at promoting investment conditions. The agency plays an active role in maintaining public-private dialogue, and in conducting surveys and visits to firms to evaluate their needs and report the problems they face. Under the aftercare programme, FIPA has provided post-investment support since 2013. Through the programme, existing investors are provided with an integrated mechanism to systematically support their business on a long-term basis. The feedback from investors is used to inform policy development, design and implementation. FIPA prepares the "Proposals for Improving the Business Environment and Investment Conditions in Bosnia and Herzegovina" report every year, with suggestions for changes to existing legislation and recommendations for resolving business barriers. This report is submitted to the BiH Council of Ministers, the entities and the canton governments.

Substantial aftercare support is also provided at the entity level. For instance, the Ministry of Economy and Entrepreneurship of Republika Srpska has been implementing the Post-Investment Support Programme for investors since 2013. Ten local self-government units have joined the programme and there are currently 28 members in the Collaborative Network, which is a system of representatives at the canton level that exchanges experience and information regarding the identification of issues, and potential solutions, related to investors. The network holds four annual meetings. Through this network, several training courses for self-government units on attracting and retaining investors have been organised. Between 2016 and 2019, joint teams including representatives from ministries and local self-government units visited around 135 companies and discussed the difficulties that investors face, some of which are solved immediately while others are addressed in co-operation with the competent institutions and ministries. The government of Republika Srpska is presented with information on aftercare activities annually, including the problems that investors face in their business. The government then instructs line ministries to systematically approach and find solutions to these issues.

Sub-dimension 1.3: Investment for green growth

Bosnia and Herzegovina is reinforcing its **green investment policy and promotion** activities, notably in the context of aligning its energy and environment standards with the EU. The economy has developed multiple strategies and action plans over the past decade to promote green economic growth, including low-carbon development, affordable energy from clean sources, green economic growth, health and well-being, industrial growth, and climate protection. For example, the National Action Plan for the Use of Renewable Energy in BiH (NREAP BiH) included ambitious targets such as a 40% share of renewable energy sources in gross final energy consumption for all energy resources, and a 10% share of biofuels in transport for 2020. The National Action Plan for Energy Efficiency aims to reduce primary energy consumption by 12%.

MoFTER has initiated activities related to the development of the Integrated Energy and Climate Plan of Bosnia and Herzegovina (NECP BiH) for the period 2021-2030. By drafting this document, BiH is applying, for the first time, an integrated approach to drafting a document as it includes the electricity sector in the parts related to market security, supply, energy efficiency, renewable energy sources, innovation, development, competitiveness and emissions. The plan includes an innovative financing strategy and mechanisms for climate adaptation investments to be developed and tested in four to five selected municipalities.

The framework for green investment respects core investment principles such as investor protection, intellectual property rights protection and non-discrimination in areas likely to attract green investment. However, it is overly complex and difficult to navigate for investors, who must go through numerous sectoral laws and regulations, as well as the authorisation systems and incentive regimes at national and entity levels. The legal framework for green investment is regulated at the state level by the Law on the Use of Renewable Energy Sources and Efficient Cogeneration that was adopted in 2014 and encourages private investment in electricity production. At the entity level, in the FBiH the framework for green growth has been reinforced by the adoption of several laws and regulations, including the Law on Electricity and the Regulation on Incentive Fees to Promote Electricity from Renewable Energy Sources. Meanwhile, the Law on Renewable Energy Sources and Efficient Cogeneration has strengthened the green growth framework in Republika Srpska.

Bosnia and Herzegovina remains only partially harmonised with EU regulations due to its complex constitutional structure. The economy lacks clear and standardised legislation on green investments, and there is little transparency regarding the publication of summary information. The legal protection system concerning green investments is inconsistent, which may create legal security concerns for private investors.

Making and implementing the choice of **public and private partnerships for green growth** is only partially encouraged in Bosnia and Herzegovina. At the state level, there are no dedicated PPP laws, and while Republika Srpska and each canton of FBiH have adopted their own laws separately, they do not explicitly define investment in green growth but rather contain principles of environmental protection that define PPP criteria. In addition, the choice of PPP procurement for green projects is limited by the absence of an institutional arrangement with solid political backing and multidisciplinary capacity, whereby responsibilities are clearly assigned for promoting, implementing, monitoring and managing PPP projects.

The way forward for investment policy and promotion

Bosnia and Herzegovina is not yet fulfilling its potential in attracting FDI as its investment climate is still hampered by complexities. Improving the investment climate requires the following reforms:

- **Improve the clarity and predictability of the legal frameworks for investment, including for foreign investors.** The key prerequisites for investment policy include respect for the rule of law, quality regulation, transparency and openness, and integrity. Effective action across these dimensions will encourage investment and reduce the costs of doing business. Strong institutions with clear mandates will also help maintain a predictable and transparent environment for investors.
- **Improve the transparency and inclusiveness of policy making.** More open and inclusive policy-making processes help ensure that policies better match the needs and expectations of citizens and businesses. The greater participation of stakeholders in policy design and implementation leads to better targeted and more effective policies. Potential actions include improving access to information by developing a portal that gathers all business-related legislation at different levels of government and providing versions in English. Improving the consultation process and mechanisms with stakeholders, including foreign investors, through raising awareness of consultation methods in the economy would also prove useful.
- **Accelerate justice reform efforts, particularly those related to commercial matters, and dedicate more effort to improving the rule of law and easing the process of enforcing contracts.** This also requires providing judges with sufficient resources and adequate training to help them understand the specificities of commercial cases. The effectiveness and independence of the judicial systems are a prerequisite for creating a business-friendly environment, building trust and promoting investment. A justice system that ensures appropriate and timely contract enforcement and reduces the backlog in court cases could positively impact the investment climate, as well as the productivity and competitiveness of businesses in Bosnia and Herzegovina.

- **Promote arbitration as a recognised alternative dispute resolution mechanism.** Bosnia and Herzegovina could consider introducing arbitration and mediation laws that are aligned with international standards. These mechanisms can help alleviate the pressure on the judiciary system, build trust and create a more business-friendly environment for conflict resolution. State- and entity-level laws should ensure that domestic courts recognise and enforce these decisions in accordance with applicable international standards.
- **Enforce IP rights and raising IP awareness.** Enforcing institutions should be adequately staffed and trained and a co-ordinating body should be established. More resources should also be allocated to IP awareness-raising activities and access to information. A strong IP system can promote innovation and reinforce linkages between multinational firms and local companies, as the strength of the intellectual property regime influences the willingness of foreign technology holders to invest and transfer technology and proprietary knowledge to local SMEs.
- **Reinforce FIPA's resources and capacity so that it can effectively fulfil its mandate and establish stronger co-ordination mechanisms to avoid overlaps and conflicts in investment promotion and facilitation activities.** Success in attracting investment requires a whole-of-government approach to investment promotion and facilitation. Effective co-ordination among various authorities with investment promotion mandates must be built, including at local government levels and with implementing agencies. It is therefore crucial to have an investment promotion agency with strong capacity and the resources to co-ordinate investment promotion tasks and ensure consistency with state- and entity-level development plans.
- **Improve investment facilitating activities, including those related to starting a business.** Uncoordinated institutional frameworks make it complicated and cumbersome for investors to become established, as well as increases their transaction costs. FIPA could play a crucial role in providing investors with much needed clarity regarding public administration and policies.
- **Promote and unify legislation encouraging green investment,** while increasing transparency through the publication of summary information in one place. Bosnia and Herzegovina should also develop a solid and harmonised PPP legal and institutional framework that encourages promoting, implementing, monitoring and managing green PPP projects.

Trade policy (Dimension 2)

Introduction

Bosnia and Herzegovina's performance on the trade policy dimension has improved, albeit moderately, since the last assessment (Figure 21.1). The economy's score has increased from 2.2 in the 2018 Competitiveness Outlook to 2.5 in the 2021 edition (Table 21.5). This is largely due to the establishment of the Trade Facilitation Committee of Bosnia and Herzegovina in 2018, which aims to aid and improve the adoption of reforms through an effective co-operation mechanism between the public and private sectors. The climate in which the private sector operates has continued to improve. There is, however, room for improvement regarding legislation on public consultations, which is uneven across the economy in terms of implementation and consolidation, despite efforts such as the adoption of new legislation at the state level on public consultation standards and the introduction of the eConsultation website, which allows the public to submit remarks and comments on all draft regulations.

Significant improvements have been made to open services trade through the signing of Central European Free Trade Agreement (CEFTA) Additional Protocol 6 in December 2019. Bosnia and Herzegovina is, however, still the most restrictive economy in the WB6 region. Nevertheless, some small progress has been made in improving economic policies. The economy has not reported any protectionist legal changes. This is particularly important in a context where recent OECD studies on member economies have tended to show a growth in the number of regulations restricting services in 2020 (OECD, 2020^[42]). Restrictions are especially present in the areas of the movement of people, foreign entry and company regulations, which negatively affect foreign entities wishing to invest and operate in Bosnia and Herzegovina.

In terms of the digital trade in goods and services, the e-commerce framework in the economy is not evolved enough as no new laws on electronic communication and electronic media have been implemented and little progress has been made on implementation (Table 21.5).

Table 21.5. Bosnia and Herzegovina's scores for trade policy

Dimension	Sub-dimensions	Score	WB6 average
Trade policy dimension	Sub-dimension 2.1: Trade policy framework	2.8	3.5
	Sub-dimension 2.2: Services trade restrictiveness	n.a.	n.a.
	Sub-dimension 2.3: E-commerce and digitally enabled services	2.0	3.1
Bosnia and Herzegovina's overall score		2.5	3.4

State of play and key developments

Bosnia and Herzegovina's exports of goods and services have been steadily growing since 2015, before decreasing slightly in 2019. Overall foreign trade declined from 99.2% of GDP in 2018 to 95.2% in 2019 (in real terms), after having continuously grown since 2015, when it was 88.2%.

BiH's exports of goods reached EUR 5.5 billion in 2019, while imports reached EUR 9.4 billion. The external deficit on trade in goods and services accounted for 15.6% of the economy's GDP (World Bank). Bosnia and Herzegovina's exports of goods and services account for 40.06% of GDP and imports represent 55.8% of GDP. The economy is a net exporter of commercial services, with commercial exports accounting for EUR 1.9 billion vs. EUR 622 million in imports.

In 2018 and 2019, BiH's main export partner was Germany, which accounted for 14.9% of the economy's total exports, followed by Croatia (11.5%) and Italy (11.4%). Bosnia and Herzegovina's main suppliers are Germany (11.9%), Italy (11.4%) and Serbia (11%).

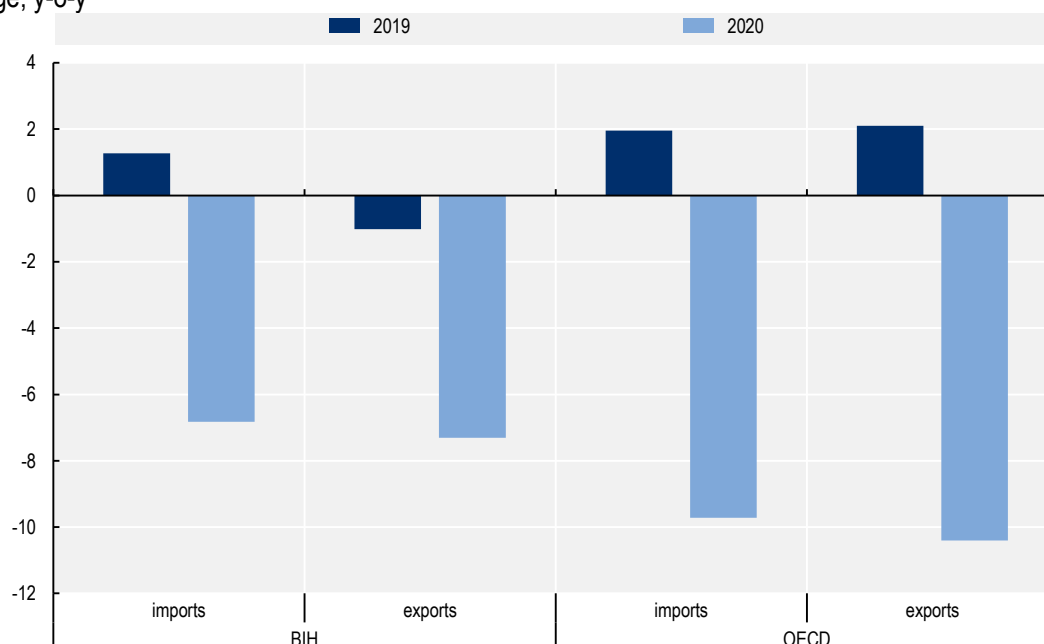
In November 2018, Kosovo imposed a 100% tariff rate on goods originating from Bosnia and Herzegovina, which severely impeded bilateral trade between the two economies. These tariffs were lifted in April 2020 and the flow of goods is in the process of resuming.

Like all economies, Bosnia and Herzegovina was heavily affected by the COVID-19 pandemic. The low level of new import and export orders prior to the crisis, combined with pandemic-related export bans, restrictions on the movement of people, and closures of shops and services, led to a significant decline in imports and exports, and a sharp decline in consumption and investment in Q2 and Q3 2020. Bosnia and Herzegovina was not the most severely affected WB6 economy, but faced a decline of -6% in imports and -7% in exports, which is below the average fall seen in OECD member states.

Industry in the WB6 economies was affected by the supply shock caused by COVID-19 and the resulting slowdown in trade flows. The decline in exports from Bosnia and Herzegovina was primarily a consequence of the breakdown of GVCs. WB6 economies with a higher level of integration into GVCs and an existing share of manufacture, such as Bosnia and Herzegovina, felt the immediate effects more severely, but have also seen trade flows decline less than the OECD average, as displayed in Figure 21.4.

Figure 21.4. Impact of COVID-19 on trade, Bosnia and Herzegovina versus the OECD (2019-20)

% change, y-o-y



Source: (IMF, 2020^[43]), *World Economic Outlook*, <https://www.imf.org/en/Publications/WEO/weo-database/2020/October>; (OECD, 2020^[44]), *OECD Economic Outlook*, June, <http://www.oecd.org/economic-outlook/june-2020/>.

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The region's relatively low level of development and sophistication limits most economies to backwards linkages, mainly as assembly centres (IMF, 2020^[43]). For BiH in particular, the leading cause of the decline in exports is the disruption of supply chains resulting from the manufacturing slowdown in China and reduced demand in the United States and notably the EU, its main trading partner. In the region, and particularly in Bosnia and Herzegovina, GVCs are concentrated in a few sectors (automotive, electrical equipment, machinery, chemicals and metals) and are located around a few European economies (OECD, 2019^[25]). In Bosnia and Herzegovina, those most affected by the slowdown are the producers of machinery and equipment, and machinery and mechanical appliances, which are the most integrated in trade with Europe through GVCs. However, given the relatively high import content of Bosnia and Herzegovina's goods exports, the volume of trade in the economy is expected to recover once production resumes, in parallel with the revival of GVCs and demand, especially in the EU.

The closure of EU borders to non-EU citizens and other regulatory responses to the pandemic, combined with the existing logistical challenges of the Western Balkans, have particularly affected freight transport services. The WB6 set up the CEFTA co-ordinating body to exchange information on trade in goods at the

beginning of the pandemic. They also set up priority "green lanes" with the EU and "green corridors" within the WB6 to facilitate the free movement of essential goods through priority "green" border/customs crossings (within the WB6 and with the EU). At the peak of the crisis (April to May 2020), most road transport in WB6 economies passed through these green lanes and corridors. These have helped to maintain a certain degree of international trade in goods in the region. In fact, only about 20% of the goods benefitting from the green lanes and corridors regimes were basic necessities, the rest being regular trade. Such inclusive regional co-operation has proven to be very efficient in mitigating the consequences of the COVID-19 pandemic and helping the region's economies to recover.

Sub-dimension 2.1: Trade policy framework

Improvements have been made regarding **institutional co-ordination mechanisms** for trade policy development in Bosnia and Herzegovina since the last cycle of assessment. Trade policy development falls under state competency in the FBiH, whereas RS has its own mechanism under its Law on Trade (Invest in Srpska, 2020^[45]). MoFTER is the key institution involved in formulating and implementing Bosnia and Herzegovina's foreign trade policy.⁹ The ministry includes two administrative organisations: the Veterinary Office and the Plant Health Administration, and eight departments responsible for individual areas of trade policy.¹⁰ Each department is responsible for co-ordinating and supervising the formulation and implementation of sectoral policies that fall under the competence of the state level of BiH. In RS, the Ministry of Trade and Tourism is responsible for trade policy development.

Some improvements have been made in aligning BiH with its trade-related international obligations.¹¹ BiH state-level institutions created the Trade Facilitation Committee of Bosnia and Herzegovina in 2018. The committee's board consists of 20 members from various institutions of Bosnia and Herzegovina involved in the implementation of customs and other border procedures related to international cross-border trade in goods. Representatives of the private sector, and their associations, engaged in activities related to imports, exports or the transit of goods are also members. The primary role of the committee is to improve the preparation and implementation of trade facilitation reforms through a co-ordination mechanism between the public and private sectors.

Although efforts to co-ordinate trade-related initiatives and strategies exist at state and entity levels, a formal inter-ministerial co-ordination mechanism has yet to be adopted at the state level, and no progress has been made in this regard since the previous Competitiveness Outlook publication. There is a formal inter-ministerial co-ordination mechanism framework in RS, which has been strengthened since the last reporting cycle with the introduction of new regulations in 2018.¹² At the state level, all draft laws, regulations or international agreements being drafted or negotiated upon must go through legal procedures that involve the establishment of an ad hoc working group. These working groups consist of representatives of all relevant institutions from all levels of the state government. Moreover, all BiH agencies/bodies are obliged to submit annual reports to the Council of Ministers on the implementation of existing regulations, as well as their programmes of work for the next year, in co-ordination with the relevant MoFTER department. The main difficulty with this mode of operation is its ad hoc nature, which is not systematised by solid regulations. Consequently, and in the absence of *ex post* analysis, it is impossible to establish the quality and uniformity of the work of the working groups. At the entity level, RS's Ministry of Trade and Tourism holds constant consultations with other ministries, agencies and stakeholders involved in the trade sector during the development of strategic documents, laws and by-law acts.¹³ However, a concrete procedure for monitoring trade policy making is yet to be implemented in both entities or at the state level to improve *ex post* impact assessments.

Legislation on **public consultations** is uneven across the economy, and there is no strategic framework for co-operation with civil society at the state level or in either entity. However, progress has been made in adopting regulations for the implementation of public consultation standards at the state level. The 2017 Regulation of Consultations in Legislative Drafting¹⁴ contains a provision on the minimum obligations for conducting consultations from the earliest stage of drafting. According to the regulation, BiH institutions

at the state level are obliged to post preliminary draft regulations and acts on a dedicated website (eKonsultacije, 2020^[46]) (eConsultation) that enables the public to submit proposals and remarks. This procedure is the only part of the adoption process that allows direct public comments. The eConsultation website has been increasingly used by the institutions of BiH in recent years, and all institutions have appointed consultation co-ordinators and deputies.¹⁵ There is no similar mechanism in Republika Srpska, but the regulatory framework mandates that relevant institutions must make draft regulations and all related documents publicly available.¹⁶ At the state level, acts are posted on the website for 15 or 30 days, depending on the significance of public interest, which is determined in a pre-assessment of impact. This regulation does not include a mandated maximum time for the relevant institution to respond to comments; however, acts cannot be submitted for further procedure without all questions or comments being answered by the proponent.¹⁷ To participate in the consultation process, the public needs to register as a user of the eConsultation website and register for the specific consultation.¹⁸ If the regulations are adopted through the Parliamentary Assembly procedure the public can also provide comments as part of the amendment procedure. Despite the web platform being operational since 2017, it is still not widely used by the private sector,¹⁹ and there is potential to raise awareness about various forms of consultation. Chambers of commerce are the most active institutions involved in direct consultations; however, there is no access to statistics regarding other stakeholders involved in this process. In Republika Srpska, the Ministry of Trade and Tourism does not have accurate information regarding participation in the legislative process. The use of fast-track or emergency procedures not subject to public consultation remains a widespread issue in the legislative process at all levels, especially in the FBiH, which affects the trade decision-making process.²⁰

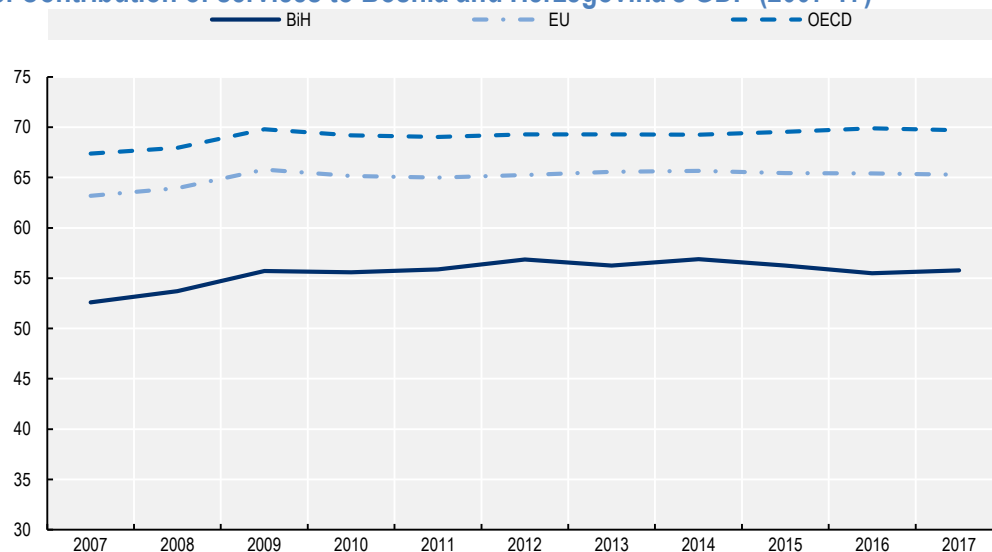
Regarding **bilateral and multilateral free trade agreements**, no progress has been made in Bosnia and Herzegovina's World Trade Organization (WTO) accession since the last review cycle. While the economy has been a member of CEFTA since 2007, it has yet to ratify Additional Protocol 5 and 6 to the agreement. Both the European Free Trade Agreement (EFTA) and the Stabilisation and Association Agreement (SAA) were ratified by Bosnia and Herzegovina in 2015.

Bosnia and Herzegovina has only one bilateral trade agreement, with the Republic of Turkey, which entered into force in 2003. A revised free trade agreement with Turkey was signed in 2019 and the ratification process is underway, after which the previous agreement and protocol will cease to be valid.

Sub-dimension 2.2: Services trade restrictiveness

Services contribute close to two-thirds of GDP in WB6 economies, which highlights how strongly economic growth, innovation and job creation depend on effective policies on services that promote open and competitive markets. In Bosnia and Herzegovina, services account for 55.5% of GDP (Figure 21.5) and more than 52.5% of employment.

Figure 21.5. Contribution of services to Bosnia and Herzegovina's GDP (2007-17)



Source: (World Bank, 2020^[3]), *World Development Indicators (database)*, <https://databank.worldbank.org/source/world-development-indicators>.

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Enhancing the openness of trade in services can improve domestic firms' efficiency and productivity (OECD, 2018^[47]). Trade in services allows economies to specialise according to their comparative advantages in services and skills. The potential gains from liberalisation in services trade are significant because increased domestic and foreign competition, complemented by effective regulation, can enhance performance and lower costs related to trade in services (Box 21.2).

Box 21.2. The costs of regulatory barriers to trade in services

Recent OECD analysis reveals that services trade restrictions significantly affect trade by raising the costs for firms to operate in the host economy (Rouzet and Spinelli, 2016^[48]). Trade costs arise both from policies that explicitly target foreign suppliers, and more generally from domestic regulation that falls short of best practice in the area of competition and rule-making. The costs resulting from barriers to trade in services are much higher than those of trade in manufactured goods.

Trading services is costly. The studies show that policy-induced services trade costs are relatively high. Expressed as percentages of total trade value, average multilateral costs for cross-border services trade are around 57% for communication services and 54% for business services, around 60% for transport services, around 103% for insurance services, and around 255% for financial services. Even exporting to the most liberal economies still requires compliance with regulation at a cost that correspond to around 30% of the export value in most sectors and nearly 90% for financial services. Within the European Single Market, however, services trade costs are significantly lower – policy-induced costs of cross-border services trade are at around 10% in most sectors and around 32% for financial services.

Source: (Benz and Jaax, 2020^[49]), *The costs of regulatory barriers to trade in services: New estimates of ad valorem tariff equivalents*, <http://dx.doi.org/10.1787/bae97f98-en>; (Rouzet and Spinelli, 2016^[48]), *Services Trade Restrictiveness, Mark-Ups and Competition*, <https://dx.doi.org/10.1787/5jln7dlm3931-en>.

The OECD Services Trade Restrictiveness Index (STRI) was used to **analyse barriers to trade for 12 services sectors** in Bosnia and Herzegovina.²¹ The OECD STRI project is a unique, evidence-based diagnostic tool that inventories trade restrictions in 48 economies,²² allowing economies to benchmark their services regulations against global best practice, identify outlier restrictions and prioritise reform efforts. For this Competitiveness Outlook assessment cycle, the 12 services sectors are grouped into four clusters:

1) transport and distribution supply chain (air transport, road transport, rail transport, courier); 2) market bridging and supporting services (commercial banking, insurance, legal services); 3) physical infrastructure services (construction, architecture, engineering); and 4) digital network services (computer services, telecommunications).

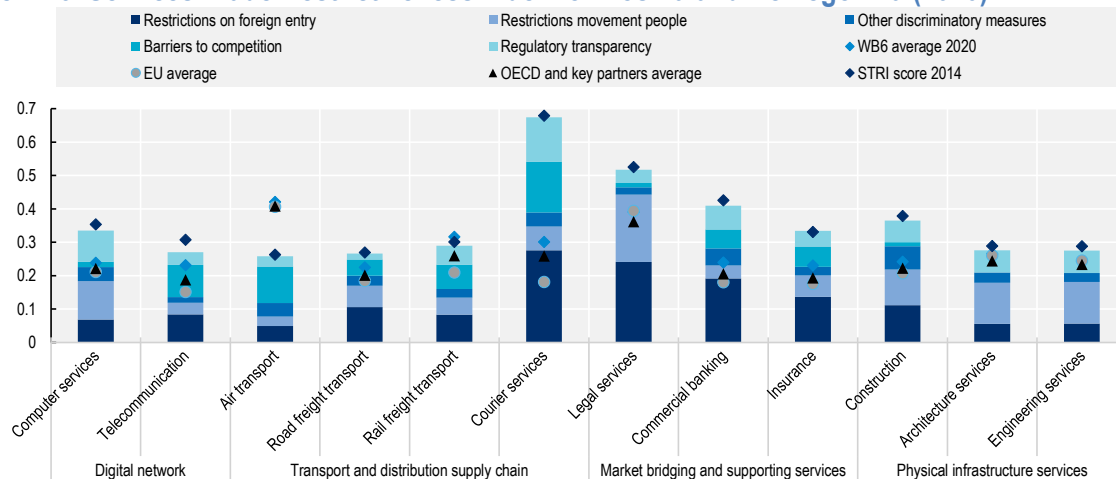
Information was collected from the WB6 economies' laws and regulations, and indices were calculated for seven years (2014-20). These composite indices quantify restrictions across five policy areas: foreign entry, movement of people, barriers to competition, regulatory transparency and other discriminatory measures. The indices quantify regulatory restrictions in each of the 5 policy areas for the 12 sectors by giving them a value between 0 and 1. Complete openness to trade in services gives a score of 0, while being completely closed to foreign service providers yields a score of 1.²³

Each policy area is composed of a series of measures. These measures are called “horizontal” if they are present in all sectors, or “sector specific” if they only affect a particular sector.²⁴ The STRI measures the most-favoured-nation (MFN) restrictions and does not take into account any specific concessions, such as regional trade agreements or mutual recognition agreements (Geloso Grosso et al., 2015^[50]).

Figure 21.6 shows the STRI indices for each of the sectors, as well as the average scores for the WB6, EU and OECD. Compared to the STRI project member states, Bosnia and Herzegovina is in the high range in terms of the degree of restrictiveness of its services sectors. This has a negative impact on the attraction of investment and competition in the economy. Within the WB6 region, Bosnia and Herzegovina has a lower STRI score than the WB6 average in 2 out of 12 sectors. Air transport services and rail freight transport services are the two sectors with the lowest score relative to the WB6 average. Courier services and Legal services are the two sectors with the highest score relative to the WB6 average.

It is important to note that although some relevant competencies in the following sectors might be shared between the state level and the entity level in Bosnia and Herzegovina, BiH is scored as a single economy for the purposes of the STRI.

Figure 21.6. Services Trade Restrictiveness Index for Bosnia and Herzegovina (2020)



Note: (0=no restrictions, 1=fully restricted); average represents the WB6 average for 2020; Bulgaria, Croatia and Romania are not OECD members nor OECD STRI key partner economies and therefore are not covered by STRI indices; key partners to the STRI project are Brazil, the People's Republic of China, Costa Rica, India, Indonesia, Kazakhstan, Malaysia, Peru, the Russian Federation, South Africa and Thailand. Source: (OECD, 2020^[51]), *Services Trade Restrictiveness Index Regulatory Database*, <http://oe.cd/stri-db>.

StatLink  <https://doi.org/10.1787/888934255532>

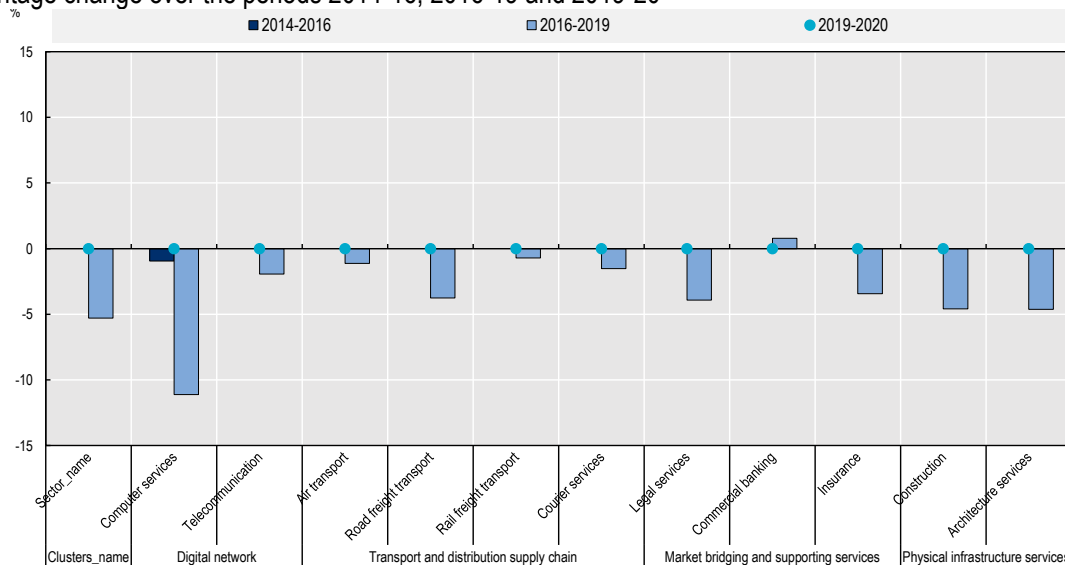
The economy has made regulatory efforts to reduce its degree of restrictiveness by introducing policies to open its market to foreign service providers. However, although the economy has not increased its degree of restrictiveness, the limited number of concrete sectoral reforms to open up the services sectors since the last evaluation round has meant that the variation in degrees of openness has been small. This is

particularly important given that recent OECD studies on member economies have tended to show a growth in the number of regulations restricting services sectors in 2020 (OECD, 2021^[52]).

Figure 21.7 displays the evolution of Bosnia's STRI indices by sector and period in percentage changes.

Figure 21.7. Evolution of STRI scores by sector in Bosnia and Herzegovina (2014-20)

Percentage change over the periods 2014-16, 2016-19 and 2019-20



Note: Values are expressed in percentage change, with negative values indicating a reduction in restrictiveness of the economy's trade regulatory environment.

Source: (OECD, 2020^[51]), *Services Trade Restrictiveness Index Regulatory Database*, <http://oe.cd/stri-db>.

StatLink  <https://doi.org/10.1787/888934255551>

The following analysis starts with the horizontal measures included in all sectors that hamper services trade in the economy as a whole, particularly in the areas of general business regulation, restrictions on the movement of service providers, standards for the cross-border transfer of personal data, the legal framework for public procurement and the screening of foreign investment. The STRI scores are then explained by sector with information on what drives the results and a brief description of the most common restrictions and good practices.

General business regulations affect firms' ability to operate in Bosnia and Herzegovina

There are a number of areas in which Bosnia and Herzegovina could improve its company regulations, such as in the acquisition or use of land and real estate by foreigners, which is restricted. This restriction mainly affects foreign companies' ability to establish offices in the economy and operate a business, and particularly affects the services sectors, which are highly dependent on 3 modes of supply (commercial presence) (see Box 21.3).

For a commercial company to be constituted and registered, a minimum capital requirement must be paid, which further affects foreign companies and consequently makes BiH less competitive compared to economies that do not impose such a requirement. This is the case even if the obligation is applied regardless of whether the company is local or foreign. Extremely lengthy procedures for obtaining business visas and cumbersome, lengthy and costly procedures for registering a company also limit investment opportunities.

Box 21.3. Examples of the four services supply modes

The definition of trade in services under the GATS has four components (modes), depending on the territorial presence of the foreign service provider and the consumer at the time of the transaction. Pursuant to Article I:2, the GATS covers services supplied.

Mode 1: Cross-border: Services are provided from the territory of one member into the territory of any other member.

Example: A consumer in economy A receives services from abroad through its telecommunications or courier infrastructure. Such supplies may include any type of consultancy, legal advice, architectural services or computer related services.

Mode 2: Consumption abroad: Services are provided in the territory of one economy to the service consumer of any other economy.

Example: Nationals of economy A have moved abroad as tourists, students or patients to use the respective services.

Mode 3: Commercial presence: Services are provided by a supplier of one economy, through commercial presence, in the territory of any other economy.

Example: The service is provided within economy A by a locally established subsidiary, or representative office of a foreign-owned and controlled company (bank or insurance company, air company, construction firm, etc.).

Mode 4: Movement of natural persons: Services are provided by a foreign supplier through the presence of natural persons of an economy in the territory of any other economy.

Example: A foreign national provides a service within economy A as an independent supplier (e.g. IT consultant) or employee of a service supplier (e.g. IT consultancy firm).

Source: (WTO, 1995^[52]), Article 1.3: Definition of Services Trade and Modes of Supply, https://www.wto.org/english/tratop_e/serv_e/cbt_course_e/c1s3p1_e.htm.

Restrictions on the movement of people are an issue in Bosnia and Herzegovina. Although significant progress has been made in easing the conditions for the movement of persons between the CEFTA economies through the conclusion of Additional Protocol 6 to the CEFTA agreement, persons from economies outside CEFTA or the EU are subject to restrictive requirements. Bosnia and Herzegovina applies quotas for work permits issued to third-country nationals, although intra-corporate transferees are exempted. Contractual and independent services suppliers, including intra-corporate transferees, are subject to labour market tests. The length of stay of these categories of foreigners is limited to 12 months for contract and independent services suppliers, and 36 months for intra-corporate transferees. Procedures for obtaining business visas and registering a company are all considerably more numerous, costly or time-consuming than is best practice.

Standards for the *cross-border transfer of personal data* are set at the EU level. Transfers to non-European Economic Area economies may take place when an adequate level of data protection is ensured or, failing that, where appropriate safeguards (e.g. binding corporate rules or standard data protection clauses) are in place.

Restrictions on public procurement include a local price preference regarding tenders that applies a reduction for local suppliers, which affects negatively the STRI score of BiH. Furthermore, the economy's public procurement regulation does not contain an explicit reference to the prohibition of discrimination towards foreigners. The procurement law includes thresholds above which a tender is mandated, but there is no procurement regime applied to foreign suppliers below the value thresholds.

In terms of the *screening of foreign investments*, the laws and regulations of Bosnia and Herzegovina do not mandate the consideration of economic motives or interests in the review of foreign investments, although it is not explicitly ruled out.

Box 21.3 presents the modes of supply of trade in services as defined by the World Trade Organization's General Agreement on Trade in Services (GATS) and used in the OECD STRI.

There are several restrictions in specific services sectors

Beyond regulatory measures that affect Bosnia and Herzegovina's trade in services in a horizontal manner, there are a number of sector-specific restrictions in the 12 sectors analysed, which are explored below.²⁵

Air transport services are defined as passenger and freight air transport carried domestically or internationally (code 51 under the International Standard Industrial Classification – ISIC - Revision 4). The STRI for this sector covers commercial establishments only. Given the range of air transport subsectors, the approach in the STRI project is to focus on measures affecting carriers' transport of passengers and goods between points. Airport management and other aviation services are only relevant in so far as regulations enacted by relevant authorities can have an impact on the ability of foreign carriers to transport passengers and goods between points.

The STRI scores can range from 0 to 1, with 0 signalling a completely open sector and 1 indicating a sector closed for foreign service suppliers. The 2020 scores for all OECD member states and STRI partners in this sector range between 0.165 and 0.601. With a score of 0.258, Bosnia and Herzegovina is the second-least restrictive WB6 economy. It scores lower than the EU (0.407), OECD (0.409) and WB6 (0.421) averages.

Regarding restrictions on foreign entry, unlike most economies, Bosnia and Herzegovina does not impose foreign equity restrictions, which facilitates the entry of foreign capital in this sector. There is no limit to the maximum equity share allowed. There are also no regulatory limits to the proportion of shares that can be acquired by foreign investors in publicly controlled firms. There are no prohibitions or restrictions on the lease of foreign aircraft either with or without crew (wet or dry lease). The lack of such restrictions makes the economy very attractive in this sector.

Bosnia and Herzegovina again differs from other economies regarding *barriers to competition* as there is no public ownership in the aviation sector through a national airline. Air carriers are not allowed to retain allocated slots from one season to the next. Operational centres of airports are responsible for allocating slots using discretionary authorisation based on transparent, unbiased and non-discriminatory rules. However, air carriers are not allowed to commercially exchange slots and there is no schedule for airport use, which contributes negatively to Bosnia's score in this sector, although marginally.

Road freight transport (ISIC Rev 4 code 4293). The STRI for this sector covers commercial establishment only. Cross-border trade is governed by a system of bilateral and plurilateral agreements that provide for permits, quotas and other regulations.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.124 and 0.624. With a score of 0.266, Bosnia and Herzegovina is the second most restrictive WB6 economy. It performs worse than the EU (0.184), OECD (0.201) averages, but lower than the WB6 average (0.421).

Due to the specificity of this sector, the score is negatively affected by horizontal measures that affect the whole economy, particularly those related to the movement of people and visa requirements. In Bosnia and Herzegovina, the procedures for registering a company are much more costly, lengthy and cumbersome than international best practice, which contributes to the sector's restrictiveness.

There are few restrictions regarding sector specific regulations, as Bosnia and Herzegovina does not impose many sector specific laws that would hamper the given sector. As regards *foreign entry restrictions*, licensing/permits are subject to quotas for domestic traffic, which is the main contributor to Bosnia and Herzegovina's negative score. In the area of barriers to competition, fees are set by the

government for transportation, management certification, issuing of licences, licence copy statements, licences for international carriage of goods, and special permits for foreign carriers. The ministry, at the proposal of the Association of Carriers at the Chamber of Commerce of the Federation of Bosnia and Herzegovina, has established minimum prices for road freight transport services.

Rail transport (ISIC Rev 4 code 4912) is provided over a dedicated network where the market structure may take different forms, the two most common being: 1) vertically integrated rail services firms owning and managing both the infrastructure and the operation of freight services; and 2) vertical separation between infrastructure management and operations. Regardless of the market structure, there are well-established best practice regulations that also consider competition from other modes of transport, particularly road transport.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.129 and 1. With a score of 0.290, Bosnia and Herzegovina is the second-most restrictive WB6 economy. It scores higher than the EU (0.210) and OECD (0.260) averages, but lower than the WB6 average (0.316). In terms of foreign entry restrictions, unlike many economies, Bosnia and Herzegovina provides transit rights for international rail transport, as well as access rights for international combined transport and rail transport, which positively affects the STRI score. However, under Republika Srpska law, a local establishment is required to obtain a licence to operate rail transport services.

Regarding restrictions on the movement of people, licences are required to practice, and laws have established a process for recognising qualifications gained abroad. The Railway Regulatory Board (RRB) of BiH operates within the Ministry of Communications and Transport of Bosnia and Herzegovina, and the law gives it powers to issue instructions for the safety and interoperability of the railway system according to the EU-Bosnia Stabilization and Association Agreement and its Protocol 3.

Barriers to competition significantly contribute to Bosnia and Herzegovina's STRI performance in rail transport services. Access to railway infrastructure is mandated at the national level, and access fees are regulated. Republika Srpska law explicitly prohibits the transfer and trading of infrastructure capacity. FBiH law makes no distinction between private and public railway infrastructure, but RS law does. However, in practice, the public company operates the infrastructure.

Following the Dayton Peace Accords of 1995, the state railway company was divided into two entity-owned companies, *Zeljeznice Federacije Bosne i Hercegovine* (ZFBH) and *Zeljeznice Republike Srpske* (ZRS). Maintaining a state-owned enterprise in this sector negatively affects its STRI scoring.

The courier services sector (ISIC Rev 4 code 53) includes postal and courier activities. While courier services have traditionally been important means for communication, the rise of modern ICT has contributed to a less frequent use of letters between individuals for communication.

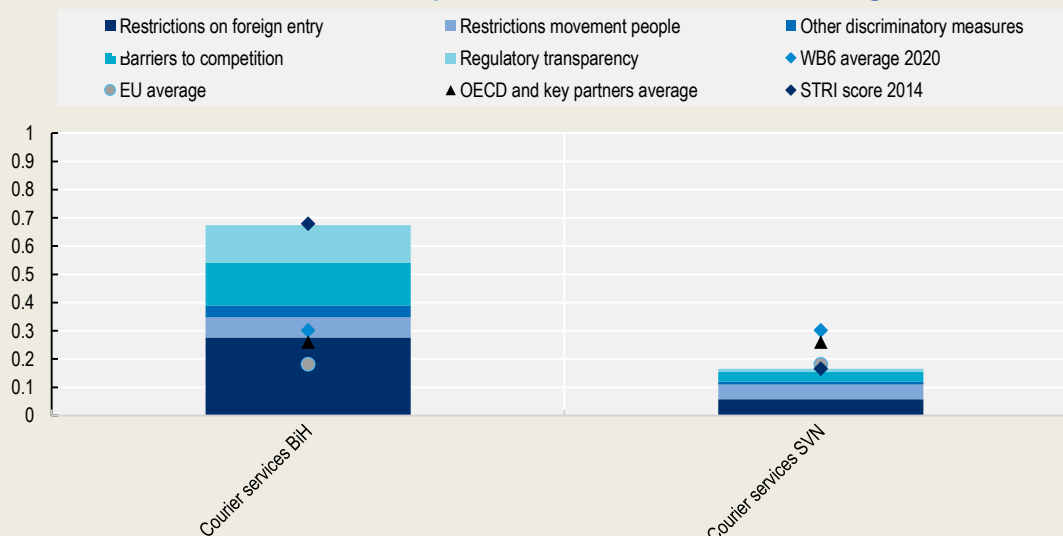
The 2020 scores for all OECD member states and STRI partners are between 0.106 and 0.881. With a score of 0.674, Bosnia and Herzegovina is the most restrictive WB6 economy. It is considerably more restrictive than the EU (0.182), OECD (0.259) and WB6 (0.301) averages. The degree of restrictions in the courier sector in Bosnia and Herzegovina is particularly visible when benchmarked against top European performers like Slovenia (Box 21.4). However, the restrictiveness could be largely lessened as it appears to be concentrated in a series of particularly limiting regulatory measures.

In terms of restrictions on the movement of people, a licence is required to practice as a postal operator. To obtain a licence from the regulator, postal operators need to provide proof of having a "sufficient number of qualified employees".

Box 21.4. Identifying regulatory bottlenecks and increasing the attractiveness of courier services in Bosnia and Herzegovina

The joint use of STRI tools helps to identify the regulatory elements that affect the restrictiveness index, and consequently the degree of openness of a sector. The comparative study of the STRI 2020 indices of Slovenia and BiH highlights certain elements that could help to identify regulatory bottlenecks and increase the attractiveness of courier services in Bosnia and Herzegovina.

Figure 21.8. STRI courier services – comparison between Bosnia and Herzegovina and Slovenia



Note: 0=no restrictions, 1=fully restricted; average represents the WB6 average for 2020

Source: (OECD, 2020^[51]); *Services Trade Restrictiveness Index Regulatory Database*, <http://oe.cd/stri-db>.

StatLink <https://doi.org/10.1787/888934255570>

Bosnia and Herzegovina has a high score in the courier services sector compared to other OECD STRI participants. The economy is also the most restrictive WB6 economy, with a score higher than the EU, WB6 and OECD averages. In contrast, Slovenia has a very open and liberal courier services market, scoring among the lowest STRI indices in this sector. The Postal Act of 1997 brought Slovenian legislation in the postal sector partially in line with the EU *acquis*. The complete liberalisation of postal services was achieved with the adoption the new Postal Services Act in April 2002 and secondary acts in 2003. Currently, courier services are Slovenia's least restrictive STRI sector. The economy maintains only a small number of sector-specific restrictions, such as the existence of a state-owned designated postal operator and limits to the proportion of shares that can be acquired by foreign investors.

Upon comparing both economies using the STRI policy stimulator, only a limited number of regulatory measures appear to dictate the weight difference between Slovenia and BiH STRI scores. This suggests that Bosnia and Herzegovina could substantially reduce its restrictiveness index to the average levels found in the STRI by focusing on lifting the following specific restrictions:

In the area of restrictions to movement of people, the score of both economies is largely impacted by quotas on foreign services suppliers. Additionally, both economies maintain a very short duration of stay for foreign service providers. However, Slovenia and Bosnia and Herzegovina have aligned their regulatory environments with international good practice regarding the length of stay of intra-corporate transferees. Overall, lifting limitations on the movement of people could decrease the BiH courier restrictiveness index value by 0.052.

In the barriers to competition category, Slovenia does not apply any preferential tax or subsidy treatment to the national DPO, a limitation still present in the Bosnian regulatory framework. Lifting this restriction could decrease BiH's courier index value by 0.011.

Slovenia has incorporated a specific dispute resolution system into its regulatory environment governing the postal sector. In Bosnia and Herzegovina, such a mechanism is absent from the legislation. By creating such a procedure, BiH could lower its degree of restrictiveness by 0.011.

In its 2002 reform of the postal market, Slovenia abolished all reserved services in the sector. This regulatory change is the most significant difference with Bosnia and Herzegovina, which maintains certain postal services reserved under the universal postal services. Following Slovenia's example, the removal of these restrictions could potentially reduce BiH's index value by 0.468.

Source: (OECD, 2017^[53]), *Services Trade Policies and the Global economy*, <https://doi.org/10.1787/9789264275232-en>.

Foreign entry restrictions contribute significantly to performance in many economies, including Bosnia and Herzegovina. The economy imposes limits on the proportion of shares that can be acquired by foreign investors in publicly controlled firms. Local presence is required for the cross-border supply of courier services through registration to the court registry. Restrictions are also present in the form of a licence requirement to enter the market. Designated postal operator (DPOs), which are publicly controlled, have a monopoly on letters weighing up to 1 kg and parcels weighing up to 10 kg. The law designates three publicly owned DPOs: the Postal Traffic Company RS AD Banja Luka, JPBH Post d.o.o. Sarajevo, and HP Mostar d.o.o.

Regarding barriers to competition, there is no dispute resolution mechanism available. The three DPOs provide universal and other services in the economy, but there is at least one other dominant provider in the courier services market. The regulator establishes a unified price policy for reserved services. The law enables the state or entity governments to subsidise the DPOs if they cannot finance their activities. These subsidies are limited to the reserved postal services, and cross-subsidising is prohibited.

Legal services (ISIC Rev 4 code 691) cover advisory and representation services in domestic and international law. International law includes advisory services in home country law, third-country law, international law, as well as the right to appear in international commercial arbitration. Domestic law extends to advising and representing clients before a court or judicial body in the law of the host country.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.141 and 1; the OECD average is 0.360, the EU average is 0.394 and the WB6 average is 0.391. With a score of 0.517, Bosnia and Herzegovina is the most restrictive WB6 economy. However, it must be noted that the legal services sector in BiH is not completely closed to foreign legal services providers, as is the case in some EU member states (OECD, 2020^[51]).

Restrictions on the movement of people have a considerable negative effect on the STRI score of Bosnia and Herzegovina as there are many restrictions in place in the legal sector, for example a licence is required to practise domestic law. Regarding international law, foreign citizens in FBiH who are registered as lawyers in their home country may give legal advice on matters concerning the law of their economy. In Republika Srpska, the use of foreign lawyers is unrestricted in arbitration courts dealing with matters of international law. RS law allows for exemptions to the nationality requirement that a licence is needed to practise domestic law; however, FBiH law provides for these exemptions on the basis of reciprocity, which negatively affects the STRI scoring. Foreigners do not have an option to obtain a temporary permit as there is no temporary licensing system in Bosnia and Herzegovina, which further restricts foreign lawyers' ability to operate in the economy.

Regarding restrictions on foreign entry into Bosnia and Herzegovina, both local and commercial presence is required for the cross-border supply of legal services. There are also localisation requirements in place for professional liability insurance. Under RS law, a foreign lawyer registered in the Bar Association's B

register (register of Foreign Lawyers) must practice with a local lawyer for at least three years after registration. In FBiH, the Bar Association's Code of Ethics explicitly prohibits lawyers from being permanent representatives of foreign law firms. There is also a restriction on the acquisition and use of land and real estate by foreigners, which negatively impacts the economy's STRI score. However, this law includes a reciprocity clause for the successor states of the former Yugoslavia.

Regarding barriers to competition, both FBiH and RS provide a recommended minimum and maximum fee for locally licensed lawyers. The two entities take different approaches to restrictions on law advertising. Under RS law advertising is prohibited, whereas FBiH law provides conditions for permitted advertising determined by the Statute of the Federal Bar Association.

Commercial banking (ISIC Rev 4 divisions 64-66) includes deposit-taking, lending and payment services. Commercial banking services are traded business to business, as well as business to consumer for retail banking. Efficient banking services are one of the backbones of dynamic economies as they provide financing for investment and trade across productive activities, which underly all value chains.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.131 and 0.517; the OECD average is 0.205, the EU average is 0.180 and the WB6 average is 0.239. With a score of 0.409, Bosnia and Herzegovina is the most restrictive WB6 economy. In terms of foreign entry restrictions, in RS the branch network of a foreign bank cannot be established if it undermines the ability of local banks to operate. However, a subsidiary may be established as a separate legal entity, subject to prior approval by the Banking Agency of Republika Srpska. Only banks registered in Republika Srpska and branches of banks registered in FBiH (that operate on RS territory, if approved by the regulator) can establish an ATM network in Republika Srpska.

A bank must be registered in BiH and operate under a licence by the regulator. Only banks can undertake deposit-taking, lending and other activities prescribed by the law. Banks may establish representative offices to deal with non-banking activities. According to FBiH and RS laws, banks from one entity can open branches in the other entity upon approval of the relevant banking agency. There is no mention of branches of foreign banks in the laws of either entity. The criteria to obtain a licence are more stringent for foreign companies, which has a negative impact on the STRI score. For example, the regulator can refuse a licence request if the performance of the supervisory function of the Agency could be hindered or impeded by the connection of the bank with other legal or natural persons established, domiciled or domiciled in another economy. Since 2017 there has been a requirement that at least one member of the Supervisory Board must have active knowledge of one of the languages in official use in BiH and residency in one of the entities or in BiH in general. As mentioned above in legal services, BiH imposes a restriction on the legal form as the law defines a bank as a joint-stock company.

Although BiH is not a member of the Basel Committee on Banking Supervision, which is the main global standards setter for banks, significant provisions on risk weighting exist within both entities' banking laws. Credits in foreign currency are forbidden, except for legal persons and entrepreneurs seeking to pay to import goods from abroad. To take deposits in foreign currency the bank may open a non-resident account in convertible marks, i.e. foreign currency, on which convertible marks or foreign currency acquired by the non-resident in accordance with the law are kept. A non-resident deposit account can be on-demand or term, with or without notice, with special purpose or without purpose. It is forbidden to grant non-residents financial loans with a maturity of less than one year, except for the granting of loans from banks and residents for the purpose of establishing lasting economic relations. Lending in local currency between a resident and a non-resident is not allowed.

Regarding barriers to competition, default interest rates on loans are regulated, and the licence strictly regulates the services a bank may provide. The Ministry of Finance in the FBiH owns a majority share of Union Banka, which is a major firm in the sector. While the law provides an extensive list of reasons for declining a licence application, there is no explicit requirement to inform the applicant of the reason for denial. Moreover, the law allows the regulator to define additional reasons for refusal at its discretion. This form of legal uncertainty heavily affects the scoring in this sector.

Insurance services (ISIC Rev 4 code 651 and 652) include life insurance, property and casualty insurance, reinsurance, and auxiliary services. Private health insurance and private pensions are not covered.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.104 and 0.565. The WB6 average is 0.231, EU and OECD averages are lower at 0.175 and 0.193, respectively. With a score of 0.334, Bosnia and Herzegovina is the most restrictive WB6 economy. Restrictions to the movement of people are visible in the form of licence requirements, but criteria to obtain a licence are not more stringent for foreign companies. While the law provides no condition on residency, it requires the passing of a professional exam that does require residency in Bosnia and Herzegovina. In RS, foreign professional exams are recognised.

Regarding restrictions to foreign entry, RS law restricts cross-border mergers and acquisitions for non-life insurance and reinsurance. Both RS and FBiH laws require that foreign insurance and reinsurance companies establish branches that have the quality of legal persons. Furthermore, the laws of both entities include a local availability test for cross-border trade in the field of non-life insurance. As part of the licensing process, foreign companies must appoint a local representative, which negatively affects the STRI score. As of 2017, the FBiH law only mentions the possibility of foreign insurance companies opening branches, there is no mention of reinsurers. There are legal form restrictions on the cumulative activity of a branch of a company practising both non-life and life insurance. RS law includes a reciprocity clause for the establishment of branches of foreign insurance companies. Until 2017, the FBiH law also had such a clause, and its removal facilitates the activity of foreign insurers on FBiH jurisdiction. FBiH law, however, imposes various restrictions on managers. Such categories of foreigner must have a work permit, and at least one manager must be a resident of the economy.

Regarding barriers to competition, there are restrictions on asset holdings. The new FBiH Insurance law empowers the regulator to approve new insurance premiums. However, this is not the case in RS. The FBiH maintains a certain form of state-owned enterprise in the sector as the largest shareholder of the Sarajevo Insurance JSC, which provides both life and non-life insurance. RS has no shares in life insurance companies, but it does hold a minority share of 34.9% in Krajina Insurance. However, this company only provides non-life insurance and has a market share of 2.3%. RS provides no restrictive laws on insurance advertising; however, BiH is still scored as restrictive in this area due to the new law in FBiH, which mandates that the advertiser must submit advertising material containing information about the company's financial and market situation for review before publishing.

Construction includes buildings (residential and non-residential) and construction work for civil engineering (ISIC Rev 4 codes 41 and 42). Construction services have historically played an important role in the functioning of economies, providing the infrastructure for other industries. These services account for a significant share of GDP and employment in most economies. Public works, such as roads and public buildings, account for about half of the market for construction services. Therefore, the STRI for construction services covers detailed information on public procurement procedures.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.123 and 0.464. The WB6 average is 0.242, the OECD average is 0.222 and the EU average is 0.207. With a score of 0.365, Bosnia and Herzegovina is the most restrictive WB6 economy.

The movement of people is restricted by the imposition of licensing requirements that need to be respected to provide engineering services in Bosnia and Herzegovina. While RS regulation recognises an acquired amount of ECTS in engineering studies as a possible precondition for passing the licensing exam, there is no such mention in FBiH regulation. At least one engineer must be licenced for the issuance of construction permits in the economy.

Regarding restrictions on foreign entry, the STRI score is negatively affected by the existence of restrictions on cross-border mergers and acquisitions. If a company is fully merged with a foreign entity it will lose its incorporated status and thus its licence to operate. Construction services must be performed by licenced

and registered companies, meaning that they must be incorporated in BiH. Given the federal structure of FBiH, the STRI methodology uses the Sarajevo canton for reference whenever there is no federal law or regulation applicable to the measure in question. Local presence is also required, and foreign branches are prohibited.

Barriers to competition, as defined by the STRI, include cases in which public authorities hold control (i.e. at least a blocking minority or a preferred share) in one of the 10 largest companies in the service sector analysed. It is believed that the presence of an SOE in a given sector could distort competition and act as a deterrent to market entry by foreign operators. In the construction sector, the FBiH maintains the ownership of FBiH Motorways, considered the largest construction company in terms of revenue.

Architecture services also include related technical consultancy (ISIC Rev 4 code 711). These services constitute the backbone of the construction sector, with key roles in building design and urban planning. An important feature is the regulatory complementarity between architecture, engineering and construction services, which are often combined into projects offered by one company, and sometimes subsumed into the building and construction sector.

The 2020 scores for all OECD member states and STRI partners in this sector range between 0.113 and 0.684. The WB6 average is 0.265, the EU average is 0.260 and the OECD average is 0.244. With a score of 0.275, Bosnia and Herzegovina is the second-most restrictive WB6 economy, scoring marginally higher than the WB6 average.

Restrictions on the movement of people mean that a licence or authorisation is required to practice in BiH, and there is no temporary licensing system in place. Qualified foreign physical and legal persons can request a licence for producing architecture documents from the ministry.

Regarding restrictions on foreign entry, both local and commercial presence is required for the cross-border supply of architecture services. Foreign suppliers must have a registered business unit in BiH to obtain a licence. Although it is not clearly stated in the company laws, the alien laws state that a foreign natural person may perform work in the territory only based on their work permit. To obtain a work permit, a foreign natural person must first be granted a residence permit. Given that managers are registered with the court registry and may perform work only upon the employment agreement with the employer (for foreign persons a work permit is mandatory), a manager must have registered residence in BiH.

Engineering services (ISIC Rev 4 code 711) covers several related activities, such as engineering and integrated engineering services, and engineering related scientific and technical consulting services.

The 2020 scores for all OECD member states and STRI partners range between 0.118 and 0.575. The WB6 average is 0.244, the EU average is 0.245 and the OECD average is 0.233. With a score of 0.274, Bosnia and Herzegovina is the most restrictive WB6 economy.

Restrictions on the movement of people are present in the form of licensing requirements to provide engineering services in Bosnia and Herzegovina. RS regulation recognises an acquired amount of ECTS in engineering studies as a possible precondition for passing the licensing exam, but there is no such mention in the FBiH regulation. At least one engineer must be licensed for the issuance of construction permits in the economy.

Regarding restrictions on foreign entry, the STRI score is negatively affected by the restrictions on cross-border mergers and acquisitions. If a company is fully merged with a foreign entity, it will lose its incorporated status and thus its licence to operate. Engineering services must be performed by licensed and registered companies, meaning that they must be incorporated in BiH. Given the federal structure of FBiH, the STRI methodology uses the Sarajevo canton for reference wherever there is no federal law or regulation applicable to the measure in question. Local presence is also required, and foreign branches are prohibited.

Computer services are defined as computer programming, consultancy and related activities and information service activities (ISIC Rev 4 codes 62 and 63).

The 2020 scores for all OECD member states and STRI partners range between 0.123 and 0.448. The WB6 average is 0.239, the EU average is 0.211 and the OECD average is 0.221. With a score of 0.355, Bosnia and Herzegovina is the most restrictive WB6 economy.

This sector is very rarely regulated by sectoral legislation; instead, Bosnia and Herzegovina subjects computer services to general laws that apply to the whole economy. The sector also requires highly skilled workers who are often sought after in third countries, which means that measures affecting the mobility of service providers have a significant impact on the degree of openness in this sector. For this reason, horizontal restrictions on the movement of people account for one-third of the total score in computer services (Figure 21.7).

The telecommunications sector comprises wired and wireless telecommunications activities (ISIC Rev 4 codes 611 and 612). These services are at the core of the information society and provide the network over which other services including computer services, audio-visual services and professional services are traded.

The 2020 scores for all OECD member states and STRI partners range between 0.108 and 0.682. The WB6 average is 0.231, the EU average is 0.151 and the OECD average is 0.188. With a score of 0.270, Bosnia and Herzegovina is the most restrictive WB6 economy.

In the telecommunications sector, the results are mostly affected by two policy areas: restrictions on foreign entry and barriers to competition. In all STRI economies, barriers to competition account for 30% of the STRI score in the telecommunications sector. This reflects the characteristics of the sector, as well as the policy environment in which it operates. It is a capital-intensive network industry and its strategic importance has led many economies to restrict foreign investment and activity.

In order to ensure fair competition in the telecommunications market, Bosnia and Herzegovina has an independent telecommunications regulator, the Communications Regulatory Agency (RAK), which operates at the state level. RAK has published a regulation setting out the requirement of number portability and regulated time and conditions for porting. It also regulates interconnection. Bosnia and Herzegovina is restricted in this sector partly because it does not apply a "use-it-or-lose-it" policy to frequency bands, which can prevent incumbent operators from over-holding valuable frequency licences and free tradable spectrum and telecom services. Mtel a.d. Banja Luka, BH Telekom d.d. Sarajevo and HT d.o.o. Mostar were declared the significant market power operators in the leased lines market in 2012.

Ex ante regulations on granting access, price control and publication of reference offers apply, which is in-line with best practice and EU regulations. All reference interconnection offers and licensing agreements are published on RAK's website. The FBiH is the majority shareholder of both BH Telecoms d.d. and JP HT d.d. Mostar, both of which operate fixed and mobile networks. As in most sectors, maintaining SOEs is a competition liability in the telecommunications sector.

Regarding restrictions to foreign entry, both commercial and local presence are required to provide cross-border services in the telecommunications sector. Furthermore, a licence is required to practise. RAK appoints a service provider for universal services. While this appointment procedure must adhere to the principles of objectivity, transparency, non-discrimination and proportionality, the description of the procedure is not elaborate enough to qualify it as competitive.

In absolute terms, the regulatory framework of the telecommunications sector in Bosnia and Herzegovina is competitive and constrained only by some sector-specific measures and horizontal regulations that apply to the economy as a whole, most notably the movement of people. Cumbersome procedures to obtain visas and register companies also negatively affect the sector to some extent.

Sub-dimension 2.3: E-commerce and digitally enabled services

E-commerce can bring about significant gains for businesses, and is positively related to firms' process innovation. It enlarges businesses' market scope, reduces operational costs at various stages of business

activities and lowers barriers to entry, thus intensifying competition (OECD, 2020^[42]). E-commerce also benefits consumers by providing information on goods and services, helping consumers identify sellers and comparing prices, while offering convenient delivery and the ability to purchase easily via a computer or mobile device (López González and Jouanjean, 2017^[55]).

In the context of COVID-19, e-commerce appears to have been essential for maintaining trade flows despite the restrictions put in place to preserve public health. Indeed, buying online rather than in person reduces the risk of infection. Continuing to sell in locked down economies preserves jobs, despite the demands of social distancing and movement restrictions. E-commerce increases the acceptance of prolonged physical distancing among the population and allows them to maintain a certain level of consumption.

2020 will be a turning point in e-commerce. The digital transformation underlines the importance of adopting a more holistic approach to policies, as well as more international co-operation (Ferencz, 2019^[54]; OECD, 2020^[55]). This sub-dimension assesses the policies implemented in parallel and in addition to those of the Digital society (Dimension 10). It is mostly focused on the trade in digitally enabled services given its rapid growth in the region.

Modern e-commerce regulations should focus on several key elements such as electronic documentation and signature, online consumer protection, data protection and privacy, cyber security, intellectual property regulations, and intermediary liability. An attractive regulatory environment should refrain from maintaining disproportionately restrictive measures such as licensing requirements for e-commerce platforms, limitations on the types of goods that can be sold online (other than for generally accepted public policy considerations), and restrictions on cross-border data flows.

The **e-commerce framework** in Bosnia and Herzegovina is underdeveloped. BiH citizens and business people generally do not shop or conduct business on the Internet, and ordering online remains very rare. The financial sector, however, leads the way as it is generally in line with good international practice in terms of the regulations necessary to operate e-commerce. Many commercial banks offer e-banking to their clients.

The regulatory policy framework on e-commerce in Bosnia and Herzegovina is still at an early stage of preparation. There have not been any substantive changes in the framework since the last assessment cycle, and very little progress has been made on implementation.

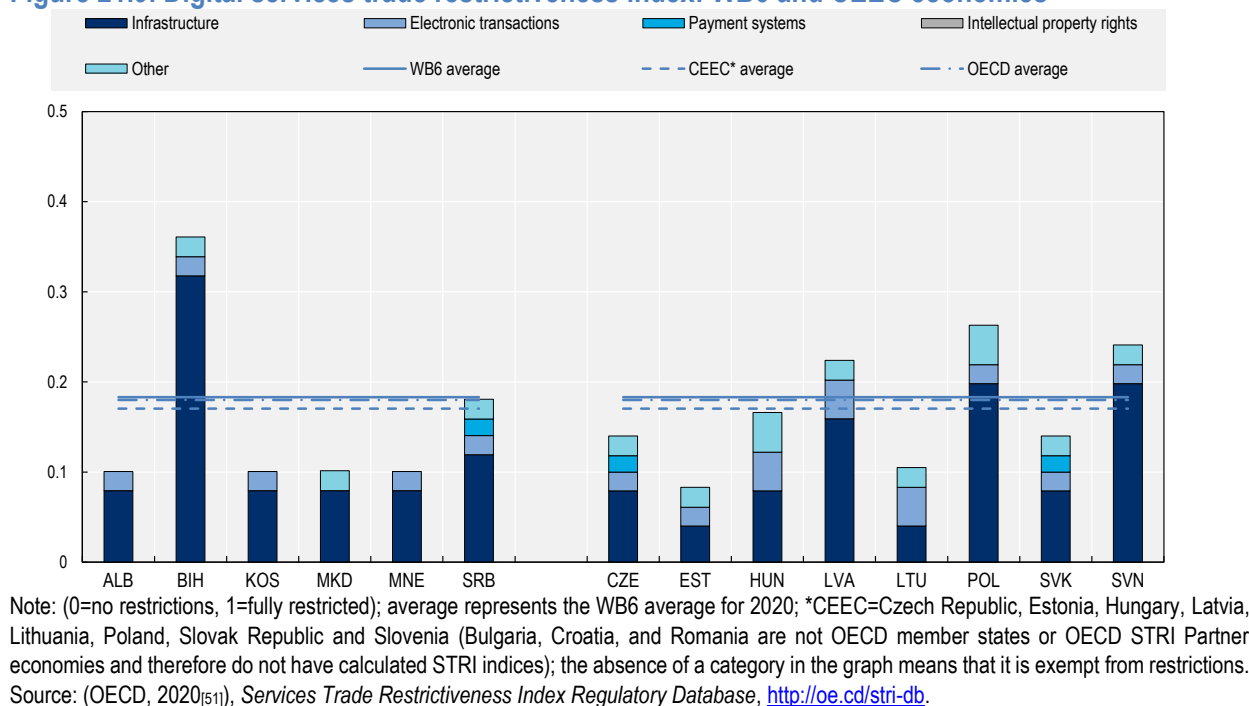
E-commerce falls under the jurisdiction of the state's MoFTER and Republika Srpska's Ministry of Trade and Tourism. The economy has made no progress in adopting a new law on electronic communications and electronic media in line with the 2018 EU regulatory framework. Regulations currently in force are the Law on Electronic and Legal Business Transactions (2007) at the state level and the Law on Electronic Business (2009 amended 2016) in Republika Srpska. In Republika Sprska, certain aspects of e-commerce are also regulated by the Law on Trade (2019) and the Rulebook on the Ways and Forms of Conducting Distance Selling, which was last updated in 2021.²⁶ Different ministries, such those in charge of finance, education or science development, are responsible for the implementation of the laws related to e-commerce. At the state level, the Office for Supervision and Accreditation was established in October 2019 within the Ministry of Communication and Transport of Bosnia and Herzegovina, and regulates the conditions for the application of the Law on Electronic Signatures and the issuance of verified electronic signatures in Bosnia and Herzegovina.

Bosnia and Herzegovina adopted the 2017-2021 Policy for Development of the Information Society in May 2017 (Sluzbenilist BiH, 2017^[56]); however there has been no progress made in adopting a state-wide strategy and associated action plans on e-commerce related matters. Only Republika Srpska has implemented a legal framework addressing consumer protection in e-commerce.

The OECD Digital STRI captures the **restrictiveness of digitally enabled services** by identifying cross-cutting barriers that inhibit or completely prohibit firms' ability to supply services using electronic networks, irrespective of the sector in which they operate. The regulatory data underlying the Digital STRI were

extracted from the existing OECD STRI database and data collected under public laws and regulations affecting digitally enabled services. Digital STRIs are the result of aggregating the identified barriers to trade into composite indices. In accordance with OECD STRI methodology, Digital STRI scoring uses a binary system. Scores are assigned with a value of 0 when there are no trade restrictions and a value of 1 when restrictions are in place. The rating takes into account the specific regulatory and market characteristics, as well as the links and hierarchies between regulatory measures affecting digitally enabled services (López González and Jouanjean, 2017^[57]). Figure 21.9 shows Bosnia and Herzegovina's score on the Digital STRI index.

Figure 21.9. Digital services trade restrictiveness index: WB6 and CEEC economies



StatLink <https://doi.org/10.1787/888934255589>

The 2020 Digital STRI scores for all OECD member states in this sector range between 0.043 and 0.488; the WB6 average is 0.183. With a score of 0.361, Bosnia and Herzegovina is the most restrictive WB6 economy in the digital sector. The economy's score has not changed since 2014.

Results in most Digital STRI economies are regularly driven by infrastructure and connectivity measures due to the lack of effective interconnection regulation. Although BiH has stricter rules than the OECD guidelines in this area, it does not impose excessive conditions on cross-border data flows beyond those put in place to ensure the protection and security of personal data. However, the economy, like the other 11 Digital STRI economies, requires that some types of data are stored locally, although copies can be transferred abroad if the authorities can have direct access to the data upon request.

No specific licences or authorisations for e-commerce activities, beyond ordinary commercial licences, are required. However, there must be a local presence to operate an e-commerce business.

The implementation of international standards for electronic contracts and key electronic authentication measures, such as recognition of electronic signatures, are generally in place; however, BiH lacks a proper dispute settlement mechanism to resolve litigations arising from cross-border digital trade.

Policy areas relating to intellectual property rights and payment systems account for a smaller share of the scores of economies participating in the Digital STRI. BiH is relatively open in this category from a regulatory point of view as it follows the precepts of European regulations in this field.

Regulations are in place which state that foreigners should be treated no less favourably than nationals in terms of intellectual property protection. Moreover, all necessary regulations related to payments systems are in place, although their use is limited in practice.

The way forward for trade policy

Some important steps have been taken to improve institutional co-ordination mechanisms for trade, especially in the area of public consultations. However, Bosnia and Herzegovina could improve its competitiveness by paying attention to the following:

- **Create a formal inter-ministerial co-ordination mechanism** based around a specific action plan on improving overall trade performance to boost co-operation between different ministries and government bodies.
- **Collect data on stakeholders involved in consultations for monitoring and evaluation purposes.** This will allow for adjustments depending on the results and the broader participation of stakeholders on the eConsultation website (Box 21.5). More effort is also needed to raise awareness of various forms of public consultation.
- **Set up a process for regularly reviewing consultation frameworks** according to established goals of effectiveness, efficiency, inclusiveness and transparency, as well as performance indicators. Create mechanisms for evaluating public-private consultations to regularly assess the degree of openness and transparency of consultations. Ideally, a monitoring programme with adequate budget and an independent office would be introduced to allow for systematic evaluations. Training could be provided on the use of various quantitative and qualitative approaches to measure compliance with the minimum standards set by regulatory frameworks for public consultations.
- **Broaden trade in services beyond regional trade agreements.** Significant improvements have been made among the WB6 economies to open services trade through the conclusion of CEFTA Additional Protocol 6 in December 2019. Nonetheless, the STRI analysis in this section has provided some insights into where domestic reforms could help attract new businesses and improve competitiveness:
 - **Ease conditions on the temporary movement of natural persons.** This would further encourage innovation and knowledge transfer, and contribute to economic growth. A starting point could be to remove the remaining quotas and labour market tests for foreign services suppliers.
 - **Reduce the remaining barriers to market entry and competition in the courier, commercial banking and insurance sectors.** Regarding the courier sector, as presented in Box 21.4, abolishing the limits on the proportion of shares that can be acquired by foreign investors in publicly controlled firms would attract investment. In addition, a dispute resolution mechanism should be established. Regarding commercial banking, the restrictions on legal form and local presence requirements to provide cross-border services should be reconsidered to make the sector less restrictive. For the insurance sector, existing restrictions on cross-border mergers and acquisitions should be lifted, along with restrictions on the cumulative activity of a branch of a foreign company.

Box 21.5. Stakeholder engagement throughout the European Commission policy cycle

Following the adoption of the 2015 Better Regulation Guidelines, the European Commission has extended its range of consultation methods to enable stakeholders to express their view over the entire lifecycle of a policy. It uses a range of different tools to engage with stakeholders at different points in the policy process. Feedback and consultation input is taken into account by the Commission when further developing the legislative proposal or delegated/implementing act, and when evaluating existing regulation.

At the initial stage of policy development, the public has the possibility to provide feedback on the Commission's policy plans through roadmaps and inception impact assessments (IIA), including data and information they may possess on all aspects of the intended initiative and impact assessment. Feedback is taken into account by the Commission services when further developing the policy proposal. The feedback period for roadmaps and IIAs is four weeks.

As a second step, a consultation strategy is prepared setting out consultation objectives, targeted stakeholders and the consultation activities for each initiative. For most major policy initiatives, a 12-week public consultation is conducted through the website “Your voice in Europe” and may be accompanied by other consultation methods. The consultation activities allow stakeholders to express their views on the key aspects of the proposal and main elements of the impact assessment under preparation.

Stakeholders can provide feedback to the Commission on its proposals and their accompanying final impact assessments once they are adopted by the College. Stakeholder feedback is presented to the European Parliament and Council and aims to feed into the further legislative process. The consultation period for adopted proposals is 8 weeks. Draft delegated acts and important implementing acts are also published for stakeholder feedback on the European Commission's website for a period of 4 weeks. At the end of the consultation work, an overall synopsis report should be drawn up covering the results of the different consultation activities that took place.

Finally, the Commission also consults stakeholders as part of the ex post evaluation of existing EU regulation. This includes feedback on evaluation roadmaps for the review of existing initiatives, and public consultations on evaluations of individual regulations and “fitness checks” (i.e. “comprehensive policy evaluations assessing whether the regulatory framework for a policy sector is fit for purpose”). Stakeholders can also provide their views on existing EU regulation at any time on the website “Lighten the load – Have your say”.

Source: (OECD, 2017^[58]), *OECD Best Practice Principles on Stakeholder Engagement in Regulatory Policy*, www.oecd.org/gov/regulatory-policy/public-consultation-best-practice-principles-on-stakeholder-engagement.htm; (OECD, 2016^[59]), *Pilot database on stakeholder engagement practices in regulatory policy: Second set of practice examples*, [https://one.oecd.org/document/GOV/RPC/RD\(2016\)5/en/pdf](https://one.oecd.org/document/GOV/RPC/RD(2016)5/en/pdf); (European Commission, 2015^[60]), *Better Regulation Guidelines*, https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how/better-regulation-guidelines-and-toolbox_en.

- **Reinforce the regulatory framework on e-commerce** by finalising the drafting of the Law on Electronic Communication and Electronic Media and adopting new legislation on electronic identification and trust services for electronic transactions (e-signature). Overall, BiH needs to do more to align e-commerce legislation with the European e-commerce directive.²⁷ A good step could be to establish a national online dispute resolution (ODR) platform based on the model of the EU ODR platform (see Box 21.6). The platform should be designed to resolve disputes over the online purchase of goods and services without the intervention of a national court. This resolution process is known as alternative dispute resolution and, as such, is faster and cheaper than a court case. The ODR platform should not be affiliated with any merchant but should provide an independent body that could be called upon at any time to deal with a complaint from any party regarding an e-commerce contract. The dispute resolution body should be an impartial organisation or person that helps consumers and online traders and is independent of, but approved by, the authorities. It should meet the quality standards of fairness, transparency, efficiency and accessibility.

Box 21.6. The European Online Dispute Resolution (ODR) platform

The EU ODR platform is provided to make online shopping safer and fairer through access to quality dispute resolution tools. Regulation (EU) 524/2013 provides the framework for online dispute resolution, the creation of the EU ODR platform and the date (1 September 2016) by which every e-shop in the European Union must provide a link to the platform on its website so that European consumers can electronically submit their complaints to an alternative dispute resolution entity. All online retailers and traders in the EU, Iceland, Liechtenstein and Norway must provide an email address and an easily accessible link to the ODR platform.

The EU ODR platform can be used to solve the problem directly with the trader, and initially acts as an intermediary between the parties in the dispute by informing the trader of the notification. If the requested trader is willing to discuss, the platform allows the exchange of messages directly via a dashboard. Attachments such as product photos can be sent using the dashboard, and an online meeting can be scheduled. If the dispute cannot be resolved amicably within 90 days, or if requested by the parties involved, the ODR platform refers the dispute to a dispute resolution body. Although the model is mainly aimed at disputes initiated by a consumer, some European economies allow traders to file a complaint against a consumer if they reside in Belgium, Germany, Luxembourg or Poland.

Source: (EUR-Lex, 2013^[61]), *Regulation (EU) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Regulation on consumer ODR)*, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R0524>; (European Commission, 2009^[62]), *The European Online Dispute Resolution (ODR) platform*, <https://ec.europa.eu/consumers/odr/main/?event=main.trader.register>.

Access to finance (Dimension 3)

Introduction

Bosnia and Herzegovina has made progress in the access to finance dimension due to the harmonisation of the legal framework in both entities (Figure 21.1). The biggest progress has been recorded under the sub-dimension on access to alternative financing sources, and in particular regarding factoring with the adoption of new regulations in the FBiH (2017) and Republika Srpska (2020). Overall, the economy's performance has increased from 1.9 to 2.3 since the previous assessment (Table 21.6).

Table 21.6. Bosnia and Herzegovina's scores for access to finance

Dimension	Sub-dimension	Score	WB6 average
Access to finance dimension	Sub-dimension 3.1: Access to bank finance	3.1	3.4
	Sub-dimension 3.2: Access to alternative financing sources	1.6	1.9
	Sub-dimension 3.3: Mobilisation of long-term financing	3.0	2.8
Bosnia and Herzegovina's overall score		2.3	2.6

State of play and key developments

Sub-dimension 3.1: Access to bank finance

Bosnia and Herzegovina's financial sector is dominated by banks, which account for around 89% of overall financial sector assets, considerably more than in the euro area (around 45%). At the end of 2019, 23 commercial banks were operating in the economy. One bank is majority state-owned, while foreign banks own more than 80% of the banking sector. Two supervising bodies operate in the territory, one in each entity: the Banking Agency of the FBiH and the Banking Agency of Republika Srpska. According to the regulations in both entities, the screening and approval procedures are the same for all banks regardless of ownership, and banks are subject to the same supervisory and regulation rules.

In Bosnia and Herzegovina, regulation for the **banking industry** falls under the competence of the entities' banking supervisory authorities. The regulation authorities in both entities have been harmonising their regulatory frameworks with EU regulations since the last assessment. Notably, the minimum capital adequacy ratio was transposed in both entities in 2018, meaning that Bosnia and Herzegovina's regulatory framework is largely compliant with Basel III²⁸ requirements.

In the FBiH and RS, the law on foreign exchange operations encourages local currency lending. Banks are not allowed to lend in foreign exchange to a resident, except to enable a resident legal person or entrepreneur to pay for imported goods and services. Banks are obliged to have a methodology in place to calculate internal capital requirements for foreign exchange credit risk.

In Bosnia and Herzegovina, each entity administers its own cadastres to **register** properties, and both are accessible online. Property registration is compulsory. The ownership of pledges on registered fixed assets are fully documented, and both cadastres provide full coverage of the territory. However, in practice the land plot numbers in the Cadastral Books and the land plot numbers in the Land Registry do not appear to often match; moreover, the data are not harmonised among entities as the registries are not linked and verified systematically. Consequently, as a follow-up to the Land Registration Project, implemented between April 2007 and June 2012 in co-operation with the World Bank, a project to support the development of a sustainable real estate registration system with harmonised land registry and cadastre records in urban areas of both the FBiH and the RS was signed in March 2020.

Collateral requirements remain strict, meaning that access to bank loans is challenging for businesses in Bosnia and Herzegovina. Around 67% of loans require collateral, higher than the OECD average (58%), while 212% of the borrowed amount is required as collateral in Bosnia and Herzegovina, more than double the average in OECD economies (88%) and the highest in the Western Balkan region (World Bank,

2019^[16]). In both entities, regulations are largely harmonised and allow the use of fixed and non-fixed assets by businesses to secure loans. However, the list of non-fixed assets is limited to specific machinery and passenger and freight vehicles, which means that the haircuts²⁹ imposed by the regulatory framework remain relatively high at 60% for passenger vehicles, and between 70% and 90% for machinery. This limits the number of potential businesses that can apply for a bank loan.

A public **credit information** system is in place, governed by the Central Bank of Bosnia and Herzegovina. In 2019, a new decision on the Central Registry entered into force which implements the International Financial Reporting Standards (IFRS) 9 norms.³⁰ Credit data are collected directly by the Central Bank from all banks, leasing companies, microcredit organisations and other financial institutions operating in BiH. Both negative and positive information is collected and made available to financial institutions and the public on request. In both entities, legislation provides consumer rights and procedures for correcting mistakes. In the FBiH there is also an operational private credit information system. However, there is no specific regulation that regulates the operation of private credit bureaus in Bosnia and Herzegovina.

Credit guarantee schemes fall under the competence of entities. There were no credit guarantee schemes in the FBiH before the COVID-19 pandemic; however, in May 2020 the authorities established a guarantee fund under the law on the mitigation of the negative economic consequences of the pandemic. Consequently, the FBiH Development Bank set up a guarantee fund with initial reserves of up to BAM 80 million (~EUR 40 million) to maintain and improve the liquidity of companies. Republika Srpska amended the Law on Guarantee Funds in 2019 and 2020 to expand its competences due to the COVID-19 pandemic. The fund targets entrepreneurs, businesses operating in agriculture and manufacturing sectors, and activities focused on exports and preserving employment. It can issue individual and portfolio guarantees. Individual guarantees are issued for up to 50% of the amount (70% in specific situations), while the limit for portfolio guarantees is 25%. Up to May 2020, a total of EUR 17.6 million had been issued as guarantee to 145 companies operating in Republika Srpska.

Sub-dimension 3.2: Access to alternative financing sources

The **factoring** market is still in an early stage of development in Bosnia and Herzegovina and is regulated at the entity level. A dedicated law on factoring in the FBiH was adopted in 2017. The legal treatment of factoring services is clearly defined; however, foreign factors cannot operate directly in the local market, which limits their potential penetration. According to the Law on Corporate Income, interest on factoring is deductible, and value-added tax (VAT) is only applied on service fees, which reduces the cost of factoring.

In Republika Srpska, the Ministry of Finance adopted a new law on factoring in December 2020 and six by-laws in 2021 to improve the factoring market. Before the adoption of this law, two regulations, the Law on Obligatory Relations and the Banking Law, explicitly recognised factoring activities and allowed only banks to perform such activities. The potential effects of the new law and by-laws will be assessed in the next assessment process.

The **leasing** market is relatively small but has been growing since 2017 in terms of nominal value. Notably, the total assets value increased by 24.4% between 2017 and 2019 to reach BAM 323.7 million (around EUR 165 million), which represents 0.9% of total financial assets (0.8% in 2017). Financial leasing accounts for 85% of the value of lease agreements.

In Bosnia and Herzegovina, leasing is regulated by two laws: The Law on Leasing of the FBiH and The Law on Leasing of the RS. Both clearly define information on the subjects of the leasing contract, the lease terms, the contract value and leasing time, the total leasing amount, the possibilities of redemption or renewal of the leasing contract, and the right to lease the subject to another entity. At the end of 2019, five leasing companies were operating in Bosnia and Herzegovina under the supervision of the banking agencies of each entity. In 2019, leasing in the RS was mainly used by the business sector, mainly for vehicles (70% of the total financial leasing) and machinery and equipment (29%). No such information has been provided by the FBiH or a national body, and it remains unclear to what extent this data is collected.

There is no dedicated legislation targeting **private equity investment funds**, **venture capital** and **business angel networks** in Bosnia and Herzegovina. Nevertheless, the laws on investment funds in the FBiH and RS allow venture capital operations. Neither entity government performs any review of the regulatory framework to address the needs of private venture capital funds, and there are no plans nor any initiatives from institutions to stimulate creation or establish venture capital schemes. Similarly, there are no business angel networks operating in Bosnia and Herzegovina. Some minor initiatives exist in RS, such as the Innovation Centre Banja Luka, which is a full-time member of the European Banking Angels Network; however, no activity could be identified during the assessment period. Overall, there are no initiatives to develop this form of financial support in Bosnia and Herzegovina.

No activity has been reported on **crowdfunding** and **initial coin offering** during the assessment period. In March 2016, the RS Securities Commission and in February 2018 the Banking Agency of Republika Srpska issued official warnings for interested investors to be aware of risks related to cryptocurrency investments as they are not regulated. Meanwhile, the purchase of cryptocurrency remains legal in Bosnia and Herzegovina.

Sub-dimension 3.3: Mobilisation of long-term financing

Public-private partnerships (PPPs) are underdeveloped and legally not unified, which prevents the investment in infrastructure projects required to develop the economy. In Bosnia and Herzegovina, legislation related to PPPs is adopted at the entity and/or canton level. There is a dedicated law on PPPs in the RS, while in the FBiH all ten cantons have adopted (non-concession) PPP laws.

At the national level, the Law on Concessions of Bosnia and Herzegovina governs concessions. The two entities also have separate laws on concessions. The Law on Public Procurement from 2014 clearly states that non-concession and concession PPP contracts are awarded in-line with PPP/concession legislation; however, in practice co-ordination remains challenging, which potentially leads to overlapping and conflicting implementation solutions due to the very complex legal system. In FBiH, data on the total number of PPPs are not centralised at the federation level and not publicly available. Only data from three cantons could be gathered through publicly available sources during the assessment period.³¹

In 2020, Republika Srpska amended the law to facilitate the use of PPPs and clearly regulate that the working relationship between public and private partners should be intended to fulfil a public need. The law also includes provisions on rights allocation and obligations of both contracting parties, including the obligation to provide a guaranteed service to users and dispute settlement mechanisms. Since 2010, a limited number of PPP projects have been awarded in Bosnia and Herzegovina.³² Most of these projects are in the fields of energy, transport, and social and health. However, no concession has been awarded at the national level nor in the Republika Srpska since 2015. Thus, data regarding the number and value of the aforementioned PPP projects is unknown. Due to the lack of projects, the effectiveness of the laws cannot be fully assessed. A better transactional record is required to assess the functionality of the legal framework for PPPs (EBRD, 2018^[63]).

Bosnia and Herzegovina's domestic **institutional investor** base remains underdeveloped, which limits capital market development. The regulatory framework is under the entities' competences. Both entities have adopted a dedicated legal framework on securities market and investment funds, and both have a securities market regulator called the Securities Commission. The legal framework is well-developed in the RS and covers conditions for institutional investors to exercise voting rights attached to the share held on behalf of their clients, conflict of interest, and prohibitions related to insider trading and market manipulation. The legal framework in the FBiH does not cover provisions such as the voting rights attached to the share held on behalf of their clients, transparency of fees nor prohibitions related to insider trading.

As of January 2020, 36 investment funds were operating in BiH: 23 open-end investment funds and 13 closed-end investment funds. The total value of net assets of investment funds represented around BAM 852 million (~EUR 426 million) at the end of 2019, around 4% less than the previous year. In the RS,

19 investment funds were operating out of the top five firms, representing a total asset under management of EUR 183 million (1.6% of GDP). One development and investment bank operating in the RS is fully owned by the RS government. In the FBiH, 17 investment funds are operating; however, no further statistical information was reported during the assessment period.

Capital markets have been in place in Bosnia and Herzegovina since 2001. Both entities have their own **stock markets**: the Sarajevo Stock Exchange (SASE) in FBiH and the Banja Luka Stock Exchange (BLSE) in the RS. Both stock exchanges joined the SEE Link in 2017, which is the regional platform for cross-market trading supported by the European Bank for Reconstruction and Development. The stock market is more active in FBiH, while the bond market records higher turnovers in RS. However, in both entities the contribution of capital markets to financing the economy is limited. In 2019, with a 3.6% increase compared to 2018, the SASE registered a total turnover of securities in amount of BAM 144 million (~EUR 72 million), from which the turnover of shares totalled BAM 136 million (~EUR 68 million) (94.4% of total securities), while bonds totalled BAM 7.35 million (~EUR 3.65 million) (5.1% of total securities). Over the same period, with an increase of 10.3% compared to 2018, the BLSE registered a total turnover of securities of BAM 472 million (~EUR 236 million), from which the turnover of shares totalled BAM 76.6 million (~EUR 36.1 million) (16.2% of total securities), while bonds totalled BAM 355.6 million (~EUR 181.8 million) (75.3% of total securities).

Overall, the legal frameworks related to capital markets are aligned in both entities. The listing procedures for companies operating in both entities are clearly defined in their respective laws on securities markets and are organised on the same regulatory principles, while the listing rules slightly differ (Table 21.7). Neither entity offers a separate market for low capitalisation firms.

Table 21.7. Listing rules in Bosnia and Herzegovina

	Federation of Bosnia and Herzegovina	Republika Srpska
Minimum business operations	3 years	2 years
Financial statements	Audited financial report for the minimum last 3 years	Positive or unqualified audit report
Minimum amount of market capitalisation	BAM 1 million	BAM 1 million
Number of shareholders	150	50

In 2019, 17 bond offerings were recorded on both stock exchanges and the treasury bills sector, while in 2018, 5 issuings were recorded on the same basis. In 2019, the FBiH government issued six long-term bonds with a nominal value of BAM 200 million, a maturity of three to ten years and interest rates ranging from 0.05% to 0.80%. It also organised an auction of treasury bills with a total nominal amount of BAM 20 million, a maturity of nine months and an interest rate of -0.1950%. Over the same period the RS government issued eight bonds for a total amount of BAM 271.8 million, a maturity of five to ten years and interest rates between 2.3% and 4%. It also realised two treasury issue bills of BAM 40 million with a maturity of six months and interest rates ranging from 0.0% to 0.0993%.

The regulatory framework is in place in both entities concerning **bond markets**; however the market is shallow and illiquid, especially in terms of corporate bonds. The legal framework of both entities allows the emission of treasury securities, municipal bonds, corporate bonds and zero-coupon bonds. Both regulations clearly stipulate the maturity of the obligation of the issuer and the manner of exercising the right to interest; however, bond ratings are not published. Both entities have no plans nor any specific incentives to facilitate the use of the bond market.

The way forward for access to finance

To enhance the banking industry and support businesses' access to finances, policy makers should:

- **Continue efforts to align banking regulation with international standards.** Given the economic shock caused by the COVID-19 pandemic, the resilience of the banking sector to absorb shocks has become even more vital. Therefore, regularly monitoring and revisiting the respective

regulation in line with internationally agreed norms would further enhance the capacity of the banking sector.

- **Continue efforts to build a business environment by diversifying financing sources.** Given the limited success of business angel networks and venture capital, adopting dedicated legal frameworks to crowdfunding such as the Lithuanian model (Box 21.7) would help to increase the number of potential financing sources, especially for smaller companies.
- **Enhance the transactional record to assess the functionality of the PPP legal framework.** The economy's needs and current institutional context should be taken into account to enhance transactional records.
- **Facilitate market-based long-term debt financing for businesses.** Firms need access to fit-for-purpose financing that meets their needs at various stages of their growth trajectory and development. This will be even more important to recover from the COVID-19 crisis in the long term. Considering the dependence on bank financing, a more extensive use of corporate bond financing could help lengthen maturities, increase resilience and facilitate long-term investments in Bosnia and Herzegovina. This could be achieved by creating an appropriate credit rating mechanism. Models such as those where central banks play a key role in providing rating services could be assessed as a credible and reliable mechanism. The government could also consider introducing a special framework for private bond placements by smaller companies, following a recent and successful example of creating alternative financing options for SMEs in the Italian mini-bond market framework (Box 21.8).

Box 21.7. The Lithuanian crowdfunding model

While Lithuania's crowdfunding market is smaller than other European fintech hubs, the economy is only one of 11 EU Member States with dedicated domestic legislation for crowdfunding platforms and boasts a mature and comprehensive regulatory framework for crowdfunding. Although its crowdfunding is in its infancy, Lithuania currently has 15 registered crowdfunding platforms. There has been a positive increase in the total value of crowdfunding platform loan portfolios, from EUR 6.6 million in 2019 to EUR 9.13 million in the first half of 2020 (Bank of Lithuania, 2020^[64]).

Lithuania adopted its Law on Crowdfunding in 2016 with the aim of providing a hospitable, clear and transparent setting for cross-border crowdfunding platforms. The law adopted all aspects of the European Commission's Regulation for European Crowdfunding Service Providers, allowing for a seamless transition once the EU Directive¹ comes into force. It was established through a multiple stakeholder consultation process and provides better protection and guarantees for investors through information disclosure obligations, governance rules, risk management and a coherent supervision mechanism. The law covers equity, real-estate and debt-based crowdfunding models, while donation and rewards models continue to fall under the Civil Code of the Republic of Lithuania.

Transparency regulations for crowdfunding platforms help mitigate misinformation and legal risk to better protect investors. Platforms must be included on the Public List of Crowdfunding Platform Operators and subject to an efficient reliability assessment conducted by the Bank of Lithuania's supervisory authority within 30 days. Platform operators, board members and significant stakeholders also undergo a criminal record check, while platforms must institute measures to avoid, identify and address any conflicts of interest that would prejudicially benefit the funder or project owner.

In addition to the EUR 40 000 minimum capital requirement, platform owners are required to put up 10% of starting capital themselves. In the case of offerings between EUR 100 000 and EUR 5 million, platform operators are obligated to publish a light prospectus, while offerings over EUR 5 million require a full prospectus detailing the project and project owner characteristics, proportion of own funds used, details of the offering, security measures, and the existence of secondary markets.

In all cases, Lithuania's crowdfunding regulations require platforms to publish wide-ranging information on their websites for investors, including data on the company, risks associated with investment, project selection criteria, conditions and procedures for repayment of funds, disclaimers on tax and insurance information, and monthly and yearly progress reports.

Lithuania is continuously improving its innovative business environment to give financial institutions and crowdfunding platforms more investment opportunities. In 2016, the economy began allowing the use of remote identity verification via qualified electronic signatures and video streaming/transmission, and is harmonising itself with the EU Regulation on electronic identification. Lithuania has also recently amended its Law on the Legal Status of Aliens to include an e-residency programme that allows foreigners to set up companies, open bank accounts and declare taxes through digital identification. This will further financing opportunities for its fintech platforms.

Note: Please note that the European Commission's Regulation for European Crowdfunding Service Providers refers to the European Commission (2018), Impact Assessment of the Council on European Crowdfunding Service Providers. In October 2020, the EU adopted the ECSP Regulation 2020/1503 on European crowdfunding service providers for business.

1: European Commission (2018), Impact Assessment of the Council on European Crowdfunding Service Providers (ECSP) For Business <https://op.europa.eu/fr/publication-detail/-/publication/2eb8abc0-22cb-11e8-ac73-01aa75ed71a1>.

Source: (European Commission, 2017^[65]), *Identifying market and regulatory obstacles to cross border development of crowdfunding in the EU: Final report*, https://ec.europa.eu/info/sites/info/files/171216-crowdfunding-report_en.pdf; (Bank of Lithuania, 2019^[66]), *Consumer Credit Market Review*, <https://www.lb.lt/lt/leidiniai/vartojimo-kredito-rinkos-apzvalga-2019-m>; (Bank of Lithuania, 2020^[64]), *List of Crowdfunding Platform Operators*, <https://www.lb.lt/lt/finansu-rinku-dalyviai?list=36>.

Box 21.8. The Italian “Mini-bond” market

In 2012, the Italian Government introduced a series of laws¹ to initiate a mini-bond framework for unlisted companies to enable them to issue corporate bonds. The mini-bond framework provides a simplified process whereby unlisted companies with more than 10 employees and an annual turnover and/or assets in excess of EUR 2 million (except micro-enterprises and banks) can issue bonds that are available only to qualified investors. Firms are not required to publish a prospectus – an admission document is sufficient.

In response to this new regulatory framework, Borsa Italiana introduced the ExtraMOT PRO segment in 2013, dedicated to the listing of bonds whose trading is only permitted to professional investors. Since its introduction, the mini-bond market has seen steady growth, with the number of issuances increasing from 16 in 2013 to 171 in 2018. The cumulated proceeds during this period amounted to EUR 10.6 billion, 25% of which was raised in 2018. Moreover, mini-bonds have also been securitised through special purpose vehicles which have created a diversified pool of mini-bond issuers available for institutional investors.

In 2019, the government introduced mini-bond placements on equity crowdfunding platforms. In October 2019, the operating rules for equity crowdfunding platforms willing to place mini-bonds were published by the competent authority (Consob). These rules include that offers must be published on specific sections of the platforms; issuers are limited to joint stock companies; and eligible investors are required to hold financial assets of at least EUR 250 000, invest at least EUR 100 000 in the mini-bond, or be a client of an asset management company. The first offerings were published on crowdfunding platforms in January 2020.

1: Law Decree No.83/2012 and its subsequent amendments (Law Decree No. 179/2012; Law Decree No. 145/2013), Law Decree No: 91/2014; Law Decree No: 157/2019, (Fiscal Decree 2020) and Law Decree No: 160/2019 (Budget Law 2020) which created the possibility for unlisted companies to issue corporate bonds through the so-called mini-bond framework.

Source: (OECD, 2020^[67]), *OECD Capital Market Review of Italy: Creating Growth Opportunities for Italian Companies and Savers*, <http://www.oecd.org/corporate/OECD-Capital-Market-Review-Italy.htm>; (Politecnico di Milano, 2020^[68]), *Osservatorio Minibond: 2020 Italian Minibond Industry Report*, <https://www.minibond.tv/files/siti/minibond.tv/osservatorio-minibond/202005-italia-minibond-industry-report.pdf>.

Tax policy (Dimension 4)

Introduction

Table 21.8 shows Bosnia and Herzegovina's scores on two tax policy sub-dimensions and compares them to the WB average. Regarding the first sub-dimension, the tax policy framework, Bosnia and Herzegovina scores below the WB6 average due to its low score for the "tax expenditure reporting" indicator. On the second dimension, tax administration, Bosnia and Herzegovina scores below the WB6 average due to its low score for the "independence and transparency" indicator.

Table 21.8. Bosnia and Herzegovina's scores for tax policy

Dimension	Sub-dimension	Score	WB6 average
Tax policy dimension	Sub-dimension 4.1: Tax policy framework	2.9	2.6
	Sub-dimension 4.2: Tax administration	2.4	3.3
	Sub-dimension 4.3: International co-operation	n.a.	n.a.
Bosnia and Herzegovina's overall score		2.6	3.0

Note: For comparability with the previous assessment, the new sub-dimension (4.3) has not been scored but is discussed in the text below.

State of play and key developments

Sub-dimension 4.1: Tax policy framework

Bosnia and Herzegovina raises significant tax revenue relative to its GDP (Table 21.9). Tax revenue as a share of GDP was 36.3% in 2019, which exceeds the OECD average (33.8%) and the average of other WB6 economies (28.3%). Bosnia and Herzegovina's tax mix is highly concentrated on SSCs and taxes on goods and services, which accounted for 88.1% of total tax revenue in 2019 (the highest joined total among WB6 economies). This ratio is above the WB6 average (80% in 2019) and the OECD average (58.4% in 2018). Consequently, other taxes play a smaller role. Among OECD economies, CIT and PIT account for a third of total tax revenue, on average (33.5% in 2018). However, in Bosnia and Herzegovina these taxes combined accounted for only 10.4% of total tax revenue in 2019. There is therefore scope to rebalance the tax mix. SSCs account for 43% of total tax revenue, which is far above the WB6 average (32% in 2019). The heavy reliance on SSCs supports the direct funding of the welfare system and prevents the need for social welfare funds to be funded partly from general tax revenues, which would create challenges from a budgeting perspective. However, high SSCs can place a significant tax burden on labour income, reducing incentives to work and making it expensive for employers to hire workers, especially low-income and low-skilled workers (OECD, 2018^[47]). Bosnia and Herzegovina has a relatively large informal economy, estimated at 25-35% of GDP (European Commission, 2020^[39]), which may partly be linked to the high labour tax cost. Revenue from taxes on goods and services as a share of total taxes is 45.1%, which is slightly below the WB6 average (48% in 2019). The economy could rebalance the tax mix by strengthening taxes on personal or corporate income, as well as environmental taxes and recurrent taxes on immovable property.

Table 21.9. Bosnia and Herzegovina's tax revenue as a percentage of GDP

	CIT	PIT	SSCs	Goods and services	Tax/GDP ratio
Bosnia and Herzegovina	1.8%	2.7%	15.6%	16.4%	36.3%
WB6	1.8%	2.7%	9.3%	15.9%	30.6%
OECD	3.1%	8.1%	9.0%	10.9%	33.8%

Note: The ratios for Bosnia and Herzegovina were calculated on the basis of data received in the CO2021 questionnaire for the Federation of Bosnia and Herzegovina and Republika Srpska, with complementary data from the Agency of Statistics of Bosnia and Herzegovina for the Brčko District. Based on the Brčko District's share of Bosnia and Herzegovina's GDP, tax revenues were computed under the assumption that tax/GDP ratios in the Brčko District were similar to the combined average ratios found in the other entities. With the tax revenues computed under this assumption, tax/GDP ratios were then calculated for the integrated economy.

Source: (OECD, 2020^[69]) OECD.Stat, <https://stats.oecd.org/> (OECD average on overall tax/GDP ratio, 2018 for specific tax/GDP ratio.)

The standard CIT rate is levied at 10%, which is below the WB6 average (11.5% in 2020) and the OECD average (23.3% in 2020). This relatively low CIT rate is reflected in BiH tax revenue: CIT revenue accounted for 1.8% of GDP in 2020, which is similar to the WB6 average (1.8% in 2019) but below the OECD average (3.1% in 2018). Despite a low CIT rate, Bosnia and Herzegovina has a similar ratio of CIT revenue to GDP compared to other WB6 economies (Table 21.10). Regarding the taxation of capital income, capital gains are considered as business income and are taxed at a rate of 10%, while dividend income is excluded from the CIT base. Upon dividend distribution, no withholding tax is paid by the company if dividends are distributed to a resident individual. However, withholding taxes are levied on income generated by a non-resident business and paid to a foreign entity.³³ Concerning the taxation of international business income, Bosnia and Herzegovina operates a worldwide taxation system in which resident corporations are liable for taxes on their worldwide income, while non-residents only pay taxes on domestically sourced income. A worldwide taxation system is currently adopted in all WB6 economies. However, such systems are increasingly less common among OECD economies, particularly for small, open economies. The economy may wish to re-evaluate the advantages and disadvantages of worldwide taxation systems, possibly in collaboration with other WB6 economies.

Table 21.10. Selected tax rates in Bosnia and Herzegovina

	CIT	PIT	SSCs	VAT
Bosnia and Herzegovina	10.0%	10.0%	37.1%	17.0%
WB6	11.5%	12.8%	28.6%	19.0%
OECD	23.3%	42.8%	26.9%	19.3%

Note: CIT and PIT averages are based on top statutory rates.

Source: (OECD, 2020^[69]), OECD.stat, <https://stats.oecd.org/> (Statistics on OECD average for CIT and VAT (2020), PIT and SSCs (2019).)

Corporate investment in Bosnia and Herzegovina is incentivised through profit-based and cost-based **tax incentives**. Cost-based tax incentives lower the cost of investment, and the value of the benefit increases with the size of the investment undertaken. The value of profit-based tax incentives increases with the profits made by the business, and depends less on the amount of investment. In the FBiH, a number of such incentives exist. For example, companies investing their resources in production equipment may benefit from a 30% CIT relief, and companies undertaking a minimum investment in production equipment for five consecutive years benefit from a 50% CIT tax relief for five years.³⁴ The FBiH also provides a full CIT deduction for business expenses used for R&D activities. An employment incentive scheme provides CIT relief that is double the amount of gross salaries paid for companies employing new workers.³⁵ FBiH also allows provisions for future expenses aimed at environmental protection that are up to 30% of taxable income. Following a 2019 CIT reform, Republika Srpska provides a CIT reduction that is equivalent to the value of the investment undertaken for taxpayers investing in manufacturing equipment. In general, cost-based incentives are better targeted at stimulating investment than profit-based tax incentives, which favour companies with high profits (UNCTAD, 2015^[70]). Given the economy's competitive CIT rate, profit-based incentives may not be needed. Overall, Bosnia and Herzegovina has a mix of cost-based and profit-based tax incentives that are aligned with practice in other WB economies. Whether these tax incentives

create significant “additional” investment beyond what would have taken place without the tax incentives requires further empirical analysis.

Regarding **tax revenue**, PIT revenues as a share of GDP are relatively low in Bosnia and Herzegovina, which is common in the region. In 2019, PIT as a share of GDP was 2%, slightly below the 2.2% average of WB6 economies and significantly below the 8.1% OECD average in 2018. The relatively low PIT revenues are partly explained by the economy’s low PIT rate. In Bosnia and Herzegovina, PIT is levied at a 10% flat rate, which broadly aligns with the 9.8% average rate found in other WB6 economies that implement a flat-rate PIT system. Similar to most OECD economies, a minimum amount of income is exempt from PIT through an annual personal basic tax allowance. This allowance equals BAM 3 600 (EUR 1 840) in the FBiH and BAM 6 000 (EUR 2 560) in Republika Srpska. These allowances are relatively high, at 31% of the average net wage in FBiH and 43% in the RS (FIPA, 2021^[71]). Under a reform proposed for 2021, the FBiH plans to move from the current flat PIT rate to a progressive PIT rate schedule, with rates at 0%, 10% and 13%. Introducing a progressive PIT rate schedule in Bosnia and Herzegovina would increase tax progressivity and, depending on the tax brackets and income distribution, could contribute to raising more PIT revenue. This would help rebalance the tax mix away from SSCs and towards PIT. Regarding the taxation of personal capital income, dividends and interest are tax exempt, while capital gains, royalties or rental income are included in the PIT base. The tax exemption of dividends and interest creates an incentive for entrepreneurs to incorporate and receive income in the form of capital income rather than salaries.

Bosnia and Herzegovina relies heavily on revenue from SSCs, to a greater extent than other WB6 economies. In 2019, SSC revenue amounted to 15.6% of Bosnia and Herzegovina’s GDP, which is by far the highest ratio among WB6 economies (9.3% on average, second highest is Serbia with 12.5%). This reliance on revenue from SSCs also exceeds average levels found in OECD economies (9% in 2018). The high SSC revenues are a result of high SSC rates. In the FBiH, employee SSC rates are currently 31%, while employer SSC rates are 10.5%, leading to a total SSC rate of 41.5%. In Republika Srpska, only employees are liable for SSC payments at a rate of 32.8%. These rates are high compared to the rates levied on average in the OECD (9.8% for employees and 17.8% for employers in 2020). Compared to regional averages, the total SSC rate exceeds the average rate in other WB6 economies (29.4% in 2020). OECD research shows that high SSC rates can place a significant tax burden on labour income, which can reduce incentives to work and make it expensive for employers to hire workers, especially low-income and low-skilled workers (OECD, 2018^[47]). As SSCs are levied at the same rate for all income levels, they do not contribute to making the taxation of labour income more progressive (OECD, 2018^[47]). As part of the aforementioned proposed reform, the FBiH plans to lower the SSC rate from 41.5% to 32.5% in 2021.

Taxes on goods and services as a share of GDP are relatively high in Bosnia and Herzegovina. Revenue from these taxes accounted for 16.4% of Bosnia and Herzegovina’s GDP in 2019, which is above the WB6 average (14% in 2019) and OECD average (10.9% in 2018). VAT revenue is relatively high, linked to a relatively high VAT rate of 17%. Nevertheless, this rate is the lowest among WB6 economies and below average levels found in OECD (19.3%) and WB6 economies (19%) in 2020. Bosnia and Herzegovina does not have a reduced VAT rate, which is atypical in the region (it does have a zero VAT rate, but this only applies to exports). However, activities in the public interest are exempted from VAT.³⁶ OECD research generally does not recommend adopting reduced VAT rates as they are an ineffective way to provide support to those on a low income, as those on a higher income benefit more from the reduced rate. The VAT registration threshold is BAM 50 000 (EUR 25 600), which is relatively low compared to levels found in other WB6 economies. Regarding other taxes on goods and services, Bosnia and Herzegovina levies excise duties on gasoline and diesel fuel. The economy does not levy a carbon tax or other environmental taxes. This high reliance on taxes on goods and services and SSCs suggests a low level of progressivity in Bosnia and Herzegovina’s tax system.

Despite its extensive set of tax incentives, Bosnia and Herzegovina does not publish an annual **tax expenditure report**, unlike several other WB6 economies. For example, Albania published a tax expenditure report in 2019, while Montenegro and North Macedonia are currently in the process of publishing such a report. Bosnia and Herzegovina should publish a regular tax expenditure report to increase transparency and accountability and allow the economy to monitor the use and effectiveness of tax incentives, along with forgone tax revenue (OECD, 2010^[72]). The report should identify, measure and report the cost of tax expenditure in a way that enables the comparison of the monetary value of tax incentives with that of direct spending programmes (IMF, 2019^[73]). A cost-benefit analysis could also be conducted to evaluate whether specific tax incentives meet their stated objectives and, if not, whether they should be abolished or replaced.

Regarding **modelling and forecasting**, the Ministry of Finance of Bosnia and Herzegovina uses macro-simulation models to forecast aggregated tax revenues for all types of tax. This function is carried out by the Macroeconomic Analysis Unit, which produces estimates of budgetary revenue trends on a yearly basis, as well as the medium-term forecasting of all public revenue. In both entities, micro-simulation models are used to analyse the impact of taxes and tax reforms, including their distributional impact, for CIT, PIT and SSCs.

Sub-dimension 4.2 Tax administration

Bosnia and Herzegovina does not have a unified administrative body that oversees all taxes. The **functions and organisation** of the tax administration is divided between the two entities and the Brčko District, which are each responsible for collecting direct taxes at their level. The Indirect Taxation Authority is responsible for all indirect taxes at the state level. In the FBiH, tax administration uses a mixture of taxpayer and functions approaches – tax registration, submission and processing of tax returns, payment of investigation and services rendered to the taxpayer are based on a functions approach, while supervision/audit is based on a taxpayer group approach, with separate units for large taxpayers and other taxpayers. In Republika Srpska, the tax administration head office is in charge of co-ordination, surveillance and control over operations, as well as the unified implementation of tax policy. RS tax administration regional centres are in charge of a wide range of functions including desk and field audits, taxpayer assistance with the application of tax regulations, tax collection, and the management of tax arrears. RS tax administration local offices receive and process documents received from taxpayers, including tax declarations. They also formally check the information provided and calculate tax liability.

With regards to **compliance assessment and risk management**, Bosnia and Herzegovina follows a risk-based approach. At the state level, the Risk Analysis and Management Department within the Ministry of Finance and Economy prepares a monthly control plan based on a parametric risk model that ranks taxpayers according to risk points. In Republika Srpska, a monthly audit plan has been developed with a focus on large taxpayers, and an automated system for the selection of high-risk taxpayers is currently under development. For the FBiH, an annual audit plan has been developed that has a wide set of criteria,³⁷ including the business activity of the taxpayer, the time passed since the last audit and the number of employees. OECD research shows that risk-based selection is a key element of effective and efficient compliance programmes as it allows administrations to make effective trade-off decisions and make the best use of scarce resources (OECD, 2018^[47]). Tax administrations at the state and entity level in BiH carry out similar audit tasks, ranging from simple checks to in-depth inspections of taxpayer premises.³⁸ Both RS and the FBiH have special audit divisions for large taxpayers. With regards to VAT compliance, Bosnia and Herzegovina has implemented the Indirect Tax Compliance Strategy 2019-2021, which includes specific programmes for addressing the various risks of tax compliance.³⁹

In Republika Srpska, the **transparency and independence** of tax administration is established by the Law on Tax Procedure; however, the FBiH has not adopted a policy to establish an independent management board of the tax authority. In both RS and the FBiH, the operational budget of the tax administration is fixed by annual budgetary procedures and does not depend on the amount of collected revenue. In RS, a

regulatory framework is in place to guarantee sanctions in case of misconduct by a member of the tax administration, which is not the case in the FBiH. OECD research suggests that corruption among tax administration employees may deter individual taxpayers from paying taxes, or may lead to them opting to pay a bribe or enter the informal economy (OECD, 2018^[47]). Implementing strong procedural safeguards that guarantee the independence of the tax administration is therefore crucial for tax collection purposes.

Regarding **tax filing and payment procedures**, e-filing has been mandatory for VAT and excise duties since 2019 (the state level is only responsible for indirect taxes). In the FBiH, e-filing is possible for CIT, PIT and SSCs, but only 55% of tax returns are filed electronically. In RS, e-filing is available for all taxes, and seems to be increasing: 43% of tax returns were filled electronically in 2019, compared to 57% from January to April 2020. The Audit Office of Bosnia and Herzegovina, an independent body, performs regular audits of the functioning of the Indirect Taxation Authority. In 2018, the process was assessed by the independent body of the Tax Administration Diagnostic Assessment Tool (TADAT), but the results are not publicly available. The RS tax administration submits semi-annual and annual reports to the government of Republika Srpska. In the FBiH, the tax administration reports once a year to the entity-level Ministry of Finance.

Various **taxpayer services** are at the public's disposal in Bosnia and Herzegovina. State and entity levels all provide online access to information, electronic communications and in-person enquiries. The Federation of Bosnia and Herzegovina has an Ombudsman, which is an independent state body available for all citizens that taxpayers can refer to. Its mission is to protect the rights of citizens and control the work of administrative bodies.

Sub-dimension 4.3: International co-operation

Similar to most WB6 economies, Bosnia and Herzegovina has strengthened its involvement with the **international tax** community and carried out several initiatives to align its tax system with recent international tax trends since the last CO assessment. It became a member of the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) in July 2019 and has been proactive in implementing initiatives regarding the four BEPS minimum standards: harmful tax practices (Action 5); prevention of tax treaty abuse (Action 6); economy by economy reporting (Action 13); and mutual agreement procedures (Action 14). Furthermore, Bosnia and Herzegovina signed the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS in October 2019 and the Convention on Mutual Administrative Assistance in Tax Matters at the 10th Global Forum plenary meeting in November 2019. Both conventions entered into force in January 2021. With regards to exchange of information, a peer review by the OECD Global Forum on exchange of information on request is scheduled for the second half of 2022. The economy's transfer pricing legislation has been drafted based on OECD transfer pricing guidelines.

Bosnia and Herzegovina could strengthen its efforts with regards to **digital taxation**. While the economy has not formally implemented international guidelines on VAT or goods and services tax (GST), it levies cross-border digital services at the place where the service recipient is established. This resembles the destination principle, which is the "cornerstone" of international VAT/GST guidelines. However, the economy has indicated that its VAT legislation is not fully compliant with the EU VAT Directive. Personal income received from digital platforms is excluded from the PIT base. Bosnia and Herzegovina has appointed representatives to the OECD's Tax Challenges Arising from Digitalisation project, which aims to find a consensual solution to specific tax challenges through two pillars focused on nexus and profit allocation (Pillar 1), and a global minimum tax (Pillar 2). These developments taking place at the OECD level, especially those under Pillar 2 and the expected global minimum tax on corporate profits, might have an impact on the economy's taxation of corporate income. While a global minimum tax rate has not been set and depends on ongoing discussions, Bosnia and Herzegovina's 10% CIT rate is low, below both WB6 and OECD averages. If the global minimum rate were set higher than 10%, Bosnia and Herzegovina would be faced with the choice of either raising its rate to the minimum tax rate or risk forgoing tax revenue to

foreign jurisdictions. Pillar 2 might also incentivise the economy to redesign its investment incentives to offer attractive tax rates. Bosnia and Herzegovina may wish to carefully assess its position on this issue and draft an action plan in case consensus is reached among BEPS members.

Bosnia and Herzegovina is engaged in modest **regional co-operation** with other WB6 economies. At the state level, the Ministry of Finance and the Treasury of Bosnia and Herzegovina participate in workshops organised by the Centre for Excellence in Finances, which have been delivered as part of the Supporting Capacity Development of Tax Administrations in South East Europe Project.⁴⁰ Republika Srpska is also engaged in independent initiatives and signed an agreement on mutual co-operation in March 2011 with Slovenia, Montenegro, Serbia and the FBiH. Republika Srpska also joined the Intra-European Organization of Tax Administrations in June 2004.

The way forward for tax policy

To enhance Bosnia and Herzegovina's tax policy framework and achieve objectives, policy makers should:

- **Continue to support the economy in light of COVID-19.** Bosnia and Herzegovina implemented a comprehensive set of measures to mitigate the effects of COVID-19 on its economy and citizens. It may wish to continue its efforts, while focusing on measures that could spark an economic recovery.
- **Diversify the tax mix and increase progressivity in the tax system.** Bosnia and Herzegovina levies 88.1% of its total tax revenue from taxes on goods and services and SSCs, which means that most revenue is levied at the same rate across income levels. PIT and CIT, also currently levied at flat rates, could be redesigned to diversify the tax mix and introduce progressivity in the tax system.
- **Rebalance the taxation of labour income by shifting revenue away from SSCs and towards PIT.** The high tax burden on labour income could distort the functioning of the labour market, in particular for low-income and low-skilled workers, and create tax-induced incentives to operate in the informal economy. Lowering SSC rates and redesigning PIT by introducing a progressive rate schedule could be explored as a policy option.
- **Evaluate whether the imbalance between the tax burden on capital and labour income distorts the economy and creates tax-induced incentives for entrepreneurs to incorporate.** The incentive for entrepreneurs to incorporate allows them to shift highly taxed labour income to lower taxed capital income.
- **Strengthen tools and capacities to assess the effects of tax policies on the economy.** Tax transparency and accountability could be strengthened through the annual publication of a tax expenditure report. Micro-simulation models should be used to assess the distributive effects of tax reforms and forecast tax revenue.
- **Turn profit-based tax incentives into cost-based tax incentives.** Evaluate whether tax incentives create “additional” investment or just provide windfall gains to investors.
- **Strengthen the use of e-filing.** The use of e-filing remains low in Bosnia and Herzegovina compared to other WB6 economies. BiH should consider mandatory e-filing as used in some economies, such as Albania.
- **Implement a policy that guarantees the independence of all tax administrations.** Although there is a law that establishes the independence and transparency of Republika Srpska's tax administration, the Federation of Bosnia and Herzegovina has not established an independent board for its tax administration. An independent and transparent tax administration is crucial for taxpayer trust in the tax system, which is in turn crucial for tax collection.
- **Define an action plan regarding BEPS Pillar's 2 global minimum tax rate in case consensus on this rate is found among members of the OECD/G20 Inclusive Framework on BEPS.** The global minimum tax rate, if agreed, is likely to be lower than the current statutory CIT rate in BiH.

However, the economy's set of CIT investment incentives could lower effective tax rates on corporate profits to a level below the expected minimum rate. In this case, Bosnia and Herzegovina would be faced with a choice of either redesigning its investment tax incentives or risk forgoing tax revenue to foreign jurisdictions. The economy should evaluate its position on this issue and prepare an action plan accordingly.

- **Continue to engage with the international tax community and implement international best practices.** Since the last CO report, Bosnia and Herzegovina has strengthened its involvement in international tax matters, and this approach should be continued.
- **Carry out a cost-benefit analysis on the merits of a worldwide taxation system for resident corporations.** For small open economies such as Bosnia and Herzegovina, worldwide taxation may entail high administrative costs without raising significant revenue.
- **Foster regional co-operation and co-ordination on common tax issues within the WB6 region.** Bosnia and Herzegovina shares common challenges with other WB6 economies, and enhanced collaboration might be favourable for all economies involved. Areas such as tax compliance, the training of tax officials and the exchange of information would greatly benefit from a co-ordinated regional approach.

Competition policy (Dimension 5)

Introduction

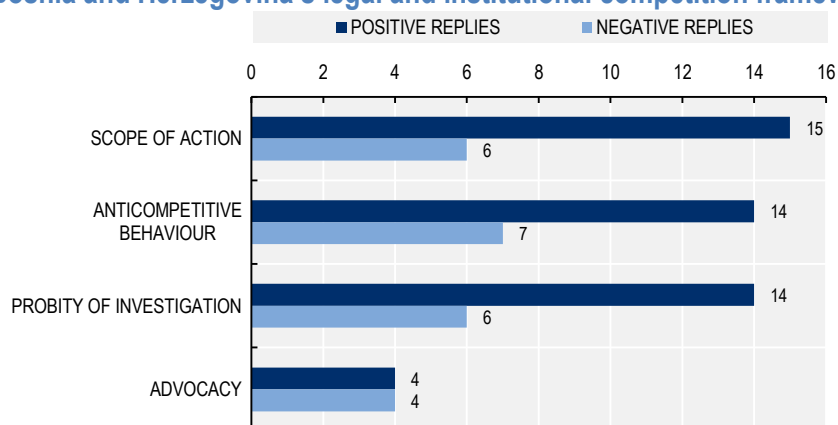
The legislative framework on anti-trust and mergers is broadly aligned with EU competition rules and has not been significantly modified in recent years. The Law on Competition of Bosnia and Herzegovina largely mirrors the relevant provisions of the Treaty on the Functioning of the European Union in terms of restrictive agreements (Article 101) and the abuse of dominant position (Article 102). It also provides for the *ex ante* control of the effects on competition of mergers above certain turnover thresholds, in line with the principles of the EU Merger Regulation.

Responsibility for implementing the Law on Competition, approved in 2001, rests with the Competition Council (CC), an operationally independent public body established in 2004 that has exclusive competence and decision-making power in competition matters. The CC is composed of six members appointed from legal and economic experts by the Council of Ministers and entity governments to reflect the ethnic composition of the economy.

Unlike the other dimensions, where indicators are allocated a score from one to five, the Competition policy dimension assesses four policy areas (i.e., scope of action, anticompetitive behaviour, probity of investigation and advocacy, plus a new area: implementation). Scoring is based on yes/no (coded as 1/0) answers to the 71 questions in the questionnaire administered by the OECD. Where a response to a question is yes (coded as 1), then we refer to this as an adopted criterion. Each of the four policy areas has a different number of possible criteria that can be stated as having been adopted. Each policy area is assessed through data collected from the questionnaire indicators and by measuring the number of criteria adopted. The new fifth policy area (implementation) is not scored, but is a quantitative analysis of how many competition decisions have been adopted by the competition authorities. The anti-competitive behaviour and implementation policy areas are discussed together below.

Figure 21.10 shows the number of positive (aligned with good practice) and negative answers to the questionnaire for each policy area.

Figure 21.10. Bosnia and Herzegovina's legal and institutional competition framework



Source: Based on the OECD assessment.

Regarding the implementation of competition rules, the impact of anti-trust and merger cases carried out by the CC is still limited, and the related fines do not seem to ensure strong deterrence. The leniency system is not effective in supporting cartel detection.

Advocacy action could be expanded to embed competition principles in the legislation and spread a competition culture.

State of play and key developments

Sub-dimension 5.1: Scope of action

The Competition Council implements the Law on Competition in Bosnia and Herzegovina. It consists of six members appointed for a six-year term of office, with the possibility of one reappointment. Three members are designated by the Council of Ministers of Bosnia and Herzegovina, two members by the Government of the Federation of Bosnia and Herzegovina and one member by the Government of Republika Srpska. Every year the Council of Ministers of Bosnia and Herzegovina appoints one CC member as the President of the CC for a one-year term. Decisions can be taken by majority rule, but at least one member from each of the three constituent ethnic groups must vote in favour.

In addition to the headquarters in Sarajevo, the CC holds two smaller offices in Mostar and Banja Luka. There are 20 staff in total, in addition to the council members. All employees deal with competition matters and are not organised into departments specialised by sector or type of infringement.

It is possible to compare the CC with other competition authorities using the OECD CompStats database,⁴¹ which has data from competition agencies in 56 jurisdictions. Of particular use are the 15 competition authorities operating in small economies (with a population lower than 7.5 million). In 2019, the average total number of staff in these 15 competition authorities was 114, of whom 43 were working on competition.

The budget of the CC has decreased, as in several other national public institutions, from EUR 700 000 in 2017 to EUR 650 000 in 2019. Even considering the small size of the economy, this amount is very low when compared internationally. In 2019, the average budget of the 15 competition authorities in small economies that participated in the OECD CompStats database was EUR 5.4 million.

The Law on Competition of Bosnia and Herzegovina ensures competitive neutrality insofar as it stipulates that the **competences** of the CC encompass any natural and legal persons active in the production, sale or trade of goods and services, or involved in the trade of goods and services that have or may have an influence on competition in BiH. This includes public bodies, regardless of ownership, seat or residence.

The CC has appropriate **powers to investigate** and **powers to sanction** possible anti-trust infringements, i.e. restrictive horizontal and vertical agreements and exclusionary or exploitative practices by dominant firms. It can impose cease and desist orders and remedies on firms that have committed anti-trust infringements. It can also adopt interim measures in case the alleged competition breach poses a risk of irreparable damages, either on its own initiative or following a request by the parties involved. It can accept commitments offered by the parties to remove the competition concerns and close the investigation.

The CC can compel investigated firms and third parties to provide relevant information and can perform unannounced inspections (dawn raids) on the premises of the parties, subject to a warrant by the competent court. The assessment of alleged anticompetitive conduct follows a thorough scrutiny of the collected evidence, which may include an economic analysis of the competitive effects of vertical agreements or possible exclusionary conduct. The CC can impose fines of up to 10% of the aggregate turnover of the undertaking.

The Law on Competition provides for a leniency programme that grants total or partial immunity from sanctions to firms that report to the CC the existence of an agreement and submit appropriate evidence. The Law on Competition also provides for the *ex ante* control of mergers, following the principles of the EU Merger Regulation.

The CC must prohibit concentrations that significantly restrict effective competition, in particular by creating or strengthening a dominant position. It can authorise the transaction subject to structural and/or behavioural remedies suitable to address the competition concerns, such as divestiture of assets and/or obligations to act or refrain from acting in a certain way.

The investigative powers of the CC for merger review are similar to those related to anti-trust proceedings; namely, it can compel merging firms and third parties to provide relevant information, and may perform

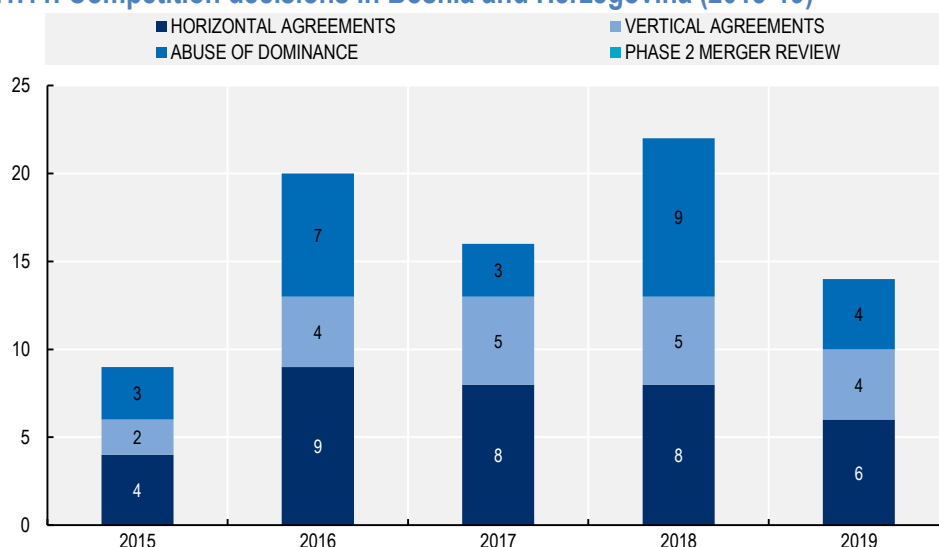
unannounced inspections on the premises of the parties. The assessment of notified mergers must follow a thorough scrutiny of the evidence, which includes an economic analysis of the restrictive effects and of possible efficiencies stemming from the concentration.

In Bosnia and Herzegovina, **private enforcement** cannot be actioned to seek damages from firms that have committed anti-trust infringements.

Sub-dimensions 5.2 and 5.5: Anti-competitive behaviour and implementation

The anti-competitive behaviour and implementation policy areas together gauge the use of powers and resources in terms of decisions adopted and fines imposed for horizontal agreements, vertical agreements and exclusionary conduct. They also explore the actual activity of the competition authority on reviewing mergers. The impact of competition enforcement in Bosnia and Herzegovina is limited, despite a high number of decisions adopted by the CC in recent years (Figure 21.11).

Figure 21.11. Competition decisions in Bosnia and Herzegovina (2015-19)



Source: Data provided by the authorities.

In 2019 the CC took six decisions on **horizontal agreements** and four decisions on **vertical agreements**. These figures were even higher in 2017 and 2018, when there was eight horizontal decisions and five vertical decisions. However, it should be noted that most decisions have been related to the non-opening of formal proceedings, and no significant fines have been imposed over the last five years for prohibited agreements.

In 2019 the CC also adopted four decisions on **exclusionary conduct** (abuse of dominance), down from nine decisions in 2018. Again, these figures include several decisions not to pursue or to drop the case, which means that sanctions following infringement decisions were negligible. One fine was imposed in 2018 following an investigation on the delivery of heating energy which meant that the amount of fines peaked at around EUR 230 000; however, it dropped close to zero again in 2019.

No leniency application has been submitted to the CC, which has never performed an unannounced inspection.

In the period 2015-2019, the CC received a limited number of **merger** notifications, from a minimum of 15 in 2016 to a maximum of 35 in 2018. In 2019, the CC took 21 merger decisions, with all mergers unconditionally cleared in Phase I (i.e. without the need for an in-depth review in Phase II).

Sub-dimension 5.3: Probity of investigation

The CC is an **independent** public body mandated to ensure implementation of the Law on Competition. It has exclusive competence to decide on competition infringements in Bosnia and Herzegovina. Nevertheless, as mentioned the appointment of CC members and the decision-making process is influenced by ethnic-based procedures, which risk introducing other considerations to decisions that should solely rely on a technical assessment.

The CC is **accountable** to the Council of Ministers, to which it submits a performance report and an annual report for adoption.

In terms of **procedural fairness**, the Law on Competition stipulates that the decisions of the CC must be submitted to the parties to the proceedings and published in the national Official Gazettes. The decisions must indicate the parties to the proceedings, the main contents and the outcome of the investigation, while specifying the relevant legal basis.

In line with EU rules, the decisions of the Competition Council can be challenged and an appeal can be launched before the Court of Bosnia and Herzegovina. Unlike in most jurisdictions, there are not two levels of appeal.

Prior to the adoption of a final anti-trust decision, the CC must inform the party on the relevant facts, evidence and other elements on which the decision is based and enable the party to submit a defence. The parties have the right to be heard before the CC takes a final decision. In managing confidential data or business secrets, the CC has the duty to protect the legitimate business interests of the economic entities involved, in accordance with the relevant regulations.

If the CC intends to prohibit a merger transaction, it must inform the merging parties about the evidence and conclusions on which the decision is based and enable them to submit their remarks and possible remedies.

The CC has not published guidelines to clarify substantive or procedural issues.

Sub-dimension 5.4: Advocacy

The CC is entrusted by the Law on Competition to provide opinions and recommendations on competition issues and principles, either *ex officio* or upon request of the state authorities, economic entities or companies. The CC is also empowered to issue opinions on drafts laws and regulations that have an impact on competition. Proponents are required to submit the drafts to the CC and verify their compliance with the Law on Competition.

Between 2015 and 2019 the CC did not issue any formal opinions to the government or parliament on draft or existing laws or regulations. However, the CC co-operates with public institutions on competition matters and expresses its views on industry practices that may restrict competition. For example, in 2019 the CC made observations on general conditions for the supply of thermal energy and on price setting for driving lessons. Upon request by the Agency for Public Procurement, the CC has also been analysing the rules on public tenders.

It should be highlighted that unlike most competition authorities, the CC cannot conduct market studies, which represent a key tool to gain an in-depth understanding of restrictions to competition in crucial sectors.

The CC has organised some advocacy events aimed at developing competition culture. A project for summer courses on competition policy, in co-operation with the Faculty of Law of the University of Sarajevo, was suspended due to COVID-19.

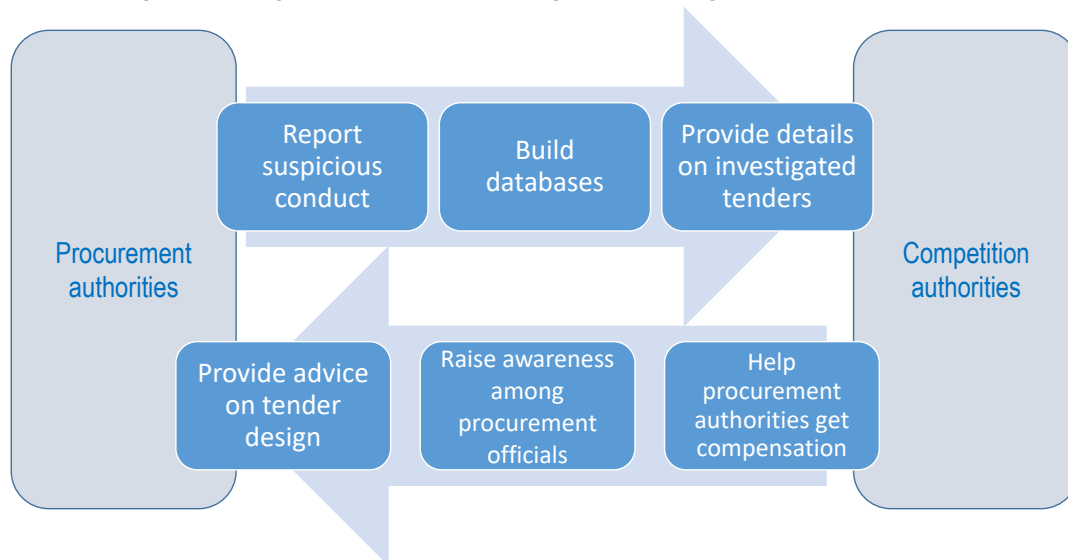
The way forward for competition policy

Despite a legal framework on competition broadly aligned with international standards, there is still room for improvement regarding competition enforcement in Bosnia and Herzegovina. The efforts of the CC in tackling prohibited agreements and the abuse of dominant positions have not resulted in strong decisions with significant fines, which are necessary to ensure deterrence and encourage competition compliance by firms.

The CC should engage in a set of advocacy initiatives to promote competition principles and foster competition culture. Importantly, the CC cannot carry out market studies. To enhance Bosnia and Herzegovina's competition framework and achieve objectives, policy makers should:

- **Prioritise boosting cartel enforcement and imposing high fines.** Cartels are the most clear-cut and undisputedly harmful competition infringements and affect every economy. CC efforts should be focused on detecting cartels and imposing heavy fines on infringers to deliver a strong message that firms engaging in collusion risk severe punishment. If the fine amount sufficiently exceeds illicit gains, offences can be deterred even when the probability of paying a fine is low. Concern of fines is also a key driver for leniency applications, thus fostering the effectiveness of the leniency programme – which has been unproductive in Bosnia and Herzegovina so far – and further boosting detection. The CC could expand its detection skills by, for example, further strengthening the fight against bid rigging (see below), and start using its power to perform on-site inspections to collect evidence.
- **Pay specific attention to public procurement, particularly during the COVID-19 crisis.** Public procurement is a key sphere of action both for cartel enforcement and for competition advocacy. Bid rigging results in significant harm to the public budget and taxpayers, dampening innovation and creating inefficiencies. The CC should extend its co-operation with the Agency for Public Procurement and with procurement bodies to carefully design the procurement process so that it reduces the risks of bid rigging and detects bid-rigging conspiracies. The Recommendation of the OECD Council on Fighting Bid Rigging in Public Procurement (OECD, 2012^[74]) calls for governments to assess their public procurement laws and practices at all levels of government in order to promote more effective procurement and reduce the risk of bid rigging in public tenders. The Guidelines on Fighting Bid Rigging in Public Procurement (OECD, 2009^[75]), which form part of the recommendation, are designed to reduce the risks of bid rigging and detect bid rigging conspiracies through the careful design of the procurement process. Figure 21.12 shows how co-operation between competition and procurement authorities can help detect and avoid bid rigging. The OECD could also provide assistance to Bosnia and Herzegovina through a project aimed at assessing the main rules governing the procurement of public works and the procurement practices of major public buyers and providing recommendations to design competitive procurement and fight bid rigging in accordance with international good practice. Training to both competition and public procurement officials based on the Guidelines on Fighting Bid Rigging in Public Procurement could also be offered.

Figure 21.12. Example of co-operation between competition and procurement authorities



- **Ensure that the CC regularly speaks out against laws and regulations that restrict competition.** Competition authorities can help governments eliminate barriers to competition by identifying unnecessary restraints on market activities and developing alternative, less restrictive measures that still achieve government policy objectives. The OECD's Competition Assessment Toolkit is a practical methodology that supports competition authorities in this task (OECD, 2015^[76]). Where a detrimental impact is discovered, the toolkit helps to develop alternative ways to achieve the same objectives, with minimal harm to competition. In the past, OECD economy projects have proved very helpful in boosting competition advocacy and competition assessment in several jurisdictions, including in Eastern Europe. On top of establishing a competition mindset and culture within an economy, competition advocacy would strengthen the CC's standing and reputation when it enforces against anti-competitive restrictions by private firms.
- **Give the CC the power to perform market studies, as in most competition authorities in the world.** Market studies are a tool used to assess how competition in a sector or industry is functioning, detect the source of any competition problems, and identify potential solutions. Competition problems that can be uncovered in market studies include regulatory barriers to competition and demand-side factors that impair market functioning. Because market studies are a versatile tool that allow the examination of a broader set of issues than competition enforcement, their use is growing. International organisations, notably the OECD and the International Competition Network (ICN), have developed a wide range of documents on market studies, including the OECD Market Studies Guide for Competition Authorities (OECD, 2018^[77]). The OECD's Competition Division could also assist competition authorities, regulators, ministries and policy makers with market study projects. This could be particularly valuable in Bosnia and Herzegovina, where the CC and policy makers have limited experience with such tools.
- **Increase international co-operation and targeted training initiatives to successfully address a fast-moving economic environment.** In the face of increasing complexity of anti-trust issues and the frequent cross-border nature of competition infringements, the management and staff of the CC should have frequent opportunities to meet and share good practices with international competition experts and colleagues from other jurisdictions. International organisations such as the OECD, the ICN and the United Nations Conference on Trade and Development (UNCTAD) offer valuable opportunities to this end, including the OECD-GVH Regional Centre for Competition in Budapest. The CC is already a regular participant in the centre's events and would benefit from actively continuing. Additional training initiatives would further enable CC staff to reach their full potential.

State-owned enterprises (Dimension 6)

Introduction

Responsibilities for Bosnia and Herzegovina's approximately 80 SOEs are dispersed across the public administration and often exercised by line ministries also involved in sectoral development policy. Some elements of centralisation are in place for SOEs as part of the Share Fund of Republika Srpska. External assessments of SOEs' financial statements point to low profitability and insufficient investments in infrastructure, among other performance issues (Parodi and Cegar, 2019^[78]). As a result of weak ownership arrangements and underperformance, Bosnia and Herzegovina achieves a relatively low score in terms of governance and efficiency. A higher score is accorded for transparency and accountability, reflecting the fact that most SOEs are required to prepare annual financial statements that are often publicly available. Bosnia and Herzegovina achieves a below average score in terms of ensuring a level playing field with private companies, which reflects legal differences for SOEs incorporated as statutory entities, as well as the fact that SOEs' overall under-performance distorts market efficiency (Table 21.11). Bosnia and Herzegovina's performance in the state-owned enterprise dimension has not changed significantly since the 2018 Competitiveness Outlook, reflecting the absence of significant state ownership reforms since then (Figure 21.1). However, both the Federation of Bosnia and Herzegovina and Republika Srpska have announced plans to establish central co-ordinating units to monitor SOEs, which, if implemented, could improve the economy's score going forward.

Table 21.11. Bosnia and Herzegovina's scores for state-owned enterprises

Dimension	Sub-dimension	Score	WB6 average
State-owned enterprises dimension	Sub-dimension 6.1: Efficiency and performance through improved governance	1.6	2.2
	Sub-dimension 6.2: Transparency and accountability practices	2.5	3.0
	Sub-dimension 6.3: Ensuring a level playing field	2.0	2.8
	Sub-dimension 6.4: Reforming and privatising SOEs	n.a.	n.a.
Bosnia and Herzegovina's overall score		2.0	2.6

Note: For comparability with the previous assessment, the new sub-dimension (6.4) has not been scored but is discussed in the text below.

State of play and key developments

Sub-dimension 6.1: Efficiency and performance through improved governance

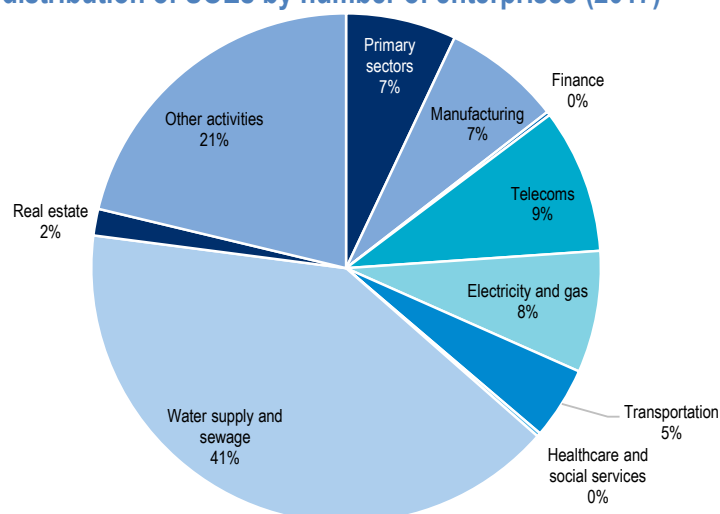
The national-level entities of Bosnia and Herzegovina together own approximately 80 SOEs (53 owned by the FBiH and 27 owned by the Share Fund of RS).⁴² In addition, the FBiH's 10 cantons and 80 municipalities own approximately 128 SOEs, while the municipalities of Republika Srpska own over 100 SOEs.⁴³ This assessment will focus mostly on entities held by the central levels of FBiH and RS rather than cantons and municipalities.

There is no publicly available dataset presenting the overall size and sectoral distribution of SOEs in Bosnia and Herzegovina, and authorities did not provide comparable sectoral data for this assessment. However, an assessment by an International Monetary Fund (IMF) team published in 2019 sheds light on the characteristics of a selection of 414 enterprises owned by all levels of government in Bosnia and Herzegovina (Parodi and Cegar, 2019^[78]).⁴⁴ The underpinning data are not limited to the portfolios of the central levels of government, which this assessment focuses on, meaning that the figures presented are therefore simply provided to give a general idea of the characteristics of SOEs in BiH. According to the IMF assessment, SOEs in Bosnia and Herzegovina, as measured by employment, are highly concentrated in the primary sector (27% of all SOE employees), followed by electricity and gas (23%), transportation (16%), and other public utilities including water supply, sewage and waste management companies (14%) (Figure 21.13, Figure 21.14).⁴⁵ SOEs are also present in sectors with a

less obvious state-ownership rationale. For example, state-owned manufacturing enterprises account for 6% of all SOE employment, while SOEs classified in the “other activities” sectors – including construction, accommodation and food services – similarly account for 6% of all SOE employment.

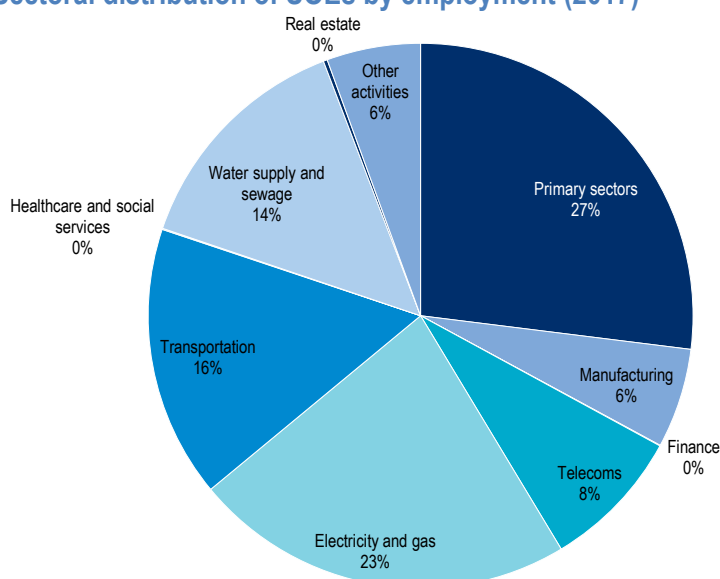
In addition to enterprises that are majority or wholly owned by the state (which are considered SOEs), the FBiH holds minority shares in four enterprises, while the Share Fund of RS holds minority shares in 13.

Figure 21.13. Sectoral distribution of SOEs by number of enterprises (2017)



Source: Author calculations based on data provided in (Parodi and Cegar, 2019^[78]), *State-Owned Enterprises in Bosnia and Herzegovina: Assessing Performance and Oversight*, <https://www.imf.org/en/Publications/WP/Issues/2019/09/20/State-Owned-Enterprises-in-Bosnia-and-Herzegovina-Assessing-Performance-and-Oversight-48621>. The figures used in the IMF study have been transferred into a different sectoral classification system, to allow for an alignment with the OECD's recurrent SOE data collection exercise (OECD, 2017^[79]), *The Size and Sectoral Distribution of State-Owned Enterprises*, <https://doi.org/10.1787/9789264280663-en>.

Figure 21.14. Sectoral distribution of SOEs by employment (2017)



Source: Author calculations based on data provided in (Parodi and Cegar, 2019^[78]), *State-Owned Enterprises in Bosnia and Herzegovina: Assessing Performance and Oversight*, <https://www.imf.org/en/Publications/WP/Issues/2019/09/20/State-Owned-Enterprises-in-Bosnia-and-Herzegovina-Assessing-Performance-and-Oversight-48621>. The figures used in the IMF study have been transferred into a different sectoral classification system, to allow for an alignment with the OECD's recurrent SOE data collection exercise (OECD, 2017^[79]), *The Size and Sectoral Distribution of State-Owned Enterprises*, <https://doi.org/10.1787/9789264280663-en>.

SOEs in Bosnia and Herzegovina employ approximately 80 000 people, accounting for an estimated 11% of national employment (Parodi and Cegar, 2019^[78]). This is above OECD average and high compared to other WB economies. However, the size is overstated through the inclusion of sub-national SOEs in this figure, as internationally comparative data are mostly limited to central-level SOEs (OECD, 2017^[79]). The prevalence of SOEs in systemically important sectors – notably electricity and gas, transportation, and public utilities – gives them a decisive influence on broader market efficiency. A review of the financial statements of 414 SOEs found that they have very low returns overall, for example they averaged a -0.3% return on equity for the 2015-17 period (Parodi and Cegar, 2019^[78]).

Concerning the **clarification of ownership policy and rationale**, neither the FBiH nor RS have developed an ownership policy that outlines the rationale for the state ownership of enterprises. Although this may be implicitly gleaned from other government policy documents, there is a problematic absence of any overarching policy explaining why the government owns companies and what it expects those companies to achieve. The rationale for state ownership is implicitly presented in the Law on Public Enterprises in force in each entity. In FBiH, the Law on Public Enterprises establishes that a “public enterprise” is one that performs “public interest activities in the field of energy, communications, utilities, management of public resources and other public interest activities”. This implies that the purpose of state ownership in FBiH is to serve the public interest by offering public goods and services in these, and possibly other, sectors. Similarly, in RS the Law on Public Enterprises establishes that a “public enterprise” is any joint-stock or limited-liability company that is at least majority owned by Republika Srpska or local government units and is established to perform “activities of common interest”. This implies that the purpose of state ownership in Republika Srpska is to serve the “common interest”. However, many SOEs in both FBiH and RS do not have an obvious public interest activity, which underscores the lack of clarity regarding why the state owns certain companies. In a similar vein, in RS the state maintains ownership in 42 largely inactive companies that have not been registered as companies in accordance with applicable legislation. In these companies, the rationale for continued state ownership is particularly unclear.

At the time of writing, the FBiH government was in the process of preparing an ownership policy for the SOEs under its remit, which is expected to clarify the entity’s rationale for owning companies and its expectations of the SOEs in its portfolio.

Efforts to **professionalise state ownership** practices are relatively limited in BiH, as ownership responsibilities are often exercised in a decentralised manner by various line ministries, subject to almost no central co-ordination. In both BiH government entities, while the government as a whole is by law responsible for exercising state ownership rights, in practice SOEs are mostly under the jurisdiction of line ministers who play a strong role in their operational oversight. This is problematic for several reasons, partly because it leads to a mixing of the state’s roles – ownership roles, regulatory roles and policy development roles – which can lead to conflicting or unclear objectives.

Concerning specific practices at the level of each entity, the FBiH government is by law accorded state ownership rights, which it can exercise directly or through federal authorities, including ministries. In practice, many state ownership decisions are made directly by the government (e.g. appointing and dismissing board members). All of the FBiH’s 53 SOEs are under the explicit jurisdiction of several individual line ministries, according to a list provided by the authorities. This indicates that there is limited co-ordination of ownership practices and limited separation of ownership from regulatory functions. Independent regulators, notably in the energy sector, establish some degree of separation of functions, but this is not the case in all sectors. The authorities report that an informal co-ordinating unit is in place in the Prime Minister’s Office, but additional steps are needed to give this unit the formal authority to co-ordinate ownership decisions across the FBiH.

Similarly, in RS the government is by law responsible for exercising ownership rights in fully state-owned enterprises, with these rights delegated by decisions of the government either to the Share Fund (which is managed by the Investment Development Bank of Republika Srpska) or to line ministries. Although the Share Fund’s ownership responsibilities would seem to indicate a stronger separation of ownership and

regulatory functions in RS, in practice the SOEs in the Share Fund's portfolio are also subject to oversight by relevant line ministries, indicating a mixing of the state's ownership and regulatory roles among these SOEs. The Share Fund's portfolio includes all SOEs in RS that are incorporated as joint-stock or limited-liability companies. SOEs incorporated under the separate legal form of "public enterprise" are held by the government as a whole and are under the jurisdiction of individual line ministries. In these companies, the government makes ownership decisions at the annual general meeting (AGM) based on recommendations and information provided by the responsible line ministries.

Concerning the SOE **board nomination framework**, and in the context of BiH's predominantly decentralised ownership arrangements, there are minimal elements of a common approach to board nominations, namely that they are subject to general requirements set forth in legislation applicable to governmental appointments in both entities. However, these general requirements cannot really be considered to constitute an SOE board nomination framework as they apply to all governmental appointments and not specifically to SOEs. This also indicates the broader issue that SOEs often appear to be run as arms of the public administration, rather than as corporate entities operating under independent boards of directors with private sector expertise. Even if strong corporate boards with private sector expertise were put in place in BiH, the current level of SOE policy development would make it difficult for boards to effectively oversee enterprise strategy and management decisions given the absence of clear financial and non-financial performance objectives communicated by the state.

Concerning the basic board nomination frameworks in place in each entity, in FBiH the Law on Ministerial, Governmental and Other Appointments outlines the general requirements for SOE board member nominations, notably establishing that an open competitive procedure must be carried out to fill relevant positions. Dedicated qualifications criteria are defined for each board vacancy; however, in the absence of a public document outlining the necessary professional qualifications for SOE board members, the procedure can be considered as lacking transparency.

Similarly, in RS the Law on Ministerial, Government and Other Appointments establishes that board nominations must be subject to a public competition. The law covers basic requirements, including that such appointments can only be made to persons aged over 18 who have not been dismissed from the civil service as a result of a disciplinary measure. The authorities of RS also reference the Law on Companies and the Law on Public Enterprises as setting forth information on the board nomination process, pointing to a complexity of requirements and the likelihood of a piecemeal approach to SOE board nominations. The Law on Public Enterprises only sets forth minimal elements regarding the legal responsibilities for board nomination, such as stating that the general meeting of shareholders is responsible for appointing supervisory board members, and that the aforementioned Law on Ministerial, Government and Other Appointments must be respected in the process. Specific requirements are developed for individual board nominations, but no formal documents exist on how those criteria are established, so the process can be considered as lacking transparency.

The authorities have not established criteria to promote **independent and professional boards** in SOEs. In both entities, boards are generally perceived to operate as arms of ownership ministries, rather than as independent corporate oversight organs. In the worst cases, there is also a perception that individual SOEs are essentially under the control of political parties, which increases risks of corruption and mismanagement (US Department of State, 2019^[80]). This perception was confirmed by stakeholders interviewed for this assessment, as well as by several local media reports, for example by the Centre for Investigative Reporting. One such report indicated a perception that executive director appointments in one of the economy's largest SOEs, BH Telecom, are accorded based on political affiliations rather than professional qualifications (CIN, 2018^[81]). Despite these shortcomings, it should be highlighted that SOE boards are not staffed predominantly by civil servants but by experts appointed via dedicated nomination procedures. In this sense, BiH differs from many economies around the world, where SOE boards are often predominantly composed of civil servants who may not have the appropriate private sector expertise to oversee corporate strategy.

In FBiH, the state's strong role in SOE corporate oversight is evidenced by the requirement that the chair of the supervisory board submits three-monthly reports to the government on its work, indicating the state's strong involvement in SOE management oversight. There does not seem to be any practice of requiring independent members on boards, although some basic requirements confer independence from management, for example the chief executive officer (CEO) cannot also be the chair of the supervisory board. Concerning duties and liability, SOE board members in FBiH are required by company law to act in the best interest of the enterprise, with specific legislative provisions stipulating that any damages to the company brought about by the CEO or a supervisory board member owing to "non-performance or disorderly performance of their duties" must be compensated. The company law also establishes fines in case the chair or CEO does not perform certain duties such as convening the AGM. Separately, a Government Decree on Executing Authorities in Companies with State Capital Share establishes that the CEO and supervisory board members must act in the interests of the capital owner (the state shareholder). This is supported by the requirement that the supervisory board chair submits at least once every three months a written report on the work of the supervisory board. This document applies equally to fully state-owned enterprises and to those with minority shareholders, pointing to weaknesses in the equal treatment of all shareholders. If SOE boards are explicitly expected to act (only) in the interests of the state shareholder, then there may be instances when corporate decisions are made to serve the state's interests at the expense of minority shareholder interests. This could include politically expedient decisions that may jeopardise the commercial viability of SOEs.

The state's strong role in SOE management oversight – and the concomitant weakness of SOE boards of directors – is similarly evident in RS, where SOEs operate primarily under the Law on Public Enterprises and are subject to close direct oversight by the public administration, including the state audit office. In RS, the strong role of the state in corporate decision making is somewhat mitigated by the fact that SOE boards are reportedly not predominantly staffed with civil servants but with experts in relevant fields, including law, economics and technical sciences.⁴⁶ The authorities report that civil servants can serve on SOE boards in exceptional cases, but that it is not common practice. There are no requirements for non-executive or independent members on SOE boards (except for stock-exchange listed companies whose boards must comprise a majority of non-executive directors, of which two must be independent). However, the Law on Public Enterprises of RS – which also sets forth SOE board duties – establishes the principle that board members must avoid any conflicts of interest that could go against the interest of the enterprise or prevent them from fulfilling their duties.

Sub-dimension 6.2: Transparency and accountability practices

Concerning **financial and non-financial reporting**, SOEs in both entities are required, by various laws, to submit financial reports to various state entities. According to the IMF study, SOEs do not consistently comply with related reporting requirements, for example several do not make their financial statements available in a timely manner (Parodi and Cegar, 2019^[78]). A local media organisation representative interviewed for this assessment echoed the conclusion that many SOEs do not publish financial statements and are in general not transparent about their activities or performance. Limited information was provided by the authorities concerning SOEs' non-financial reporting practices for this assessment, indicating that producing annual reports with non-financial information is either not required of SOEs or is not a widespread practice. Nonetheless, the RS authorities report that SOEs regularly include some non-financial information in their annual reporting to the government.

Concerning the precise requirements and practices in place in each entity, in FBiH SOEs are required by the Law on Public Enterprises to prepare accounting records and financial reports in accordance with the Law on Accounting and Audit. It is not clear whether financial statements must be made publicly available; the Law on Public Enterprises requires that the AGM of SOEs submits "reports on their operations" to the municipal council, cantonal assembly or parliament at least once a year, and that these reports are made publicly available, but these are not financial statements. The authorities report that approximately two-thirds of SOEs are required by various laws to publish annual reports, but limited information was

provided on the content of these annual reports and whether they discuss SOEs' public policy activities or other non-financial information.

In RS, SOEs' reporting requirements are also mostly established through the Law on Public Enterprises, which notably requires that SOEs prepare financial reports in accordance with applicable laws on accounting and auditing, as well as three-year "business plans" that are submitted to both the Auditor General and the competent ministry. According to the Law on Public Enterprises, SOE management boards are responsible for drafting and supervising the implementation of these business plans, which include some basic non-financial reporting, for example concerning issues related to environmental protection and labour force trends. However, they are not required to be made publicly available, so do not constitute the "annual reports" traditionally produced by companies.

Concerning **auditing practices**, certain categories of SOE in BiH are required to have their financial statements audited by an independent external auditor. In FBiH, independent external audits are only required for SOEs that exceed certain size thresholds, in accordance with the Law on Accounting and Audit. Audited financial statements should be presented to the AGM with an external audit report. In RS, SOEs' financial statements are, according to the Law on Public Enterprises, adopted by the AGM along with an independent auditor's report. The independent auditor must submit a statement of independence with the audit report. In RS, SOEs are also subject to close oversight by the Auditor General, which reviews SOEs' three-year business plans. This indicates a general financial oversight system that mirrors more closely the public administration system (e.g. through public budget planning processes) rather than the systems of privately owned corporations. There is limited information on the quality and credibility of SOEs' financial statements in both entities, which, alongside the limited compliance of many SOEs' with existing reporting requirements, indicates that an in-depth review of SOEs' reporting practices may be warranted.

The **protection of minority shareholders** of SOEs is particularly pertinent in BiH, given the significant proportion of SOEs that have minority non-state shareholders. In FBiH, approximately half of the SOEs held by the central government have non-state minority shareholders and are listed on the national stock exchange.⁴⁷ Similarly, In RS nearly half of the companies in the Share Fund's portfolio include non-state minority shareholders (12 out of 27 companies). Some of these SOEs are systemically important, such as the postal services operator (Pošta Srpske, 65% state-owned), RS Railways (Željeznice Republike Srpske, 63.92% state-owned) and RS airport (Aerodromi RS, 64.69% state-owned). Separately, in FBiH the state is itself a minority shareholder in 4 enterprises where full privatisations have been unsuccessful, while the Share Fund of RS is a minority shareholder in 13 companies.⁴⁸ As is the case in most WB economies, SOEs are not exempt from the application of basic company law provisions to protect minority shareholders, including the right to equitable treatment and the possibility for redress through the courts in case of alleged violations of those rights. However, external assessments indicate that there is room to improve these basic legal protections accorded to minority investors in BiH, with the World Bank's Doing Business 2020 report according BiH a lower score than its Western Balkan neighbours for the protection of minority shareholders (World Bank, 2020^[82]). Some elements of the company law in both entities do accord minority shareholders specific potential channels to participate in corporate decision making, for example shareholders that hold at least 5% of capital have the right to appoint one supervisory board member, which could help ensure that corporate decision making takes into account all shareholders' interests (and not just the state's interests). According to FBiH authorities, minority shareholders with over 5% capital in SOEs do usually exercise this right. The RS authorities report that in some cases, minority shareholders are less active in this respect and do not propose board representatives at the AGM. Limited information was provided by the authorities on recent disputes involving minority shareholders, but FBiH authorities indicated that the state and minority shareholders do sometimes disagree on corporate decisions, for example whether to reinvest profits or distribute them as dividends.

Sub-dimension 6.3: Ensuring a level playing field

Concerning **legal and regulatory treatment**, most SOEs in both entities are incorporated according to general company law (as joint-stock or limited-liability companies), although 11 SOEs in FBiH and 6 SOEs in RS have not been incorporated as companies (they are “public enterprises”, *javno preduzeće*/JP) and operate primarily subject to enterprise-specific legislation and the Law on Public Enterprises. The authorities of both entities report that SOEs are generally subject to the same tax, competition and other regulatory treatment as private enterprises. While a separate Law on Public Enterprises regulates SOEs in both entities (meaning that SOEs operating as joint-stock or limited-liability companies are subject to a company law and an SOE-specific law), it does not appear to introduce major differences in legal treatment that would create specific advantages or disadvantages in the competitive marketplace. In fact, the SOE-specific law in each entity establishes several basic principles related to ensuring fair competition in the marketplace.

Concerning the legislative framework in each entity, in FBiH the Law on Public Enterprises establishes some basic principles aimed at ensuring a level playing field between SOEs and private competitors. It notably establishes that there must be sufficient supervision of state aid to ensure that it does not distort fair competition. In this sense, although a separate law applicable to SOEs may create different legal treatment, it does take steps towards minimising differences in treatment between SOEs and private companies. In RS, the Law on Public Enterprises similarly establishes several principles related to avoiding distortions to fair competition in the marketplace, such as prohibiting abuses of dominant positions, liberalising services of general interest to prevent monopolies, and prohibiting agreements by public enterprises that could prevent, distort or restrict competition in the marketplace.

However, the presence of a separate legal form (“public enterprises”) for some SOEs raises concerns regarding their operational treatment. In general, it is considered good practice to ensure that SOEs undertaking predominantly commercial activities are incorporated according to the general company law. Information provided by the authorities of FBiH also points to some potential disadvantages that SOEs face owing to their state ownership, which may be shared by SOEs operating in RS. These disadvantages include the fact that SOEs are by law subject to the same public procurement procedures applicable to government bodies, which can create an operational burden that private competitors do not face. Such issues can be particularly acute in sectors that were previously monopolistic but where competition has been introduced (e.g. the postal services and telecommunications sectors). SOEs may also face advantages in such situations due to their historically dominant market share and regulatory leniency owing to their state ownership. SOEs’ competitive position in markets where competition has been recently introduced should be continuously assessed to minimise market distortions.

Concerning **access to finance**, the authorities of both entities have limited formal information on whether SOEs benefit from favourable terms in accessing commercial credit. It is likely that as in other economies around the world, SOEs in BiH benefit from at least an implicit state guarantee that many commercial lenders use to justify more favourable credit terms. It does not appear that explicit guarantees on SOEs’ commercial debt are commonplace, but FBiH authorities report that they are sometimes accorded to SOEs, particularly when engaged in large infrastructure projects that often receive financing from international financial institutions. The Law on Debt requires that such guarantees are approved by parliament. In RS, the authorities report that there have been cases where the government issued explicit guarantees on SOE debt, but that this is no longer common practice. SOEs in BiH often do not earn economically significant rates of return, which effectively constitutes a cost of equity capital that is not market consistent. For example, persistent losses posted by RS Railways – which is currently undergoing a restructuring process – has led the company to incur large unpaid debts to the tax office. External assessments have found that many SOEs have similar unpaid debts to state authorities, including for example health and pension contributions (US Department of State, 2020^[83]). It is likely that SOEs face some leniency concerning unpaid debts owed to the relevant authorities, pointing to their unequal treatment compared to private enterprises. Overall, SOEs’ underperformance creates a situation where economic resources are not

channeled into the most productive activities, which in the long term can crowd out private sector activity and lead to inefficient market outcomes.

Sub-dimension 6.4: Reforming and privatising state-owned enterprises

Concerning recent **SOE reform**, the current FBiH government reform agenda includes a section devoted to SOEs that focuses on improving their performance, depoliticising management, and strengthening their transparency. As mentioned earlier, at the time of writing the FBiH government was in the process of developing an ownership policy expected to be completed in 2020. There are also plans to formalise the Prime Minister's Office's (currently informal) SOE monitoring unit to strengthen central monitoring of SOEs and harmonise ownership practices across the FBiH. In RS, recent reforms have mostly involved the financial and organisational restructuring of individual large SOEs such as RS Railways to create a self-sustaining company. The restructuring process has so far led to staff reductions of over 800. RS authorities have recently established an SOE working group to undertake an analysis of SOE operations and reform priorities, with the support of the World Bank.⁴⁹ Similar to developments in the FBiH, RS authorities intend to establish a state ownership monitoring unit within the Cabinet of the Prime Minister.

Concerning the impact of the COVID-19 pandemic, FBiH authorities reported that several companies under the purview of the Ministry of Energy, Mining and Industry have suffered losses due to the crisis, and that the ministry is currently working on an overview of the financial state of its SOEs for the FBiH government. RS authorities did not report any specific measures taken for SOEs related to COVID-19.

Privatisation efforts continue in both entities, although some recent planned privatisations have been unsuccessful in RS. According to external assessments, SOEs can often be unattractive investments to potential private buyers due to, for example, their high unpaid debts that must be paid post-privatisation and/or requirements to maintain staff contracts after privatisation (US Department of State, 2020^[83]). At the time of writing, eight SOEs had recently been transferred to the FBiH Privatisation Agency for planned privatisation. The privatisation list in FBiH emerged from a 2015 review of all SOEs that classified companies into three broad categories: 1) strategic companies that should remain in state ownership and not be privatised; 2) companies with business difficulties that should be restructured; and 3) companies that should be privatised. On the basis of this list, the government instructed the FBiH Privatisation Agency to prepare a Privatisation Plan, with proposals for models and methods of privatisation for eight companies. Privatisations undertaken by the agency are in accordance with the Law on Privatisation of Companies, which also regulates privatisations undertaken by ten cantonal privatisation agencies. Since 2010, 24 SOEs owned by the FBiH have been privatised, all operating in the manufacturing sector. The latest privatisations took place in 2016, when the state relinquished its remaining minority ownership shares in the Sarajevo Tobacco Factory and the pharmaceutical company Bosnalijek.⁵⁰ In RS, the Investment-Development Bank adopts a privatisation plan as part of its annual work plan, which lists the companies slated for privatisation, together with the current state ownership share. The 2020 plan includes three SOEs lined up for privatisation. These SOEs undertake activities related to radar and missile systems, manufacturing parts for aircraft engines, and chemical corn processing. Recently, some planned privatisations in RS were not successful, including the planned stock-exchange auction of Ljubija a.d. Prijedor and a tender for the sale of Novi mermer a.d. Šekovići. The planned stock-exchange auction of the state's 65% shareholding in Ljubija a.d. Prijedor was reportedly unsuccessful due to the absence of qualified investors interested in the purchase, while the tender for the fully state-owned Novi mermer a.d. Šekovići resulted in only one bid, the terms of which the government determined unsatisfactory.

The way forward for state-owned enterprises

SOEs operate at the nexus of the public and private sectors and, as such, their operations are affected by both the quality of public governance and the prevailing corporate and boardroom culture. As in most Western Balkan economies, ensuring that SOEs in Bosnia and Herzegovina operate efficiently, transparently and on a level playing field with private companies will necessitate reforms in multiple policy

areas that cannot be undertaken all at once. Choosing the appropriate sequencing of reforms is just as important as the content of the reforms, and largely depends on the political climate and current reform priorities.

The OECD Guidelines on Corporate Governance of State-Owned Enterprises (OECD, 2015^[84]) provide a guidepost for reforms that the BiH authorities can use to inform their policy efforts in this domain. Based on the state of play of SOE policy development in BiH, the following priority reform areas – which are in line with the OECD SOE Guidelines – could offer a basis for discussions with the authorities.

- **Develop a state ownership policy and improve the central monitoring of SOEs.** In the context of BiH's decentralised ownership arrangements, a state ownership policy should be elaborated to guide ownership decisions and practices. It should clearly outline why the government owns companies and what it expects those companies to achieve. The ownership policy could provide a useful foundation for eventually developing enterprise-specific financial and non-financial performance objectives, the implementation of which could be monitored and used to guide structural changes to improve SOE efficiency. The authorities of both entities should centralise data on SOEs to ensure that the development of policy priorities and performance objectives are evidence based.
- **Strengthen SOE board competencies by improving the nomination framework.** There is a perception that many SOE board seats in BiH are granted to individuals based on their personal or political connections, rather than professional merit. While the legislation in place seeks to ensure that boards are not subject to conflicts of interest, there appears to be scope to improve their professionalism and private sector expertise. The authorities should consider strengthening and publishing the professional criteria applicable to SOE board appointees with a view to ensuring that members have a sufficient diversity of expertise (e.g., financial, corporate strategy and industry-specific expertise) to effectively oversee necessary strategic and structural decision making within SOEs. The board nomination framework should be transparent and merit based.
- **Ensure a level playing field when SOEs compete in the marketplace.** While some SOEs are tasked primarily with public policy objectives, others operate commercially and compete with private companies in the marketplace. In some cases, SOEs operating commercially may face competitive advantages, such as their dominant market share coupled with public support, while in other cases they may face disadvantages, such as public-procurement procedures that private competitors do not face.⁵¹ The authorities should review SOEs' operational requirements to identify any regulatory or operational differences that hinder healthy competition in the markets in which they operate. The authorities should also consider fully corporatising SOEs that undertake primarily commercial activities but are still organised under the separate legal form of "public enterprise". In a similar vein, the authorities should move forward with the necessary liquidations of SOEs that are no longer active, in particular in Republika Srpska, where 32 SOEs are currently undergoing bankruptcy/liquidation and 42 are not registered as companies in accordance with applicable legislation and are reportedly no longer undertaking commercial activities.
- **Review minority shareholder rights and participation in SOE decision-making bodies.** A significant proportion of SOEs in BiH are partly owned by minority private investors, underscoring the need to ensure that their interests are credibly and consistently taken into account in corporate decision making so that SOEs can continue to benefit from needed private capital. An in-depth review of the strength of minority shareholder protections in practice goes beyond the scope of this assessment but would be a useful undertaking for the authorities to consider as they seek to continue broadening SOE ownership to include private investors. According to a recent review of implementation of the OECD SOE Guidelines in 31 economies, many have recently taken steps to strengthen the rights of SOE minority shareholders, for example through updates of corporate governance codes (which are applicable to listed SOEs), SOE-specific codes or guidelines (OECD, 2020^[85]). These practices, summarised in the aforementioned report, could provide useful inspiration for the BiH authorities.

- **Improve transparency at the level of SOEs and the state as owner.** The authorities of both entities in BiH have established basic financial reporting requirements for SOEs, but compliance is not consistent across the SOE sector. There is also scope for SOEs to go beyond financial reporting and produce more detailed reports on their non-financial performance, particularly SOEs engaged in public interest activities. The authorities should undertake an in-depth review of SOEs' reporting practices to identify and address weaknesses in their financial and non-financial reporting practices. The state as an owner should begin producing publicly available reports on the performance of the SOE sector as a whole using the information collected from individual SOEs.

Education policy (Dimension 7)

Introduction

Table 21.12 shows Bosnia and Herzegovina's scores for the four education policy sub-dimensions and the cross-cutting dimension on system governance, and compares them to the WB6 average. Bosnia and Herzegovina scores below the WB6 average in all sub-dimensions except for the tertiary education sub-dimension. However, it has seen modest improvements in its scores since the 2018 Competitiveness Outlook assessment (for indicators that allow for comparisons) (Figure 21.1). Despite these signs of progress, Bosnia and Herzegovina's complex education governance system, whereby responsibilities for education are shared among actors at the state, entity, canton and district level, continue to create challenges in terms of setting strategic objectives, policy co-ordination and reform implementation. As a result, the scores in this policy profile should be interpreted with caution as they represent a composite, with the scores for the state and its entities often varying.

Table 21.12. Bosnia and Herzegovina's scores for education policy

Dimension	Sub-dimension	Score	WB6 average
Education policy dimension	Sub-dimension 7.1: Early childhood and school education	2.2	3.0
	Sub-dimension 7.2: Teachers	1.5	2.7
	Sub-dimension 7.3: Vocational education and training	2.0	3.1
	Sub-dimension 7.4: Tertiary education	2.8	2.8
	Cross-cutting dimension: System governance	1.5	3.3
Bosnia and Herzegovina's overall score		2.1	3.0

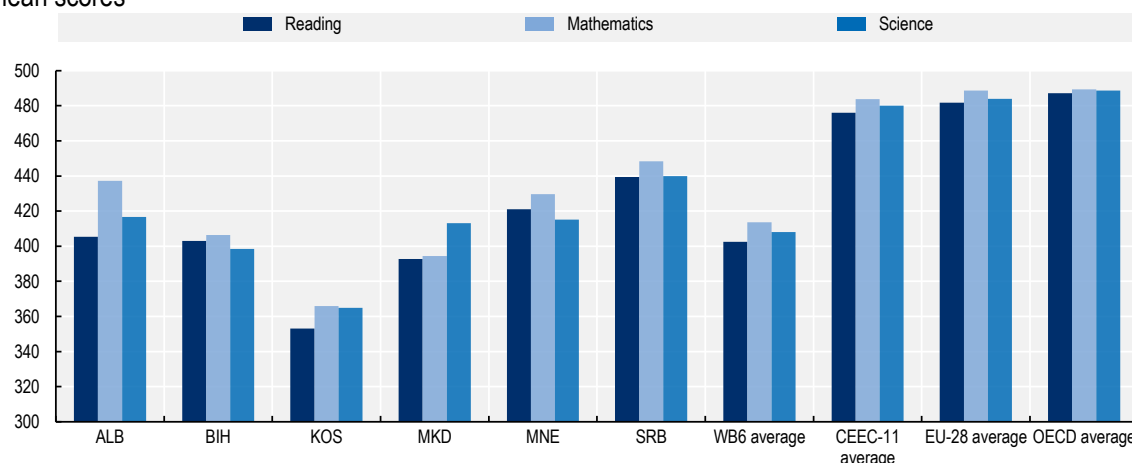
State of play and key developments

Similar to economies around the world, Bosnia and Herzegovina was faced with a rapid shift from classroom to remote learning in 2020 to help slow the spread of COVID-19. Working with donor agencies, education authorities introduced a variety of distance-learning opportunities for the different education levels; however, some children and youth, especially those from Roma communities, have not had adequate access to ICT and the Internet. Education authorities in different jurisdictions opted for local-specific quality assurance mechanisms during the COVID-19 pandemic and developed a diversity of approaches to distance learning (United Nations, 2020^[86]).

One major achievement since the 2018 assessment has been the introduction of the common core curriculum for pre-university education in 2018, which established a common framework for curriculum development. Since the last CO assessment, Bosnia and Herzegovina has received its first results from PISA, filling a notable gap in available information about student learning outcomes.⁵² These results reveal that overall performance was around the regional average in reading, mathematics and science, but lower than the EU and OECD averages (Figure 21.15). PISA 2018 findings also show that around 41% of students in Bosnia and Herzegovina did not achieve the minimum skills (Level 2) in all three PISA subjects, which is higher than the average among OECD economies (13.4%) and the Western Balkan average (38.7%) (OECD, 2018^[87]). These results suggest that basic learning outcomes are still not achieved by many students in BiH, which has implications for its long-term economic development, as students without basic skills are less likely to attain well-paying and rewarding jobs.

Figure 21.15. Performance in reading, mathematics and science in Western Balkan education systems, 2018

PISA mean scores



Note: CEEC – Bulgaria, Czech Republic, Estonia, Croatia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia.

Source: (OECD, 2018^[87]), *PISA 2018 Database*, Tables I.B1.4, I.B1.5 and I.B1.6, <https://www.oecd.org/pisa/data/2018database/>.

StatLink  <https://doi.org/10.1787/888934255608>

Sub-dimension 7.1: Early childhood and school education

Bosnia and Herzegovina's score in this sub-dimension is slightly lower than the Western Balkan average, and there are significant score differences across the entities and the state level. According to data from the Agency for Statistics of Bosnia and Herzegovina, the economy's net enrolment rate was around 85% for primary and 82% for lower secondary education in 2019. These rates have been generally declining since 2014, partly as a result of demographic decline. At the upper secondary level, net enrolment was nearly 79% (UIS, 2021^[88]).⁵³ There are signs that participation in education is inequitable in Bosnia and Herzegovina, especially for children from Roma communities and those from poor and rural backgrounds (World Bank, 2019^[89]).

Participation in **early childhood education** (ECE) in Bosnia and Herzegovina is low, as it was in 2018, with the gross enrolment ratio in pre-primary education standing at 25%, the lowest in the WB6 region⁵⁴ (UIS, 2021^[88]). This could be due to a lack of infrastructure and limited funding directed at ECE institutions, especially in urban areas where demand is high. For example, there are waiting lists for preschool matriculation in urban areas such as Sarajevo, Banja Luka, Brčko and Mostar; and 30 of BiH's 143 municipalities do not have a school that offers preschool programmes (World Bank, 2019^[89]).

Bosnia and Herzegovina has taken steps to raise the quality of ECE. Notably, the Agency for Preschool, Primary and Secondary Education (APOS0) developed Quality of Work Standards for educators, pedagogues and principals in preschool education. In 2018 it also introduced curriculum guidelines based on learning outcomes to help ensure continuity in children's transition from ECE to primary education. There are also several strategies and legal frameworks that establish goals for the sector. In particular, the state-level Platform for the Development of Preschool Education for 2017-2022 aims to harmonise preschool policies with international standards and sets out activities related to increasing coverage, quality assurance, financing and inclusion. However, entities and cantons are responsible for determining their own laws and budgets to operationalise ECE policy, which leads to inconsistencies. For example, the Framework Law on Preschool Education requires competent authorities to harmonise their legislation to provide compulsory and free preschool education; however, several years after entering into force not all cantons in the FBiH have made one year of preschool preparatory education compulsory, and it is only recommend in the RS, which risks undermining the goal of ensuring that all young children have access to ECE. Donor-led initiatives continue to play an important role in implementing policy initiatives and monitoring and supporting the ECE sector in Bosnia and Herzegovina.

The **instructional system**⁵⁵ in Bosnia and Herzegovina rates slightly below the regional average for this indicator. This is primarily because of the significant differences across education authorities, which contribute to fragmented education policies and resource inefficiencies. There is a Framework Law for Primary and Secondary Education, which require various education authorities to coordinate and align policies with EU standards and principles but unlike the ECE Platform, there is no comprehensive state-level education strategy for the school sector. Instead, the FBiH and some individual cantons have policies regarding instructional quality and equity but the RS is the only authority that has prepared a comprehensive strategic document.⁵⁶ School quality standards and evaluations, in addition to school leader policies also vary across entities and cantons.

Despite Bosnia and Herzegovina's rather fragmented approach to school education, an important achievement since the 2018 assessment is the introduction of the common core curriculum, which sets out a framework for learning outcomes that competent education authorities can use to develop their own curricula. The curriculum aims to strengthen students' knowledge and skills, as well as the acquisition of attitudes that will help them in their daily lives and work. However, the extent to which authorities have implemented the common core curriculum varies, and there are no state-level assessments or examinations to help determine the extent to which students are achieving learning standards. At the same time, there are examples of student assessment policies within Bosnia and Herzegovina that align with policies in EU and OECD countries. For example, *Matura* exams that mark the end of secondary education can be found in RS and some cantons (e.g. Tuzla). Unlike many other economies, however, these various tests are managed by their respective education authorities rather than a central examination centre. Bosnia and Herzegovina's state-level evaluation centre, APOSO, manages the economy's participation in international assessments such as PISA and the Trends In International Mathematics And Science Study (TIMSS), which since 2018 have filled a major void in the instructional system by generating information on student learning outcomes.

Responsibilities for **preventing early school leaving** in Bosnia and Herzegovina are under the remit of entity and cantonal ministries of education. As a result, prevention and intervention measures vary. While there is no state-level strategy or policy that explicitly addresses early school leaving, the Ministry of Civil Affairs adopted the Recommendations for Inclusive Education in Bosnia and Herzegovina in 2019, which calls for measures and activities aimed at keeping (retaining) children and young people in education. APOSO also developed state-level guidelines for inclusive education in 2020. Respective authorities collect their own data to monitor early school leaving, and the FBiH, which has studied this issue in-depth, found that Roma children are especially vulnerable to leaving school early. Overall, the data available are limited and not collected using consistent definitions across jurisdictions, which makes it difficult to accurately report on this issue and understand contributing factors. Nevertheless, the Agency of Statistics reports that Bosnia and Herzegovina's early school leaving rate was around 4% in 2019.

Sub-dimension 7.2: Teachers

Teacher policy in Bosnia and Herzegovina is under the responsibility of each entity and canton government, and the overall score in this sub-dimension is below the Western Balkan average. While the RS education strategy identifies improving **initial teacher education (ITE)** as a goal, the FBiH does not have a strategy or policy that addresses ITE, as related policies are managed at the canton level. Nevertheless, both entities report that improvements to working conditions have been adopted to help increase the competitiveness of the profession; the RS also has increased teacher salaries and professional autonomy to make teaching a more attractive career option. Some features of Bosnia and Herzegovina's ITE system are similar to those of EU and OECD economies. For example, most teachers are required to pass a professional examination before working in schools, and all education systems require candidate teachers to undergo a one-year teaching internship under the supervision of a mentor. However, none of the jurisdictions have minimum requirements for selecting candidates for ITE because higher education institutions across the economy have full autonomy to determine these criteria.

There is also a lack of programme-specific accreditation processes, meaning that providers do not have to demonstrate how they help candidates develop competences specific to teaching.

Despite entity and canton governments having responsibility for teacher policy, there have been some efforts at the state-level (via APOSO) to assess the **professional development and management** of teachers in Bosnia and Herzegovina and provide steps for improving the systems involved. Professional development is required in both entities; however, the duration and forms of training vary, and teachers sometimes have to pay for training out of pocket, which implies issues around access. Positively, the Ministry of Education and Science (FBiH) has implemented annual programmes since 2017 to finance or co-finance projects related to supporting the professional development and lifelong learning of teachers. However, this programme was not implemented in 2020 because of budget cuts related to COVID-19. Similar to many OECD and EU countries, some education authorities in Bosnia and Herzegovina have different categories of teacher that align with passing an appraisal process; however, these do not seem aligned with professional teacher standards. Actors in Bosnia and Herzegovina report using a range of sources to determine teacher professional development needs, but there are no accreditation processes to help ensure the quality of training providers.

Sub-dimension 7.3: Vocational education and training

Bosnia and Herzegovina's score in the sub-dimension on vocational education and training (VET) is below the Western Balkan average. Professionally oriented education starts at the secondary (ISCED 3) level, when students attend schools offering either a general, vocational, arts, religious or other type of curricular programme. As of 2019, some 77% of all upper secondary students in Bosnia and Herzegovina were enrolled in VET programmes, which is similar to Serbia (around 74%) but much higher than other Western Balkan economies with available data, as well as higher than the EU average (48.4% in 2018) (ETF, 2020^[90]). Despite the high share of participation in VET, there is evidence that programmes do not align with labour market needs (World Bank, 2019^[89]). As in other economies, data from PISA 2018 show that students in Bosnia and Herzegovina's VET programmes are more likely to be low performers⁵⁷ than their peers in general education. Improving the foundational skills of students who pursue VET will be important if Bosnia and Herzegovina is to raise the quality and relevance of the sector and support individuals in the transition from school to work.

As with the broader political and governance structure of Bosnia and Herzegovina, the **governance of VET** is complex and involves a wide range of actors. There has been no state-level VET strategy since the previous one expired in 2015, but a new strategy for the sector is being developed. The Framework Law on Secondary Vocational Education and Training regulates the VET system by defining basic principles and standards, based on recommendations from the EU, and requiring competent education authorities to adjust their own regulations in accordance. However, how governments engage social partners and provide career guidance for learners varies across the economy. In some jurisdictions, VET providers are subject to regular evaluations or inspections, which is positive; however, there are currently no formal accreditation processes for VET providers at the entity or state level. Effective VET governance needs reliable data to inform programme development and balance the supply and demand of skills. While some state-level bodies collect data on the completion rates of VET, and basic information on schools, students and programmes, more robust and comparable sector-level data is limited.

The new state-level VET strategy is expected to recognise the importance of **work-based learning** (WBL) in all forms. There are no clear regulations that determine the structure of WBL at the state level, and access to WBL and practical training in companies has not been harmonised throughout Bosnia and Herzegovina. Guidelines and supporting documents (checklists and forms) have been developed to support actors in the preparation, execution, evaluation, monitoring and improvement of WBL, but schools and companies usually organise WBL arrangements on their own. Neither entity has dedicated career service or placement centres to help match learners with WBL places, but both use broad public awareness campaigns as a matching mechanism, with RS organising presentations to social

partners and posting WBL opportunities on an online portal. There are only sporadic incentives for employers to provide WBL, which are organised at the level of local communities. However, RS reports having a rulebook that sets out possible employer incentives. In terms of data, there are no mechanisms for tracking and collecting information about WBL at the state nor FBiH entity level. RS collects information about the location and type of WBL opportunities, completion rates from WBL programmes and the number of learners hired after completing an apprenticeship, but information about the earnings of VET graduates and WBL participants is limited.

Sub-dimension 7.4: Tertiary education

Bosnia and Herzegovina's score in the tertiary education sub-dimension is similar to the Western Balkan average. The sector is mostly private, with 10 public and around 38 private tertiary institutions. The share of Bosnia and Herzegovina's labour force (aged 15+) who have attained some form of tertiary education (ISCED 5-8) has been relatively stable since 2015 at around 15-16%; however, this is the lowest rate among Western Balkan economies and is below the EU average (33.6% in 2019) (ETF, 2020^[90]). Participation in higher education is increasing as higher educational attainment is correlated with higher earning potential in Bosnia and Herzegovina; however, the economy faces substantial "brain drain", and graduates face a difficult transition into the labour market (World Bank, 2019^[89]; ETF, 2018^[91]). In 2019, the share of youth not in employment, education or training (NEET) was around 21%, more than double the EU average (around 10%), although this share has been decreasing steadily since 2010 (ETF, 2020^[90]).

At the state level, the Framework Law on Higher Education stipulates basic principles and standards of higher education in Bosnia and Herzegovina, which are in accordance with internationally recognised legal instruments and prevent discrimination on the basis of characteristics such as sex, disability or language. While this law can help facilitate more **equitable access to higher education**, there are limited comparable and disaggregated data to monitor and address access. State level agencies, in addition to entity and cantonal governments, collect some relevant data (e.g. enrolment by age and gender); however, only RS has proxies for socio-economic background and other factors that may impact an individual's access to higher education. In terms of student selection, higher education institutions typically determine entry requirements drawing on examinations and school results. Some of this information is also used to award merit-based loans and scholarships. Both entities and cantons provide financial support to vulnerable individuals, including those with disabilities and those from the Roma community.

Bosnia and Herzegovina's Priorities for Higher Education Development 2016-26, which was developed with IPA funding from the European Union, sets out key strategic goals for the sector, including strengthening connections between higher education institutions and the labour market. The economy has several features that support the **labour market relevance and outcomes** of higher education. For example, there are several initiatives to support the internationalisation of higher education, both at the state level, such as participation in the EU Erasmus Plus programme, and at the level of entities and individual institutions.

Some mechanisms also help align higher education with labour market demands, such as allocating scholarships for in-demand areas or involving industry stakeholders in the design of curricula. However, there is some information that such mechanisms are not effective, which together with longstanding disputes between the two higher education accreditation agencies (one at the state level and one in RS) has a negative impact on the overall quality and relevance of higher education programmes (European Commission, 2020^[39]). While there are data that can help inform higher education programmes about the needs of the labour market, neither entities use quantitative forecasting models to better understand the supply and demand of skills. Moreover, there is limited research to help align the learning outcomes, curricula and assessment methods of higher education with the labour market.

Cross-cutting dimension: System governance

It is difficult to assess Bosnia and Herzegovina in the area of **system governance** given the economy's complex political structure. While there has not been a state-level education strategy since 2015, there are several framework laws that aim to harmonise education systems and align them with EU standards and principles. Bosnia and Herzegovina has a Baseline Qualifications Framework that is being aligned with European qualifications, and several education authorities within the economy have governance features resembling those of other European economies. For example, RS has its own education strategy and an online platform to share information about the performance of the education system. However, at the state level, Bosnia and Herzegovina performs below the Western Balkan average for this cross-cutting dimension, mainly because of challenges related to policy co-ordination. The complex governance structure perpetuates inefficiencies and inequities across levels of education (World Bank, 2019^[89]).

A major challenge to system governance in Bosnia and Herzegovina is the limited amount of comparative data about the education sector. While several actors collect education data, they may use different definitions of indicators, which undermines the reliability of the data and limits Bosnia and Herzegovina's presence in international education datasets. The economy's recent participation in PISA and TIMSS filled an important gap in information about student learning outcomes, but there are no local standardised assessments that help monitor implementation of the new common core learning outcomes and provide more timely and contextualised results to inform education policy. Finally, there are some assessments and evaluations of the education system that can inform system governance, but these are often supported by donor agencies rather than an internal demand for research to systematically monitor, identify and address challenges facing the education system.

The way forward for education policy

In today's increasingly global and fast-changing world, achieving inclusive and quality education in Bosnia and Herzegovina can help increase regional competitiveness and create opportunities for more individuals to develop the competences needed for sustainable development and social cohesion. Officials will need to reflect on the economy's political, social and fiscal environment to determine how best to achieve their education goals. While deeper analysis of education policies is needed to provide more detailed recommendations for Bosnia and Herzegovina, the following considerations can provide insights for discussions on the way forward to enhancing education:

- **Strengthen evaluation and assessment policies across the system.** Education authorities across Bosnia and Herzegovina already have education management information systems, but these are mainly used for administrative purposes rather than to support education policy reforms and inform decision making. Republika Srpska produces quarterly reports on progress towards its education goals and has platforms to communicate information with the general public. Some cantons within FBiH also conduct analysis for their respective jurisdictions. However, there are limited internationally comparable statistical data and analysis at the state level. Bosnia and Herzegovina should consider producing a regular analytical report on system-wide progress that pulls together individual work programmes and statistics into a prominent state of education report. Germany and Canada provide such reports, along with other reporting materials, for their education systems (Box 21.9). Such efforts could build on the initiatives of individual authorities at the entity and canton level to help analyse and review state-level education data and policy initiatives, such as the implementation of the common core curricula.
- **Establish a technical accreditation system for initial teacher education.** Both entities in Bosnia and Herzegovina could benefit from setting out specific accreditation criteria and quality standards that require providers of initial teacher education to demonstrate how they help candidates develop competencies specific to teaching. In particular, Republika Srpska's Ministry of Education and Culture should work with the Ministry of Scientific and Technological Development, Higher Education and Information Society, which is responsible for ITE, to develop

standards of professional competencies for teachers and integrate these into an accreditation process. While the FBiH already has accreditation procedures for higher education institutes, there are no specific criteria for ITE programmes, which should be considered to help raise the quality of teacher preparation.

- **Prioritise supporting students, especially those in the VET sector, to achieve basic numeracy and literacy skills.** Considering that students who struggle to master basic skills are more likely to attend vocational programmes in Bosnia and Herzegovina (OECD, 2020^[92]), governments should take steps to prioritise reducing the number of low performers – both within VET programmes but also earlier in the education system when achievement gaps start to appear. This will help ensure that students are equipped with the skills they need to succeed in further studies or in the labour market.
- **Consider developing a state-level standardised assessment and set targets for improving student learning outcomes.** Many Western Balkan education systems have, or are developing, standardised assessment systems to help monitor the implementation of curricula and focus actors across the system on improving student learning standards. While it is important for Bosnia and Herzegovina to continue participating in international assessments such as PISA, TIMSS and PIRLS, which produce valuable information about the education system that can also be disaggregated to capture entity-level results, developing a state-level assessment instrument would provide more timely and contextualised data to help ensure that all students are achieving the common core learning standards. The data generated by assessments should be used to conduct research on the quality of educational processes and institutions.

Box 21.9. Annual analytical reports on the education system: Germany and Canada

Every two years, Germany produces a national report on education that covers the entire German education system, from early childhood education and school education to vocational training, higher education and adult education. The data compare developments over time broken down by federal state (*Länder*) and compared internationally. Each report provides information about the general conditions, features, results and output of education processes. While these reports do not include assessments of the data and recommendations for system improvement, they are a valuable tool that provide consistent and reliable information across Germany's decentralised education system.

In Canada, the Pan-Canadian Education Indicators Program provides statistical portraits of the elementary, secondary and postsecondary education systems. Through a series of public materials, including tables, factsheets and reports, education data from Canadian education systems is brought together to summarise key trends data and compare provincial and territorial systems with state-level averages and international peers.

Source: (Nationaler Bildungsbericht, 2020^[93]), *Education in Germany*, <https://www.bildungsbericht.de/en/the-national-report-on-education/education-in-germany>; (Statistics Canada, 2020^[94]), *Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program*, <https://www150.statcan.gc.ca/n1/pub/81-582-x/2020002/ab-ap-eng.htm>.

Employment policy (Dimension 8)

Introduction

Bosnia and Herzegovina's central government does not have competency over labour, employment and social policy, or social protection, which according to the Constitution fall under the remit of the two entities and the Brčko District. The Ministry of Civil Affairs of Bosnia and Herzegovina is assigned only a co-ordinating role when representing the economy's interests abroad. The possibility of working groups to

develop strategies at the state level has been discussed, as has the possibility of developing and adopting employment strategies at the level of both entities. In this dimension the state level and the two territorial entities are looked at separately. In the Federation of Bosnia and Herzegovina, the 10 cantons are highly autonomous in policy areas concerning employment (employment policy, education policy, welfare policies, etc).

Since the last Competitiveness Outlook assessment in 2018, progress has been uneven in the territories. Both entities have started to harmonise their regulatory framework for employment, but major efforts are still needed. RS has made moderate progress in tackling skills mismatches, while the FBiH has not made significant progress in this area. RS has made significant progress in the area of women's employment. Moderate progress has been made in strengthening the capacity of the public employment service (PES). Compared to other economies in the region, the regulatory and policy framework and the institutional capacity to address employment-related issues remain weak (Table 21.13).

Table 21.13. Bosnia and Herzegovina's scores for employment policy

Dimension	Sub-dimension	Score	WB6 average
Employment policy dimension	Sub-dimension 8.1: Labour market governance	2.1	2.6
	Sub-dimension 8.2: Skills	1.1	2.2
	Sub-dimension 8.3: Job quality	1.9	2.4
	Sub-dimension 8.4: Activation policies	2.4	2.9
Bosnia and Herzegovina's overall score		2.0	2.6

State of play and key developments

Table 21.14. Key labour market indicators for Bosnia and Herzegovina (2015 and 2019)

	Bosnia and Herzegovina		WB6 average	EU average
	2015	2019	2019	2019
Activity rate (15-64)	54.6%	55.5%	61.0%	74.1%
Employment rate (15-64)	39.2%	46.4%	51.5%	69.3%
Unemployment rate (15-64)	27.7%	16.4%	16.3%	6.4%

Note: WB6 average rates are based on author's own calculations using simple averages. Unemployment rate in 2015 refers to the 15+ age group.

Source: (Agency for Statistics of Bosnia and Herzegovina, 2020^[95]), *Labour Force Survey 2019*, http://www.bhas.ba/data/Publikacije/Bilteni/2019/LAB_00_2019_TB_0_HR.pdf; (World Bank and WIIW, 2020^[96]), *Western Balkans Labour Market Trends 2020*, <https://wiiw.ac.at/western-balkans-labor-market-trends-2020-dlp-5300.pdf>; (Eurostat, 2020^[97]), *Labour Force Survey data base*, <https://ec.europa.eu/eurostat/web/main/data/database>.

The activity rate of the population aged 15-64 was 55.5% in 2019, which was below the EU average and WB6 average (Eurostat, 2020^[98]; World Bank and WIIW, 2020^[96]).⁵⁸ In contrast to most economies in the region, the activity rate did not increase between 2015 and 2018 (World Bank and WIIW, 2020^[96]). Over the same period the number of employed aged 15-64 increased constantly (by 13% between 2015 and Q2 2019) (World Bank and WIIW, 2020^[96]). Between 2015 and 2019, the employment rate of those aged 15-64 increased by 7.2 percentage points, but remained well below the EU average (Eurostat, 2020^[99]). In 2019, the employment rate in BiH was the second lowest in the region (after Kosovo). The activity rate and employment rate were higher in RS than in the FBiH (by 8.7 and 10.3 percentage points, respectively), and the unemployment rate was lower (by 6.7 percentage points) (Agency for Statistics of Bosnia and Herzegovina, 2019^[100]).⁵⁹

As a result of the COVID-19 pandemic, GDP in Bosnia and Herzegovina fell by 9.3% between Q1 and Q2 2020. The impact on the labour market has been sizeable, although less dramatic than the fall in GDP. The level of registered employed fell by 2.2% in Q2 2020 (equating to 18 500 fewer employed people) compared to Q2 2019, while in Q1 2020 employment grew by 1.1% compared to the previous year. Employment in Q2 2020 fell mainly in retail trade, manufacturing and accommodation, and food

services. In contrast, employment rose slightly in the health and construction sectors. The pandemic has reversed the previous trend of shrinking unemployment, and in July 2020 the number of registered unemployed had risen by 4.7% compared to the previous year. This brought the unemployment rate (according to administrative data) to 34.7% in July 2020, compared to 32.4% at the end of Q1 2020, the highest since December 2018. Youth unemployment remains about twice as high as the overall unemployment rate, while the share of long-term unemployed (those without employment for more than 12 months) is still around three-quarters of the total number of unemployed individuals (European Commission, 2018^[101]).

The International Labour Organization (ILO) estimates that the COVID-19 pandemic constitutes an employment risk for 88% of informal workers. High-risk sectors in terms of exposure to the employment impact of COVID-19 are wholesale and retail trade, repair of motor vehicles, manufacturing, accommodation and food services, real estate, and administrative activities. In these sectors, the share of informal employment is 13%. The informal employment rate is highest (32%) in medium- to high-risk sectors, which include arts, entertainment, domestic workers, transport storage and communication. Some 14.4% of female informal workers and 37.2% of male informal workers work in these sectors. Most informally employed women (66.6%) work in the agricultural sector, which is at low-medium risk, as well as education, health, social services and public administration, which are also considered as low-medium risk (ILO, 2019^[102]).

Measures were put in place to mitigate the impact of the crisis on workers. The FBiH covered minimum salary contributions from March 2020 until one month after the end of the emergency measures. In June, the FBiH adopted a Programme of Economic Stabilisation 2020-2021, which included measures to preserve jobs. The RS reserved funds from its Solidarity Fund to support employees directly affected by COVID-19. In both entities, one of two employed parents (as well as single parents) with children under the age of 10 could be released from work during the crisis period as a justified absence.⁶⁰

Sub-dimension 8.1: Labour market governance

As stressed by the European Commission in 2019, Bosnia and Herzegovina does not have a programme for the adoption of the *acquis*, or similar strategic document, as required under the SAA. This should be developed as a priority. BiH also does not have sufficient horizontal and vertical mechanisms to ensure that approximation with EU directives is properly made (European Commission, 2019^[103]). The state level has no overview on how well legislation in the economy is aligned with EU directives.

The **regulatory framework** in FBiH consists of the Labour Law of 2016 and latest amendments from 2018.⁶¹ This reflects the start of the harmonisation of domestic legislation with EU directives, mainly in the area of working time, pregnant women, workers' rights in case of mergers and acquisitions, and some health and safety issues.⁶² There is still a long way to go to align the whole legislative framework in the area of employment. There is no legislative framework for temporary agency work.

A new Law on Occupational Safety⁶³ was adopted in FBiH on 1 October 2020 to replace a law enacted over 30 years ago, and to comply with EU law.⁶⁴ The new legislation foresees the establishment of a tripartite Council for Occupational Safety⁶⁵ to monitor, analyse and evaluate the occupational health and safety system and policy, as well as monitor the effects of the application of the law and feedback to the government of FBiH. The related strategy for occupational health and safety has not been adopted at the time of writing.

The Law on Labour of 2016 and 2018,⁶⁶ as well as the Law on Safety at Work of 2008 and 2010⁶⁷ and related rulebooks, form the pillars of the regulatory framework for employment conditions in Republika Srpska. Safety legislation is periodically updated to decrease (fatal) injuries at work.

The process of harmonising RS law with EU directives has begun, but it is not clear how close RS is to aligning with the EU *acquis* in the area of labour. The government considers that the *acquis* is stricter in many areas than current RS rules and has concerns over harmonisation given the different economic

contexts.⁶⁸ The new Labour Law of 2016 has reduced rigidity in hiring procedures and eased dismissals, although employers have still complained that the labour legislation is not sufficiently flexible (Bosnia and Herzegovina, 2019_[104]). The share of those temporarily employed can be used as an indicator of the strictness of employment protection legislation (employers may prefer using temporary contracts to evade costs of rigidity). In BiH, the share of those temporarily employed is 16.1%, which is well below WB6 average (22.1%) in Q2 2019. The share constantly increased in FBiH between 2010 and 2018, but fell in the first half of 2019 (World Bank and WIW, 2020_[96]). As there are no data for RS it is difficult to assess whether the change in law has had a positive impact on concluding permanent employment contracts. The labour legislation does not define the legal status of solo self-employed individuals and there is no regulation that would prohibit bogus self-employment. The self-employed need to register as entrepreneurs according to local rules. They must also be registered with the social security system (health insurance, pension and disability insurance, unemployment insurance). It is not clear how many self-employed individuals are actually registered as data on non-standard forms of employment are not collected.

Regarding **labour inspectorates**, in FBiH the federal administration and the cantonal administrations for inspection affairs – Labour and Occupational Safety Inspectorates – have the competence⁶⁹ to supervise implementation of the Law on Occupational Safety, as well as the regulations, technical regulations and standards related to occupational health and safety and general acts in the field of safety and health at work.⁷⁰ Federal labour inspectorates visit companies of interest to the FBiH, while cantonal inspectors carry out inspections in all other companies and entities. In addition to inspections at the employers' premises, labour inspectors consult employers and workers on the implementation of the law. The Ministry of Labour and Social Policies does not have insights into the budget of the federal and cantonal labour inspectorates, the co-ordination of different agencies at the federal and local level, nor access to monitoring data. The inspectors must inform the competent administrative bodies of deficiencies not specifically defined by existing legal regulations, and the inspectorates must co-operate with other administrative bodies, employers and employers' and workers' associations; however, there is no information on whether co-operation happens and is effective. In cases of misconduct and infringement of the labour law, inspectors can impose fines. The imposing of fines should be monitored, and activity reports published. Labour inspections are confronted with the challenge of a very high share of small and micro enterprises in both entities (like in other economies in the region). In 2017, there were around 30 000 SMEs (99.1% of all businesses) operating in BiH, with most (77.7%) micro enterprises (OECD, 2019_[105]).

In RS, the labour inspectorate is one of 13 inspectorates within the administration for the inspection of jobs (Republika Srpska Inspectorate, 2021_[106]).⁷¹ There is no separate budget for labour inspectors. In 2019, there were 32 employees working as labour inspectors,⁷² which equates to one labour inspector for 8 600 employees. Labour inspectorates carry out controls in the area of occupational health and safety (OHS) and employment conditions according to the labour legislation. They also keep records. Inspectors can give warnings and impose fines. Monitoring data indicate that irregularities are found in around 30% of inspections, while 10% involve sanctions for a minor offence.⁷³ There is no assessment or monitoring of the influence of labour inspectorates on employment and working conditions. There is also no evidence of systematic co-operation and file sharing with tax authorities, which are also key actors in reducing informal employment. There is no key strategy or action plan for labour inspectorates, but there are plans to set up a strategy.^{74,75} In FBiH, there is no publicly available monitoring of the activities and results of labour inspectors.

Regarding the **employment policy framework**, an FBiH Employment Strategy (2018-2021) was prepared in 2018 but had not been adopted by parliament at the time of writing. However, in RS there is a policy framework through the Employment Strategy 2016-2020 and previous employment strategies.⁷⁶ The main focus of employment policies relate to public employment services and active labour market programmes (ALMPs) for the unemployed. In this area some progress has been made. Action plans from 2017 and 2018 included the objective to prepare reforms and to redefine the role of PES, which resulted in the formation of an inter-departmental working group that actively includes representatives of social partners. The reform process has stopped as it would also imply reforming the healthcare system for unemployed

individuals. However, progress on the draft law on health insurance could not be made (Bosnia and Herzegovina, 2019^[104]). Progress has been made in creating partnerships between key stakeholders relevant for employment at the local level. The National Action Plan for 2019 aims to improve the link between education and employment (see Sub-dimension 8.2: Skills).

In RS, the statutory retirement age is 65 for men and 58 for women. The retirement age for women is fairly low by European standards (OECD, 2020^[42]). To be eligible for an old-age pension a person needs to have been insured for 15 years. A full pension is available for those insured for 40 years. Combining work, old-age and disability pension is only possible until age 65 in RS. In the FBiH, a new Law on Pension and Disability Insurance entered into force in 2018, which gradually reduces the possibility of retiring early. An insured person is entitled to an old-age pension when they reach 65 years of age and have at least 15 years of insurance service. In 2018, an insured man was also entitled to an old-age pension when he reached 35 years and 6 months of pensionable service and was at least 60 years and 6 months old. The number of required pensionable years and minimum age are being increased to 39 years and 6 months and 64 years and 6 months by 2026. For women, the respective minimum length of pensionable service is being increased from 30 years and 6 months in 2018 to 61 years and 6 months by 2030, and the minimum age from 55 years and 6 months to 61 years and 6 months.

There is a social dialogue framework in both entities, but implementation is weak. In FBiH there is a legal framework on employees' rights to join a trade union and on employee councils.⁷⁷ The Law on Labour stipulates that collective agreements may be concluded as general (for FBiH), branch (for cantons or FBiH) and at the level of the employer. The Ministry of Labour and Social Policy is responsible for keeping a register of collective agreements concluded in the FBiH. At the time of writing, four collective agreements had been concluded at this level (in mining, electricity industry, postal traffic, and administrative bodies and judicial authorities). Information on collective agreements concluded at the cantonal level is not collected at the FBiH level.

Tripartite social dialogue in the FBiH takes place through the Economic and Social Council (at the territorial level and the level of the cantons) as an institutionalised form of social dialogue.⁷⁸ The most important issues previously discussed at the council include the need to conclude a new general collective agreement, and determining the minimum wage, taxes and social security contributions. The ILO is supporting BiH in strengthening the peaceful mediation of labour disputes (ILO, 2021^[107]).

In RS, collective bargaining is conducted by representative trade unions and employers' associations⁷⁹ at company and sector levels.⁸⁰ A collective agreement has been concluded for the administration, health, education and culture, and social protection sectors, as well as for judges and municipal services. Social partners have failed to conclude a general collective agreement at the entity level. The Works Council Act⁸¹ of 2001 foresees the possibility of establishing works councils at the company level in companies with 15 or more employees.⁸² Collective agreements can be concluded only by trade unions.

Collective bargaining also takes place at the entity level within the Economic and Social Council. The law on the Economic and Social Council⁸³ and the Law on Labour regulate the role of the council in tripartite social dialogue in RS. The government and social partners are members of this council,⁸⁴ and there are two permanent working groups and an ad hoc working group. The Economic and Social Council has a network at local levels, and the social partners are experts in the area of employment.

One key task of the Economic and Social Council involves proposing the minimum wage level for the next year. The government then fixes the minimum wage on this basis. If the council cannot agree on a minimum wage, the government of Republika Srpska fixes the minimum wage unilaterally, considering wage development, economic growth and inflation.

Sub-dimension 8.2: Skills

Skills mismatch represents a serious challenge for the BiH economy and labour market. The World Bank conducted its Skills Toward Employment and Productivity (STEP) employer survey in BiH between

September 2016 and March 2017.⁸⁵ More than half of the interviewed firms stated that general education systems do not equip students with workplace skills (e.g. attitude, discipline), nor the practical skills needed to satisfactorily perform a job. Students from science, technology, engineering and mathematics (STEM) fields at post-secondary and tertiary levels are overall better evaluated than the general education system at large; nevertheless, between 40% and 50% of firms found STEM graduates lacking the necessary skills. In BiH, the highest rated students are from the technical and VET (TVET) system; however, more than a quarter of the firms still found that TVET students lacked the necessary skills (World Bank and WIIW, 2020^[96]). Firms also pointed to the lack of skills preventing them from hiring: 62% of surveyed companies reported difficulties in hiring due to lack of skills or experience when looking for workers in “non-routine” jobs, and 52% when looking for “routine” jobs (World Bank and WIIW, 2020^[96]).⁸⁶ Thus deficits in the quality of the education system harms the employability of the working-age population and creates skills shortages, which prevents companies from growing.

The NEET rate among young people in Bosnia and Herzegovina declined from 27.7% in 2015 to 21.6% in 2018, slightly below the WB6 average (22.1% in 2018) (World Bank and WIIW, 2020^[96]). The decline was stronger than on average in the Western Balkans, but still roughly twice the EU average of 10.5% (Eurostat, 2021^[108]).

Lower education levels lead to a higher risk of in-work poverty. A European Commission report found that 36.1% of people in Bosnia and Herzegovina with a low education level were at risk of in-work poverty. The in-work poverty risk of those with tertiary level education was only half this rate, but still high at 18.8% in 2015 (Obradović, Jusić and Oruč, 2019^[109]).

Skills governance is within the competence of the entities and the Brčko District of Bosnia and Herzegovina. FBiH has implemented some measures for young people to access the labour market. For example, to ease the school-to-work transition, the PES implements ALMPs aimed at helping young people gain their first work experience. In FBiH the Federal Employment Agency is not involved in conducting a skills needs survey among employers, as is done in other economies of the region, and little progress has been made to improve skills governance.

In RS, the Education Development Strategy for 2016-2021 aims to strengthen research-oriented higher education and better link higher education and the labour market. It identifies the perspectives and key obstacles for co-operation between higher education institutions and the business sector. To improve the employability of students, the accreditation of study programmes and higher education institutions is based on an analysis of employment opportunities and on employer surveys about the knowledge and competencies of graduates. When creating a plan for enrolling students in higher education institutions, the Ministry of Scientific and Technological Development, Higher Education and Information Society is guided by data from the Chamber of Commerce of Republika Srpska, the PES and the expressed needs of employers, and data on the number of students in individual study programmes. According to legislation in force since October 2020, employers are represented on the management boards of public universities. This represents an opportunity to better link curricula and the number of study places by educational field to the needs of employers in the future.

In RS, progress has been made in some areas of skills governance. The employment action plan for 2019 included activities to 1) improve the system for vocational guidance and career counselling through providing vocational guidance to pupils (implemented by the PES)⁸⁷; 2) develop local councils for education and employment (including the PES and municipalities; this activity has been implemented⁸⁸; 3) establish partnerships through direct co-operation with associations of employers, the economic chamber, trade unions, some ministries and units of local governments; and 4) develop an internship scheme in middle and high schools. Related activities involve providing necessary equipment to middle schools, training teachers, including companies in the provision of practical training, and the training of instructors from companies to work with pupils. The internship scheme is in the process of being implemented.

According to the World Bank’s STEP employer survey, about 31.9% of non-routine workers participated in on-the-job training: 28% in internal and 19.7% in external training. Participation in continuous training for

these workers was higher in BiH than in Albania, Kosovo and Serbia. The participation in training of routine workers (32.3% participated in on-the-job training, 30.2% in internal training and 11.6% in external training) was also higher than in Albania, Kosovo and Serbia (World Bank and WIIW, 2020^[96]).

To further **adult learning**, at the state level the Strategic Platform for Adult Education in the Context of Lifelong Learning 2014-2020 presents the strategic basis for the planning and operation of education and other competent authorities at all levels of government. The document is used to initiate, implement and co-ordinate activities in the field of adult education, in line with EU priorities, standards and trends in this area.⁸⁹ A strategic platform for a lifelong education approach was first adopted in 2014.

According to data provided by the competent education authorities in 2019, all competent education authorities in Bosnia and Herzegovina (Republika Srpska, ten cantons in the FBiH and the Education Department of the Government of the Brčko District) have enacted their own laws on adult education, thus completing the legislative framework in this area. This indicates the commitment of the competent education authorities to progress in adult education, and the acceptance and implementation of the concept of lifelong learning. There has also been progress regarding the development of strategic documents in the field of adult education. Most competent education authorities have either adopted or are in the process of developing their own strategy, or adult education has been integrated into the development strategies of their administrative units.⁹⁰

Every competent education authority has adopted its own Law on Adult Education and appropriate bylaws. At the state level, the Council of Ministers of Bosnia and Herzegovina adopted two documents in 2014: Principles and Standards in the Field of Adult Education⁹¹ and, as mentioned previously, the Strategic Platform for Adult Education in the Context of Lifelong Learning 2014-2020.⁹² Due to a complex constitutional setup, implementation is uneven and varies across educational authorities depending on priorities, capacities, budget, etc.

In RS, an adult education strategy for 2021-2031 was developed in 2019 and is in the consultation process.⁹³ The proposed strategy is targeted at young people and adults aged 18 and above who have not completed primary education, which is highly relevant as a low level of formal qualification, and therefore an assumed low level of basic competences, increases the risk of being in poor quality or informal employment, or of being unemployed or inactive.

The RS Law on Adult Education⁹⁴ sets the framework for the certification and validation of informal and non-formal learning. Adults can take an exam at an examination centre to prove their knowledge, skills and competencies, regardless of how they were acquired. The law also foresees that an employer can organise various forms of training and additional training for employees to help them adjust to market demands and changes, and to new technological and work processes.

The PES of RS is implementing adult learning measures for unemployed individuals through co-operation with the Institute for Adult Education, set up in 2010. Professional training programmes for 46 occupations⁹⁵ were defined in 2010, and there is a commission at the Institute for Adult Education composed of representatives of the Chamber of Commerce, the Ministry of Labour, the Ministry of Education and Culture, and employers.

Sub-dimension 8.3: Job quality

Regarding **quality earnings**, the overall in-work-poverty⁹⁶ rate was estimated at 24.5% in 2015, meaning that 237 943 employed persons earned less than EUR 104.60 per month and were at risk of in-work poverty. The at-risk-of-poverty threshold is about half of the minimum wage amount in RS and just over half in the FBiH. The in-work poverty rate of self-employed individuals (many of whom are informal workers) was 39%. The public sector offers higher wages and better working conditions than the private sector. According to a survey conducted for the Regional Cooperation Council in 2018, 40% of respondents would prefer to work for the public sector and 41% would prefer to work for public companies, while only 14%

would prefer to work for the private sector. There are no key strategies and action plans addressing very low incomes in BiH.

The average monthly gross wage in BiH was EUR 697 in 2018 (EUR 1 400 in purchasing power parity) which is higher than the WB6 average of EUR 656 (EUR 1 162 in purchasing power parity) (World Bank and WIIW, 2020^[96]). There is no available analysis of the wage structure and its link with labour productivity. In FBiH, the government determines the minimum wage after consultations with the Economic and Social Council.⁹⁷ Similarly, in RS the minimum wage is fixed upon decision of the Government of Republika Srpska on proposal of the Economic and Social Council. The minimum wage was set at BAM 520 per month in 2020.

The employment rate of women increased from 29.5% in 2015 to 33% in 2018 and 35.6% in Q2 2019. The activity rate of women increased from 42.9% in 2015 to 44.4% in Q2 2019. There was a strong drop in the unemployment rate of women (aged 15+) from 30.7% in 2015 to 20.3% in 2018 and 18.8% in Q2 2019. Despite these recent improvements, the employment rate of women is still very low, at 10.2 percentage points below the WB6 average and 27.7 percentage points below the EU average. The employment rate for women was 19.1 percentage points lower than the rate for men in Q2 2019, while it was 17.5 percentage points lower than the WB6 average (World Bank and WIIW, 2020^[96]). The share of women employed on a part-time basis increased from 8% in 2015 to 8.7% in 2018 and 10.3% in Q2 2019.

In terms of **policies to promote female employment**, the third Gender Action Plan 2018-2022 was adopted in 2018 and contains a wide range of highly relevant measures.⁹⁸

In the FBiH there is no comprehensive strategy to promote the employment of women, and there has been no study on the employment barriers that women face, as has been carried out in RS. Nevertheless, women are targeted in some programmes. For example, women aged 40+ are a target group for the Federal Employment Agency, and there is a small entrepreneurship programme 2019 for women.⁹⁹ The participation of women in ALMPs is uneven and differs by type of programme. Within the Entrepreneurship for Youth 2019 programme (407 young participants in total), 34% were women, within the Entrepreneurship for All 2019 programme, women represented 22% of participants (out of 672 participants), and in the Second Chance 2019 programme, 48% of participants were women (out of 127 participants).

The FBiH Law on Labour contains certain provisions regarding maternity rights (e.g. the right to work part time until the child reaches the age of 2, for twins and for the third and each subsequent child), while other issues related to reconciliation of work and family life are not within the competence of the Ministry of Labour and Social Policy, but federal and cantonal ministries of education. Therefore, no information was provided for this assessment.

The FBiH Law on Labour contains provisions on the prohibition of discrimination on the grounds of sex in relation to employment conditions, recruitment, working conditions and all employment rights, education, training and advancement, promotion, and termination of employment contracts. However, it is not known how this law is implemented, and whether barriers exist for women to bring discrimination issues to court, nor whether there are specific legal procedures in the case of sexual harassment.

The Gender Centre of Republika Srpska conducted research on gender inequalities throughout the life course in 2016 (Gender Centre, 2016^[110]). It addressed the recognition of unpaid house and care work in the home and pointed to strong patriarchal patterns of sharing housework and family care in RS. Women and men do not share equal parental responsibilities, which are largely undertaken by mothers, especially when children are small.¹⁰⁰ Almost half (44.3%) of fathers do not take on any obligation for a small child. In an effort to harmonise family responsibilities with workplace responsibilities, mothers with young children are most exposed to stress and fatigue. While there has been a shift in values for the new generation, a number of inequalities persist, and the double burden for women remains an issue for all age groups. The research highlights sectoral and occupational gender segregation in RS and, linked to that and to career breaks, a wage gap. There are also indications that female children in rural areas are particularly vulnerable to child labour.

Significant efforts have been made in RS to co-ordinate measures and programmes to reduce gender inequality across ministries.¹⁰¹ A special report on the findings of the above-mentioned research, adopted by the Government of Republika Srpska in 2016,¹⁰² contains wide-ranging and highly relevant recommendations on encouraging the take-up of paternal leave, increasing the supply of affordable family support services, and adapting gender sensitive school curricular and extracurricular activities to reduce stereotypes. These recommendations are in line with EU and OECD good practice and have led to the adoption of the Programme for Early Childhood Growth and Development 2016-2020, which aims to increase quality and access to preschool education in both urban and rural areas. Important progress has been made in tackling gender segregation through vocational guidance, which is a key approach for reducing gender segregation and the gender pay gap.¹⁰³

In RS, the Law on Labour specifically regulates the employment relationship with domestic workers, as well as the minimum salary for this work in cash in the amount of at least 50% of the salary of the employees. This type of work arrangement prescribes the obligation to conclude a contract that regulates the rights and obligations of the contracting parties. While this law forms the legal basis for preventing informal employment in private households, it may be difficult to implement without additional incentives.

Women in Republika Srpska own around 30% of businesses.¹⁰⁴ In 2019, the Strategy for the Development of Women's Entrepreneurship of Republika Srpska for the period 2019-2023 was adopted. The strategy, backed by the Law on the Development of Small and Medium Enterprises, envisages financial support for women's education, as well as support for women's associations, women in crafts and women in rural areas.¹⁰⁵ The Strategic Plan for the Development of Agriculture and Rural Areas of Republika Srpska 2016-2020 incorporates a commitment to the promotion of gender equality, to the visibility of its principles and to the consistent application of these principles by the line ministry.¹⁰⁶

Regarding employment policies for jobseekers, women are regarded as a vulnerable group and are targeted by the RS Employment Strategy 2016-2020. The Action Plan 2018 specifically introduced a measure targeted at female victims of domestic violence, women aged 55 (three years before reaching retirement age) and women from rural areas. Targeted measures have reached a low number of participants.¹⁰⁷

Sub-dimension 8.4: Activation policies

Public employment services are organised at entity and Brčko District levels, and further decentralised at the cantonal level in the FBiH. The Employment Institute of FBiH co-ordinates the activity of the 10 cantonal PES, which are under the responsibility of the cantonal assembly. In Republika Srpska, the Employment Institute has 7 regional offices and 59 local branch offices. In the Brčko District, the Employment Institute is a department affiliated to the mayor's office. Entity-level PES are involved in the overall co-ordination and methodological development, while local offices are mainly responsible for the implementation of ALMPs and passive labour market policies. The Labour and Employment Agency of BiH co-ordinates the activities of employment institutes in the two entities and the Brčko District.

Some Bosnian regions have a local partnership for employment, which is formal co-operation between labour market actors, schools and key employers who share a common vision of local labour market development (Schärle, 2018^[111]). These partnerships are important for implementing approaches to integrate vulnerable groups.

The high share of long-term unemployed in BiH is a key challenge. In 2015, 81.2% of those unemployed were long-term unemployed. This share had fallen to 76% in Q2 2019, but is still above the WB6 average of 67.4% and the EU average of 41.8% (Eurostat, 2020^[112]; World Bank and WIIW, 2020^[96]). Across the economy there are weaknesses regarding vacancy collection. Moreover, information on vacancies and jobseekers are not shared across the entities, which reduces the potential for effective matching and constrains labour market analysis (Schärle, 2018^[111]).

In FBiH, the regulatory framework for the activities of the PES consists of the Law on Mediation in Employment and Social Security of Unemployed Persons¹⁰⁸ and the rulebook on records in the field of employment.¹⁰⁹ These fix the objectives of PES activities and the division of responsibilities between the federal level and the cantons. The cantons have autonomy in running the PES and implementing employment policies, while the main task at the federal level is to ensure that there is a mechanism for employment mediation in place that ensures the establishment of an unemployment benefit system.¹¹⁰ The federal Employment Agency is tasked with co-ordinating employment services at the federal level. Cantonal employment services are responsible for collecting, exchanging and publishing data on employed persons seeking a change of employment, as well as other data that may be relevant for the performance of the basic activities of the employment service. The Ministry of Labour and Social Policies does not have an overview of the budgets of the federal Employment Service and the cantonal employment services, as determined by their financial plans. The number of actors in the field of employment policy in FBiH, and the variety of adopted policies, reduces the overall efficiency of the labour and employment sector and makes the whole system expensive and dysfunctional.

A strategy for strengthening the mediation function in PES in the FBiH has been formulated. Its main objectives are 1) the separation of active jobseekers from those registered solely for access to health care but who do not report to the PES every 45 days; 2) ensuring adequate counselling intensity and optimising the triage process, developing effective active employment measures, and improving co-operation with employers and other institutions; 3) the development of human resources, improving the performance management system, the development of modern IT support, and the positioning of public employment services as professional and relevant institutions in the labour market.

A profiling system was developed and fixed in the rulebook of 2018 that enables distinguishing three groups of jobseekers according to their employability and distance from the labour market, in line with OECD good practice.¹¹¹ An individual action plan is established for those who are unemployed. The Employment Service reassesses and classifies the level of employability of an unemployed person after every 12 months of continuous unemployment. It is advisable to look at longer periods of work history and to take a more differentiated view on employment barriers.

Regulations on the unemployment benefit system in FBiH have been adopted in 2001, 2005 and 2008, but there have been no recent changes. The right to cash benefits is acquired by an unemployed person who, at the time of termination of employment, has at least eight months of uninterrupted work or eight months with interruptions in the last 18 months. The amount of the cash benefit is 40% of the average net salary paid in the FBiH in the last three months before the termination of employment, as published by the Federal Bureau of Statistics, which is a rather low replacement rate. The duration of unemployment benefit receipt varies between 3 months (for those who have worked for less than 5 years) and 24 months (for those who have spent over 35 years in work). Health insurance for unemployed people is provided in accordance with the regulation on health insurance,¹¹² which sets incentives for inactive and informal workers to register with the PES. This would in principle call for implementing activation requirements for inactive and informal workers, and would require developing measures to support the transition from informal to formal employment, as well as measures to activate inactive workers. In the absence of a clear strategy to reach out to inactive and informal workers it would be better to move to a system of universal basic healthcare coverage. The strategy does not systematically offer activation services to inactive and informal workers, which is in conflict with the objective to raise employment rates and contradicts the principle of mutual obligation. Unemployment benefit recipients need to meet activation requirements, otherwise they get sanctioned. Activation requirements include the obligation to report monthly to the employment service, and to participate in group information sessions and job-search training. It would be advisable to monitor sanctioning. Unemployed people not receiving unemployment benefits, but receiving health insurance through their registration, need to report every 45 days. Unemployed people not receiving any benefit need to report every 120 days. Out of 323 600 unemployed people in 2020, 13 100 received unemployment benefit and 224 700 received health insurance (Employment Agency of FBiH, n.d.^[113]).

In FBiH, pension and disability insurance are provided to an unemployed person who lacks up to three years of pension experience until the conditions for an old-age pension are met, in accordance with the relevant regulations. This contradicts OECD recommendations on reducing incentives for early retirement and eliminating early retirement elements in the unemployment benefit scheme (OECD, 2020^[42]).

Social assistance in FBiH is provided on the basis of cantonal regulations. No information is provided on the level of social assistance nor on the implementation of the **mutual obligation principle** for social assistance recipients. There is no evidence, strategy nor plan for an integrated approach to the delivery of employment and social services for jobseekers with severe employment barriers. This approach is considered good practice in other EU Member States (Konle-Seidl, 2020^[114]), and attempts have been made in some economies of the region.

Active labour market programmes are measures to help unemployed people find work. They include employment incentives, support for self-employment, training measures to increase employability (i.e. preparation for work training, vocational training, and advanced training for the needs of the labour market or a specific job), as well as the provision of appropriate information for unemployed persons and employers. In 2020, the main target groups for ALMPs in FBiH included young people, women over the age of 40, the long-term unemployed and other categories of unemployed such as people with disabilities, demobilised combatants, those from the Roma community, and families where no one is employed. However, the monitoring report of the PES for 2019 does not show a strong targeting of young people and women aged over 40. Moreover, the number of participants is low: in 2019, around 9 000 unemployed individuals participated in ALMPs,¹¹³ and 6% of LFS unemployed (149 000 in Q2 2019¹¹⁴). Some 10% of ALMP funds are allocated to vocational rehabilitation for people with disabilities. There is an increase in the planned budget for 2020.

The Employment Strategy of Republika Srpska 2016-2020¹¹⁵ is the key policy document that defines the basic activities and active policy measures of the Employment Institute of Republika Srpska (EIRS).¹¹⁶ The number of staff in the EIRS has increased since 2015,¹¹⁷ but the caseload is still extremely high, with more than 1 000 registered unemployed person per PES counsellor in 2019, approximately ten times higher than EU good practice when dealing with vulnerable groups.¹¹⁸

Progress has been achieved in developing and implementing new tools in RS. A profiling tool has been developed and is implemented via a 45-minute interview with all unemployed people. However, given the very high caseload it is not clear how this can be effectively implemented. The profiling is based on the following indicators: acquired qualifications, special knowledge and skills, work experience, personal characteristics, social and health opportunities, job search period, professional interests, motivation for active job search, and career management skills. Unemployed people are then segmented into three groups¹¹⁹ depending on their assessed level of employability, and an individual action plan is developed. A follow-up is made after six months and the plan is revised if necessary. It would be advisable to have a more intense follow-up for those groups with severe employment barriers.

The IT system in RS has been improved to help follow-up on the progress of unemployed people. An application, Calendar of counselling and individual employment plan IPZ, was developed to monitor the effects of new methods of work. In September 2019, the customer relation management application was launched that aims to register unemployed people and employers' needs. Job-search clubs have also been carried out, in line with international good practice.

The number of collected vacancies in RS increased from 2 301 in 2015 to 3 458 in 2019¹²⁰; however, this is still extremely low given the high number of registered unemployed. The Action Plan for Employment 2019 includes activities to establish an annual plan of co-operation with employers and to increase the quality and quantity of collected vacancies in the private sector. However, there is no evidence to show if employer services and the active collection of vacancies have been improved.

Some progress has been made in improving horizontal co-ordination between relevant stakeholders at the local level in RS. Seventeen local councils were formed covered by seven branch offices of the EIRS, with

support of the ILO.¹²¹ These councils hold regular meetings with the aim of improving education and employment. One challenge will be to ensure sustainability after the end of the ILO project.

The RS Action Plan for Employment 2019 foresees activities to intensify counselling services for hard-to-employ jobseekers and to improve co-operation with social services at the local level. In 2019, support from international donors was also received to improve activities to support start-ups and entrepreneurship,¹²² as well as youth employment programmes.¹²³ It will be a challenge to continue these activities and to ensure sustainable financing once donor support ends.

In RS, an unemployed person is entitled to unemployment benefits if their employment has been terminated without his/her request, consent or guilt in terms of labour regulations, and if they have worked at least eight months continuously with unemployment insurance contributions in the last 12 months, or 12 months with interruptions in the last 18 months. They need to register within 30 days to receive benefits. This contradicts international good practice of early intervention, where registration is required within a few days after becoming unemployed, or even when receiving dismissal notification. Benefit duration depends on the previous contribution period and varies between 1 month (12 months of previous employment) and 24 months (over 34 years of previous employment). Compared to international good practice, 24 months is a long period to receive unemployment benefit. There is a danger that this will be used as an early retirement tool or to pave the way to long-term unemployment if not combined with strict job-search requirements. The income replacement rate is 45% for those with less than 15 years of work experience, and 50% for those with more than 15 years of work experience. In 2019, there were 25 721 unemployment benefit recipients, an increase on 2015 and 2017 figures. Those receiving benefits represented 29.4% of all registered unemployed.

Unemployment benefits cannot be lower than 80% of the minimum wage in RS (based on full-time employment). Social protection is determined by the Law on Social Protection and is financed from public revenue provided in the budget of the entity and local self-government units. Certain social services in the mixed social protection system can be financed by donor funds, funds of legal persons or individuals, and contributions from citizens. There are no job-search requirements linked to the receipt of social protection, which contradicts good practice in the EU and OECD (OECD, 2015^[115]; Konle-Seidl, 2020^[114]). The number of social assistance recipients was 55 415 in 2018, with 51 727 receiving war disability benefits and 2 713 civil disability benefits.¹²⁴ It is not known how many of these are registered with the PES and how many have remaining working capacities.

In RS, those registered as unemployed were covered by health insurance until November 2019, when this scheme was reformed.¹²⁵ Since January 2020 the right to health insurance of unemployed persons who declare themselves not actively searching for work has been provided through the Health Care Fund.

Expenditure on ALMPs in RS has increased since 2017, from 0.11% of GDP to 0.27% in 2019.¹²⁶ However, this is below the OECD average of 0.36%. In 2019, there were 5 664 participants in ALMPs and a budget of BAM 25.4 million, representing only 6.4% of all unemployed. Between 2018 and 2019 the budget for ALMPs increased considerably (BAM 16.3 million for 5 136 participants in 2018).

In 2019, the main target groups of ALMPs in RS were children of fallen soldiers, unemployed demobilised soldiers, disabled war veterans, persons over 40 years of age, women victims of domestic violence and war torture, women from rural areas, persons in the unemployed register for more than six months, children of killed fighters with a university degree without work experience, other persons with a university degree without work experience, young people up to 35 years of age regardless of their level of education, Roma, and active jobseekers with secondary education. Activities undertaken include the promotion of self-employment, employment incentives and training measures. In total, about half of participants participated in programmes earmarked for target groups, although some groups saw low participation, for example the number of participants in the specific project for the employment of Roma people was very low in 2019 (33 people). In addition, only a small part of the budget was directed at training measures, and low-educated individuals seem particularly underserved.

The EIRS analyses and monitors the achieved effects of ALMPs, such as how many persons employed under the programme remained employed after the expiration of the mandatory employment period of 12 months, which is good practice. This is undertaken by checking the status of people employed under the programme in the tax administration database after the end of the subsidised period of employment. All data are publicly available (annual work reports are published on the EIRS website).

The Employment Strategy of RS 2016-2020 aims to strengthen the capacities of social enterprises to integrate unemployed individuals into the labour market. Objectives include the creation and adoption of a platform for social entrepreneurship to strengthen social cohesion and integrate vulnerable groups into the labour market, the adoption of a corresponding law, and concrete support for the establishment of social companies.

Cross-cutting policy areas: Informality

The share of informal employment in total employment was 30.5%, and 17.4% if excluding agriculture, in 2019 (ILO, 2020^[31]). Among women informally employed, 16% were employees, 55% were own-account workers, 19% were contributing family members and the rest were employers. Among men, 27% were employees, 51% were own-account workers, 5% were contributing family members and the rest were employers.

In FBiH, the reformed Law on Labour¹²⁷ introduced the rule that work contracts must be fixed in a written form, that employment needs to be registered and that proof of social security contributions must be provided within 15 days of signature of contract. In 2016, the rulebook for the implementation of Labour Law was adopted.¹²⁸ In order to limit the use of informal work, the rulebook sets the obligation to keep daily records of workers and those engaged in work with the employer. This should help detect informal work and in particular “envelope wages”, which involves workers working and being paid for more hours than they are contracted for to avoid minimum wage and/or social security contributions. In Germany for example, according to the minimum wage law, there is an obligation for daily time records for each employee and these are controlled during labour inspections (General Customs Directorate of Germany, 2021^[116]).

In RS, no strategy addressing an informal employment reduction framework was established during the review period. The government has argued that wage increases were intended to increase the incentive to work in the private sector. It should however be considered that this only works if productivity is increased accordingly, otherwise higher wages may set incentives for employers to offer envelope wages, which increases informal employment. The RS government amended the Law on Income Tax in 2016 to increase the non-taxable salary threshold to 500 BAM per month.¹²⁹ The main intention of this measure is to reduce the tax burden on work and to direct the funds available through the application of this regulation to increase the net salaries of employees. On 13 June 2019, the Law on Incentives¹³⁰ was approved, which enables employers to receive a refund of paid contributions of up to 70% of the paid amount for a possible increase of the non-taxable part of the salary.

Cross-cutting policy areas: Brain drain

Well-educated individuals are most likely to migrate from Bosnia and Herzegovina, and their emigration rate was over 40%, higher than the rate in Serbia, Montenegro and Albania. Migration was also high among low-educated individuals, while medium-educated individuals are significantly less likely to migrate (World Bank and WIIW, 2020^[96]).

For RS, labour mediation abroad is realised according to the established procedure and regulations, in co-operation with the BiH Labour and Employment Agency, for economies with which an interstate employment agreement has been signed. The PES in Bosnia and Herzegovina places workers abroad, and employment agreements have been signed with Slovenia, Serbia and Qatar. There is also a signed agreement on mediation regarding the employment of workers from Bosnia and Herzegovina in Germany

for a certain period of time, which applies only to the employment of medical staff (caregivers). Most of the mediation for foreign economies in 2018 and 2019 was related to Slovenia and Germany.¹³¹

The EIRS assumes that migration negatively affects the labour market. However, there is no strategy in place to mitigate the negative effects of migration.

The way forward for employment policy

The following recommendations are made for all entities and the state level, according to the area of responsibility:

- **Continue efforts to align labour law and OHS regulation to EU directives.** Develop the regulatory framework for non-standard forms of employment (including self-employment, and platform work).
- **Implement adult learning programmes for low-skilled adults.** This includes measures for remedial education. Set incentives for companies to promote continuing training at the company level, in particular at the mid-skills level, to help employees adapt to technological change. Measures implemented in other economies include subsidies to employers, financed study leave, tax credits and individual learning accounts (OECD, 2019^[117]). The strategy for adult learning should foresee counselling activities for employees and employers, in particular for SMEs, as in Portugal through the Qualifica Centres (OECD, 2019^[118]).
- **Regularly conduct analyses of wages by sector, gender, educational level and occupation.** Improve labour market monitoring data and include data on poverty, the employment situation of specific vulnerable groups (e.g. Roma), informal employment, migration and working conditions, and wage development. Labour productivity should be part of a wider monitoring system. Collect information on non-standard forms of employment.
- **Activate disability pension recipients who have the capacity to work and include them in vocational rehabilitation measures.** Carry out an analysis regarding to what extent social protection supports inactivity. In OECD economies, activating people who receive welfare benefits, including those with reduced work capacities, and designing welfare benefits accordingly has been a central policy area (OECD, 2015^[115]; Konle-Seidl, 2020^[114]).¹³²
- **Strengthen the capacities of the PES to align with EU and OECD good practice by:**
 - Reducing the caseload of PES workers by increasing the number of staff.
 - Continuing efforts to co-operate with relevant stakeholders, in particular chambers and employers at local levels.
 - Furthering efforts to improve employer services and vacancy collection.
 - Increasing efforts to integrate vulnerable groups into the labour market.
 - Carrying out regular surveys on the employability of participants after programme participation.
 - Developing a concept for adult vocational guidance for adults. This could be done by the PES and/or other relevant institutions.
- **Continue efforts to increase the employment rates of women.** Increase access to affordable and quality childcare and implement measures to reduce gender stereotypes in education and the workplace.
- **The FBiH should increase the transparency of the work of labour inspectors at entity and cantonal levels.** It should establish a strategy for the whole FBiH and bring cantons together. Given the administrative complexity, to increase transparency FBiH should also intensify the exchange of practices between cantons and introduce a benchmarking system of inputs and outputs of labour inspections at the entity and canton level.
- **The Federal Employment Agency of FBiH should report to the Ministry of Labour on the budgets for running the PES and for ALMPs at the entity and cantonal level.** A good practice

example can be found in Switzerland, where cantons have a great deal of autonomy, and where the State Secretary for Labour and the Economy (SECO) takes a co-ordinating role. SECO decides on common ALMPs, which can be supplemented by cantonal programmes. A benchmarking exercise is used to help with performance management in the context of the decentralised PES in Switzerland (Eftheia, Budapest Institute and Icon Institut, 2018^[119]; Duell et al., 2010^[120]).

- **RS should strengthen co-operation between labour inspectorates and tax authorities.** Good practice from other economies shows the benefits of close co-operation and file sharing. In Norway for example, co-operation between different agencies has been formalised, and an internal database to facilitate information exchange between joint offices was created in December 2016. A National Interagency Centre for Analysis and Intelligence was also set up to undertake threat assessments for joint strategic measures against economic crime, for example by delivering intelligence reports, and help decision makers analyse cross-economy trends (European Commission, 2020^[121]).
- **Increase incentives to work longer.** Good practice in EU and OECD economies shows that policy reforms seek to lengthen working lives, often up to the age of 67 for both men and women, and set incentives for people to work even longer (OECD, 2020^[42]).
- **Support social security contributions for household and care workers employed by private households.** Other economies, such as France, have a voucher system for employing household and care workers and support for their social security contribution (Box 21.10).

Box 21.10. Universal Service Employment Voucher (Chèque Emploi Service Universel, CESU) in France

The CESU was launched in 2006 as part of a plan for the development of personal services. It replaces the service employment voucher set up in 1994, which was limited to traditional personal services such as housework, childcare in the home and care for the elderly. One major objective of this voucher is to assist in the fight against undeclared work in these services.

There are two formats of CESU:

- The CESU declaration (simply known as “CESU”) is a tool (paper or online) for the declaration of employment to be completed by a personal household service user/employer. The personal household user worker is paid via cash, bank cheque etc., or a pre-financed CESU.
- The pre-financed CESU (“CESU *préfinancé*”) is a voucher that is totally or partially prepaid by a company, local authority etc., and used by the service user/employer as a means of paying a personal household service worker.

The CESU also enables the user to receive a tax benefit, which was extended to non-taxable active persons from 2007 and to inactive persons from 2017. The list of services eligible for tax reduction (small maintenance tasks, yard work, study help, ICT or administrative assistance, etc.) were also broadened in 2017.

Source: (CESU, 2020^[122]), *Universal Service Employment Voucher (CESU)*, <https://tinyurl.com/hvfuwppc>.

Science, technology and innovation (Dimension 9)

Introduction

Bosnia and Herzegovina continues to underperform in the area of science, technology and innovation, and, together with Kosovo, has the lowest overall score in the region (Table 21.15). In particular, business-academia collaboration remains nascent, whilst some improvements have been made in the overall STI framework.

Table 21.15. Bosnia and Herzegovina's scores for science, technology and innovation

Dimension	Sub-dimension	Score	WB6 average
Science, technology and innovation dimension	Sub-dimension 9.1: STI system	1.7	2.4
	Sub-dimension 9.2: Public research system	1.2	2.0
	Sub-dimension 9.3: Business-academia collaboration	0.9	1.6
Bosnia and Herzegovina's overall score		1.3	2.1

State of play and key developments

The policy framework for science, technology and innovation in Bosnia and Herzegovina remains at an early stage and is highly fragmented across the different entities. The lack of consistent statistical data adds to the complexity in assessing the overall performance of the sector. Some progress has been made in aligning the STI framework with EU standards, which may result in more comprehensive policy measures in the medium term. The public sector research system remains chronically underfunded, and few incentives are provided to foster business-academia collaboration. However, some efforts have been made to broaden the institutional support structure.

Sub-dimension 9.1: STI system

In line with the constitutional set-up of Bosnia and Herzegovina, **STI strategy** development predominately falls within the competency framework of Republika Srpska, the Brčko District and the cantons, while the Federation of Bosnia and Herzegovina mainly exercises a co-ordinating role. This has led to a scattered and decentralised approach to STI policy making without clearly identified and harmonised policy priorities. Private sector consultation is not the norm in STI policy development and there are no systemic and comprehensive monitoring and evaluation practices in place.

At the state level, the Revised Strategy on Scientific Research (2017-2022) provides the fundamentals of scientific research and the co-ordination of internal and international co-operation, but falls short of addressing academia-industry collaboration or innovation. In Republika Srpska, STI policy is defined in the 2017-2022 Strategy of Scientific and Technological Development; however, implementation progress of the strategy remains unclear. In FBiH, a draft STI strategy prepared in 2012 has never been adopted. There are plans to prepare a smart specialisation strategy in BiH; however, development remains at an early stage. In November 2020, the Council of Ministers approved the composition of the working group in charge of preparing the strategy.

The **institutional framework** is highly decentralised. At the state level, the Ministry of Civil Affairs co-ordinates STI policy across Bosnia and Herzegovina and represents the economy internationally. There are dedicated ministries in charge of STI policy making at the entity and canton level, as well as a competent department in the Brčko District. However, co-ordination of STI policy remains limited given the lack of a single body accountable for STI policy development. There is also no dedicated innovation or technology agency supporting STI policy implementation. However, in RS there are preliminary plans to establish an Innovation and Science Fund, and assessment studies are currently being planned.

Legislation on the fundamentals of scientific research activity and the co-ordination of scientific research co-operation, which has been in place since 2009, provides the overarching **regulatory framework** for

STI in Bosnia and Herzegovina. Republika Srpska adopted its own STI legislation in 2017, as have three cantons within the FBiH since the last assessment. In contrast, a legislative framework defining STI policy at the FBiH entity level has been pending adoption since 2017. Unified legislation regulating intellectual property (IP) is in place and broadly in line with EU standards, but it is not designed to encourage business-academia collaboration or the commercialisation of IP. While the law enforcement of IP has been strengthened in recent years, co-operation across institutions remains ad hoc, and capacity is limited.

The Ministry of Civil Affairs co-ordinates Bosnia and Herzegovina's **international collaboration** with regards to STI, co-financing (in close co-ordination with entities and cantons), researcher mobility and applications for international research programmes. BiH participates in the EU's Horizon 2020 programme,¹³³ and shows relatively good performance: by the end of 2020, 67 projects involving 113 Bosnian entities had been approved, receiving EUR 8.56 million in funding, with a rate of retained proposals of 12.3% (only slightly below the Horizon 2020 associated countries' average of 13.5%) (European Commission, 2021^[123]). BiH also participates in the Western Balkans Enterprise Development and Innovation Facility (WBEDIF), which has made two investments through the Enterprise Expansion Fund (ENEF) to Bosnian entities. BiH is a full member of European Cooperation in Science and Technology (COST)¹³⁴ and has "national information point" status in Eureka,¹³⁵ with the application for full membership expected to be submitted soon.

Bosnia and Herzegovina participates in the European Research Area and its policies are broadly **aligned with EU STI policies**. It also participates in the European Strategy Forum on Research Infrastructures (ESFRI), but only Republika Srpska has developed a roadmap for research infrastructure to date. In addition, most BiH higher education institutions have endorsed the EURAXESS¹³⁶ Code of Conduct, and three universities have adopted the EURAXESS Human Resources Strategy for Researchers. In contrast, Bosnia and Herzegovina does not participate in the European Innovation Scoreboard due to weak statistical data collection. However, efforts have been made to intensify data collection, which is expected to improve the monitoring and evaluation of STI-supportive policy measures across entities going forward.

Sub-dimension 9.2: Public research system

The **institutional structure of the public research system** remains fragmented, and the lack of a unified and comprehensive framework has hindered the development of a functioning system. The institutional and legal framework governing higher education institutions (HEIs) and research and development institutes (RDIs) predominately rests at the entity and canton level, with the Ministry of Civil Affairs co-ordinating international collaboration. Amid disputes over competencies regarding HEIs and RDIs, there is no harmonised approach to performance management in the sector, and no cross-entity accreditation of HEIs is in place.

The public sector research system remains significantly underfunded, and gross domestic expenditure on research and development (GERD) has remained unchanged at around 0.2% of GDP in recent years (UIS, 2021^[124]). **Public research funding** is predominately based on institutional funding. Within the FBiH, funding is evenly allocated across HEIs in all cantons, resulting in significantly underfunded HEIs in key urban areas with larger numbers of students. In addition, budget allocations have been significantly cut amid the outbreak of the COVID-19 pandemic. In both entities, some progress has been made in introducing competitive performance-based funding for the public scientific research sector, albeit small-scale at around EUR 250 000 in the FBiH and EUR 800 000 in the RS in 2019. However, in 2020 funds were re-allocated due to COVID-19. Some competitive project-based funding is available to researchers, which is positive; however, the methodology for project selection does not reflect international best practice of a two-stage, independent evaluation process.

Fostering research excellence does not prominently feature in any of Bosnia and Herzegovina's strategic STI frameworks. Despite increasing brain drain in the sector, there are no measures in place to stimulate the involvement of the diaspora. As a result, **human resources for research and innovation** remain at low capacity. With 667 researchers per 1 million inhabitants, Bosnia and Herzegovina significantly

underperforms compared to regional peers, and a trend of brain drain has become evident in recent years. Particularly in important disciplines such as medical and health, the number of researchers has dropped significantly (UIS, 2021^[125]), while no targeted measures have been developed to counterbalance this development. However, there are some support measures to strengthen the capacity of researchers at both entity levels, primarily in the form of financial support to facilitate researchers' participation in international programmes or study visits. In contrast, opportunities provided for researchers to develop their technical skills are limited. Efforts have increased to raise awareness and promote scientific research as a profession. For instance, in 2018 RS introduced financial rewards for "best in class" scientific research published in international journals. It also celebrates a Science Festival each year. There are initial preparations underway to develop a Scientific Research Information System in BiH, which will contribute to enhancing scientific research.

Sub-dimension 9.3: Business-academia collaboration

Integration of scientific research and the private sector is limited in BiH, and the **collaboration promotion framework** remains at a nascent stage. The STI policy framework recognises the need to stimulate academia-industry collaboration but falls short of a comprehensive and concrete set of measures across all institutional levels. As a result, investment in research and development by the private sector is significantly below regional peers, and technology absorption capacity is low.

There have been no innovation voucher schemes or competitive collaboration grant schemes implemented in Bosnia and Herzegovina, and the scope of **financial incentives for collaboration** remains low. Some support mechanisms for the development of a knowledge economy exist; however, these are predominately geared towards the private sector and do not require the participation of academia. In Republika Srpska, the pilot Synergy Programme, aimed at increasing technology transfer and absorption and raising awareness about the potential of academia-industry collaboration, is currently underway. During the first call of this programme in 2019, five projects received financing of around EUR 25 000 each. There are no other financial incentives, such as STI-conducive procurement practices. Similarly, **non-financial incentives for collaboration** are under-developed. There is no legislation in Bosnia and Herzegovina to encourage technology transfer and commercialisation by defining the ownership of intellectual property and the royalty split for publicly funded research, although some centrally co-ordinated support is provided for patent application. Researchers are still assessed against conventional performance criteria and there are no dedicated researcher mobility schemes in place, other than support to participate in international networks and scholarships to facilitate doctoral and post-doctoral research. Nevertheless, by 2019, 41 Bosnian researchers had benefitted from the support provided under the MSCA.

Bosnia and Herzegovina has made progress in developing an infrastructure of **institutional support for collaboration**. A number of science and technology parks operate throughout the FBiH. Most recently, the Posušje Technology Park Foundation was established in 2019, but is not yet fully operational. In Republika Srpska there are plans to build a science and technology park in line with the roadmap for scientific infrastructure, and the Innovation Centre Banja Luka continues to play an important role in supporting innovation more broadly. Whilst the expansion in the number of science and technology parks is a welcoming trend, in reality they often primarily serve as incubation centers for companies not always linked to scientific research. However, a good example of public-private-academia collaboration is the Coordinate Measuring Machine (CMM) Competence Centre in Mostar, which was established in 2019 (Box 21.11).

Box 21.11. Coordinate Measuring Machine (CMM) Competence Centre

The Coordinate Measuring Machine (CMM) Competence Centre was established in 2019 with support from the United Nations Industrial Development Organization (UNIDO), Slovenia and a Slovenian private company. Located at the Faculty of Mechanical Engineering, Computing and Electrical Engineering of the University of Mostar, the centre provides internationally recognised calibration and testing services, and advanced research in the field of product quality control in collaboration with local industrial companies. The CMM will enable the University of Mostar to build capacity in the area of quality control and precise measurements of complex geometries, and provide expertise sought after by local industries. Inspecting the quality of products and services by using co-ordinate measuring machines is of crucial importance for some of key BiH industries, such as the automotive, aviation, pharmaceutical and metal industries, which suffer from a lack of precise geometrical measurements. Therefore, the new centre is expected to benefit the entire economy in terms of providing new opportunities and enabling access to EU and international markets through internationally recognised measurements and calibrations.

Source: (UNIDO, 2020^[126]), *Strengthening the quality system of technology and industrial products and services in Bosnia and Herzegovina: Coordinate Measuring Machine Competence Centre*, <https://open.unido.org/projects/BA/projects/160112>.

The way forward for science, technology and innovation

Bosnia and Herzegovina's STI policy framework remains below potential, and absorption capacity for technology and innovation is limited amid a highly fragmented institutional set-up, the absence of a clear co-ordination mechanism that would help identify policy priorities, and a lack of investment. Some positive steps include an emerging strategic framework to develop STI policy and several pilot schemes to stimulate collaboration between academia and the private sector.

Specifically, Bosnia and Herzegovina should consider the following priorities:

- **Align strategic priorities and co-ordinate implementation.** Bosnia and Herzegovina should look to harmonise its strategic framework for STI across all institutional levels to identify joint priorities and develop action plans for implementation. Timely and co-ordinated preparation of the economy's first Smart Specialisation Strategy will be imperative to address existing obstacles to STI development.
- **Increase investment in the public sector research system.** Funding availability to strengthen the capacity of scientific research needs to be increased significantly to enable Bosnia and Herzegovina to attract contributions from the research community. An increased focus on performance-based funding will further increase the quality and outcomes of the public research system. In the long term, such measures are expected to pre-empt increasing brain drain in the research sector.
- **Integrate the private sector.** Increased participation of the business community in STI policy development will contribute to the development of more targeted policy measures aimed at academia-industry collaboration. If coupled with well-designed incentive mechanisms, Bosnia and Herzegovina could leverage its existing institutional support structure to stimulate co-operation between research and business communities.

- **Strengthen the enforcement of IP legislation.** Steps should be taken to increase the capacity of enforcement institutions, including by providing specialised training. Awareness-raising activities about the importance of IP among the general public and the research community will further help encourage patenting.
- **Improve the collection of statistical data on science, technology and innovation.** Streamlining data collection and capacity across all institutional levels will improve the monitoring of the progress of STI policy implementation. Bosnia and Herzegovina should also work towards inclusion in the European Innovation Scoreboard.

Digital society (Dimension 10)

Introduction

Bosnia and Herzegovina scores below the Western Balkan six average across all digital society indicators, and has the lowest overall score among the six economies, as shown in the Table 21.16. The economy has been working to improve its broadband development framework since 2018, moving closer to the adoption of a broadband strategy agreed upon by all government members, which is expected to conclude during 2021. The adoption of the strategy, if coupled with a budgeted action plan, could deliver the promise of an enabling environment that stimulates private sector investment in network infrastructure, and help to leverage donor financing to support rural broadband development, as in other WB6 economies. BiH has achieved consensus among state and entity governments on the adoption of the Strategic Framework for Public Administration Reform 2018-2022 (SFPAR), which is the first significant step towards digital government development. However, agreement on a budgeted action plan is also required to make tangible progress, as the economy is lagging behind the EU and the WB region by only offering a small number of non-transactional e-services to its citizens and businesses. The absence of an overarching ICT strategy has been flagged in this assessment, as much as in the previous round, as a factor holding back ICT sector development. Despite the fact that ICT companies in Bosnia and Herzegovina have significant potential to grow and open new workplaces, they are challenged by the deficit of highly skilled ICT professionals. The situation is exacerbated by the weaknesses of the BiH educational infrastructure, especially when compared to the educational systems in some neighbouring economies, which are gradually increasing their output of ICT professionals. BiH has done little to align with the EU's digital competence framework for students and professionals, and opportunities for practical ICT training and lifelong learning are limited. Progress has also been slow in improving the legal framework and changing public mindsets in matters of personal data protection, e-commerce consumer protection and digital security risk management. Relevant legislation and regulations are perpetually under preparation, and there are no resources set aside for a domestic computer emergency response team and international collaboration in the fight against cybercrime.

Table 21.16. Bosnia and Herzegovina's scores for digital society

Dimension	Sub-dimension	Score	WB6 average
Digital society dimension	Sub-dimension 10.1: Access	1.8	2.9
	Sub-dimension 10.2: Use	1.8	2.4
	Sub-dimension 10.3: Jobs	1.7	2.3
	Sub-dimension 10.4: Society	1.5	2.1
	Sub-dimension 10.5: Trust	1.7	2.2
Bosnia and Herzegovina's overall score		1.7	2.4

State of play and key developments

Sub-dimension 10.1: Access

Bosnia and Herzegovina has not made significant progress in improving the policy framework for **broadband infrastructure** development since the 2018 assessment cycle. The Policy on the Electronic Communications Sector for 2017-2021, which is aligned with the Digital Agenda of Europe, was adopted in 2017 by the BiH Council of Ministers, but not formally implemented in practice. Given that a concrete action plan was never agreed among the entities and the state, the policy remained a high-level, visionary document. In the meantime, the development of broadband networks across Bosnia and Herzegovina is fuelled by private sector investment based on market competition. Fixed broadband penetration in Bosnia and Herzegovina was 22.6% in 2019, which is the second highest in the region next to Montenegro (28.47%), but still lagging behind EU Member States (ITU, 2019^[127]). However, the existing framework does not facilitate network infrastructure investment in rural and remote areas. Additionally, rules and

procedures across entities and different levels of local administration, especially in the FBiH, are not fully harmonised, and network infrastructure development cost reduction models are not yet in place, in accordance with the EU directive on measures to reduce the cost of deploying high-speed electronic communications networks (2014/61/EU). The development of a broadband strategy remains one of the most pressing issues for Bosnia and Herzegovina's broadband development. A working group was formed in 2017 to prepare such a strategy, which is currently in the phase of final adjustments at the level of participating institutions. Positively, representatives of all government entities were invited to take part in this working group and appointed by the Decision of the Ministry of Transport and Communications of BiH, which increases the potential for the practical implementation of the strategy once adopted.

The Communications Regulatory Agency (RAK) has developed a Strategic Development Plan for 2019-2021, as set out in the Policy on the Electronic Communications Sector for 2017-2021, which describes several projects (RAK, 2019^[128]). The agency has planned a broadband mapping study to identify "white, grey and black areas"¹³⁷ in BiH, in collaboration with relevant stakeholders (i.e. network infrastructure providers). The plan also includes a needs' assessment for financing the development of broadband infrastructure in rural and remote areas. The agency intends to launch a public call to identify and select the most suitable financing model for broadband infrastructure development in "white" areas.

The **ICT policy regulatory framework** is not completely aligned with the EU Regulatory framework. The existing Law on Electronic Communications is outdated, and the new Law on Electronic Communications is still under preparation with an undefined adoption timeframe. Major legislative and regulatory activities are needed to align Bosnia and Herzegovina's regulatory framework with the EU framework.

A TAIEX mission was organised that involved experts from Belgium and Lithuania working with the BiH Ministry of Communications and Transport and RAK to help harmonise the Law on Electronic Communications with EU legislation. The harmonisation process prioritises the transposition of the European Electronic Communications Code into BiH legislation. Republika Srpska's government nominated a working group representative for the preparation of the new law, but this person was not designated by the Decision on Appointment of the Working Group for the Drafting of the Law on Electronic Communications. RS claims that entities' participation in the adoption of important legislation, such as the new Law on Electronic Communications, through an e-consultation process with stakeholders does not ensure the applicability and implementation of the law.

RAK enjoys institutional independence, but its financial independence is not yet fully ensured, despite improvements. The director of RAK is appointed by the Council of Ministers, which does not ensure transparency and openness, nor provide sufficient safeguards against political and economic interference (European Commission, 2019^[4]). In March 2019, the Council of Ministers adopted the decision on the conditions for the provision of 4G network services in the economy, and the respective licences were issued by RAK for the three mobile operators in BiH, who launched the service in April 2019 (ITU, 2020^[129]). Given the late adoption of 4G and the expected delay in adopting 5G regulations, the assignment of a spectrum for 5G is not expected soon.

Bosnia and Herzegovina has made some progress in adopting a framework for **data accessibility**. RAK has responsibility for the adoption of any regulatory obligation concerning online communication and data related to alignment with the EU *acquis*. The SFPAR, adopted by all members of government, and the Open Government Partnership (OGP) Action Plan for 2019-2021 both refer to data accessibility and openness. While the SFPAR is not yet being implemented, the OGP Action Plan stipulates opening official statistics by the Agency for Statistics of Bosnia and Herzegovina and opening data on public procurement by the Public Procurement Agency. Under this commitment, the Agency for Statistics has increased the availability, openness and use of official statistical data, ensuring that all data published by the agency are free, in a machine-readable format under the open licence, and constantly available on the agency's website.¹³⁸ BiH has also launched a National Summary Data Page¹³⁹ for publishing essential macroeconomic data in both human and machine-readable formats, which is hosted by the Central Bank of BiH on its website. In December 2019, the RS government adopted the Strategy for the Development

of e-Government 2020-2022, which also includes objectives on data accessibility and the obligation of public sector institutions to exchange data or provide their data for re-use and e-service creation. The implementation of this strategy, however, has not begun as financial resources have not yet been allocated. The PAR Co-ordinator's Office conducted an online survey in June 2020, in which 57 state institutions participated. The survey findings showed that the average fulfilment of proactive transparency standards (publishing all data and information of public importance) is 64.04% among participating institutions; 11 institutions met 80% of the standards and only 4 institutions met 100% of the standards (one of which was the Agency for Statistics).

Sub-dimension 10.2: Use

Digital government has been developing unevenly across the two entities in Bosnia and Herzegovina. The Policy of the Information Society Development (2017-2021), adopted by the Council of Ministers in 2017, outlines the principles of information society development, but does not specifically address the promotion of digital government and the development of e-services by the public sector. Some aspects of digital government development are included in the SFPAR, which was created by the PAR Co-ordinator's Office and adopted by the Council of Ministers in June 2018. The SFPAR was a condition for Bosnia and Herzegovina's EU membership application and is donor funded through the Public Administration Reform Fund.¹⁴⁰ The FBiH adopted the PAR and its Action Plan on 8 October 2020, while RS adopted it two years later, in June 2020 (European Commission, 2020^[39]). The entity government of FBiH instructed the Institute for Public Administration of the Federal Ministry of Justice to engage in follow-up activities with the cantons to harmonise legislation regarding the civil service, and to draft the Rulebook on Internal Organisation. In the meantime, the entity government of RS has been implementing its own policy document for e-government since 2009, and recently adopted the Development Strategy of e-Government for 2019-2022, which is not yet budgeted. Despite the adoption of these policies, the economy-wide implementation of public administration reforms and service digitalisation is hampered by the lack of political ownership and co-ordination among different levels of the government, which also leads to the allocation of insufficient budgetary resources for implementation (European Commission, 2020^[39]).

The lack of interoperable information systems across entities and different levels of government in Bosnia and Herzegovina is a major obstacle to developing economy-wide digital government services, which adds considerable burden to citizens and businesses in their domestic and international exchanges. It also hampers interconnection with EU information systems, and thus the EU integration process, as noted in the latest European Commission report evaluating BiH's application for EU membership.¹⁴¹ The National Interoperability Framework was adopted by the Council of Ministers in June 2018, but is not fully implemented as consensus was not reached among entities. A number of enacted laws at the state and entity levels are affected by the adoption of the interoperability system.¹⁴² The FBiH has adopted the interoperability framework at the entity level and established a co-ordinator for its implementation. The co-ordinator has developed a long-term implementation plan for the Interoperability Framework that contains 12 projects in the field of e-government development and modernisation of FBiH registers; however, without sufficient budget allocation the plan's implementation depends on identifying donor support. The lack of interoperability, and even the development of digital government, is also reflected in the monitoring of relevant indicators, which is weak and insufficiently systematised.

Bosnia and Herzegovina has developed an eConsultation¹⁴³ portal, where all regulatory proposals should be uploaded by state-level institutions for public consultation. Some e-services are already available for citizens and businesses in BiH for issuing residence permits, identification documents, passports and drivers' licences; for the registration of business entities in RS; and for the payment of contributions with tax administrations. Particularly for tax related e-services, enhanced co-operation and data exchange between tax administrations of the entities and the Brčko District is required to improve the quality of services offered throughout BiH. One-stop shop services exist only in RS. The one-stop shop business registration system in RS became operational in 2013, alongside a reform package comprising 13 laws

and a series of bylaws.¹⁴⁴ In the FBiH, provisions regarding the delivery of submissions in person are incomplete or outdated, making e-submissions practically impossible.

There are no policy documents that directly promote **private sector ICT adoption** in BiH, and the uneven development of e-business and e-commerce legislation across entities affects the pace of the digital transformation of businesses. At the state level, the Law on Electronic Business and Legal Traffic was adopted in 2007. RS has the most developed e-commerce framework, based on the 2009 Law on Electronic Commerce, which was amended in 2016. The RS government considers that private sector ICT adoption is sufficiently encouraged through the updated e-commerce framework, one-stop shop e-registration of businesses, and the new Development Strategy for e-Government, adopted in 2020. Additionally, the RS Chamber of Commerce has been offering training services¹⁴⁵ (webinars) on e-commerce to companies registered in Republika Srpska. Moreover, during 2019 the RS government adopted the Law on Incentives in the Economy and the Decree on the Procedure for Granting Incentives for Direct Investments to support business growth. This legislation promotes financial support measures aimed at improving business efficiency through the introduction of new technologies, including ICT. Private sector companies can submit investment projects following a public call. The FBiH has not yet adopted an e-commerce framework. However, the Ministry of Trade and Ministry of Transport and Communications are working on a draft Law on e-commerce for FBiH. It has been identified that 50 existing laws across all cantons require amendment to create a one-stop shop e-registration service for businesses. The adoption of the SFPAR and its action plan by the FBiH government is expected to accelerate this process and stimulate private sector ICT adoption. Despite the under-developed framework, e-commerce is rising in Bosnia and Herzegovina. According to the Agency for Statistics of BiH, 19.2% of enterprises received orders for products or services through a website or mobile application (excluding email) during 2019 (Agency for Statistics of Bosnia and Herzegovina, 2020^[130]).

Sub-dimension 10.3: Jobs

While all stakeholders declare that **digital skills for students** are of great importance for education and training in Bosnia and Herzegovina, the framework is still under development. The Policy of the Information Society Development (2017-2021) includes a pillar on strengthening digital literacy and skills, but an action plan with specific measures and budget on the development of digital skills for students has not been adopted. Digital skills are also one of the key competencies in the Guidelines for the Implementation of the Common Core Curricula in Bosnia and Herzegovina. The state-level working document, Priorities in Integrating Entrepreneurial and Digital Competence into Education Systems in Bosnia and Herzegovina (2019-2030), aims to bring digital skills development in line with the European Digital Competence Framework, with a short-term goal of integrating digital skills into ISCED levels 1, 2 and 3 (ETF, 2019^[131]). This working document is meant to be used as the basis for the development of policy and reference documents at the entity or local administration level to become effective.

The governance of education in Bosnia and Herzegovina is complex, with more than 14 ministerial-level institutions involved at the state and entity level.¹⁴⁶ At the state level, the Agency for Preschool, Primary and Secondary Education supports the development and implementation of IT systems in schools. Internet access and computers for students are not yet available in all schools, and IT curricula are not harmonised or co-ordinated across education levels. Some subjects deal with informatics in the final grades of primary school and as elective subjects in secondary school. Positively, the Framework Law on VET of BiH and legislation at each level of governance include references to digital skills for VET students. In 2019, the RS government launched a reform of education aimed at modernising its VET framework to make it more responsive to labour market needs. The reform includes the digitalisation of teaching and learning materials and the purchase of IT equipment for 500 schools (ETF, 2019^[131]). In response to the COVID-19 pandemic, the RS Ministry of Scientific and Technological Development, Higher Education and Information Society implemented the project 1000 for the Future, which distributed 1 000 Raspberry Pi mini computers (fourth generation) to primary school students from 20 under-developed municipalities in RS. During this period, the RS government also installed Microsoft Office 365 tools in schools and trained teachers in using

a variety of modern educational tools, including Google classroom and Moodle, and how to exploit the e-Teaching portal for access to instructions and online lessons. These tools and platforms are planned to be permanently integrated into the teaching process. However, there are still problems with Internet connectivity in primary schools in RS, with only 14% of primary schools in remote areas having access to the Internet, compared to all schools in central, densely populated areas. Positively, all high schools in RS are connected to the Internet. The computer-to-student ratio in RS primary schools is around 1/5, which is quite high for the WB region, while the same ratio for high schools is just over 1/14.

The ICT industry supports the development of digital skills for students in BiH. The Bit Alliance, an IT industry association, organises the CoderDojo programming school at 16 locations in 11 cities across BiH. Over 700 primary and secondary school students have attended the free coding programme so far. At the same time, IT Girls, a United Nations initiative that aims to make girls and women more visible in ICT, organises Arduino workshops (ETF, 2019^[131]). Based on research conducted by the Bit Alliance, there is a need for approximately 6 000 new employees in the IT industry, which the current education system cannot produce.

There is no economy-wide framework for **digital skills for adults** in BiH. The Labour and Employment Agency, the Federal Employment Agency and the RS Institute for Adult Education provide adult learning courses through a donor-supported portal,¹⁴⁷ and some of these courses target the development of digital skills. In 2019, 100 individuals with university diplomas who had not found a job in their profession attended the first IT adult training programme organised by the RS Ministry of Science and Technology Development, Higher Education and Information Society, and the Innovation Centre in Banja Luka.

Higher education institutions provide IT study programmes, and some provide digital and online learning solutions to the wider community (e.g. University of Sarajevo, Tuzla University, International University of Sarajevo, Logos Centre Mostar, Vitez University Travnik). Informal education providers also offer various ICT courses and educational programmes, including programming, web design and graphic design. The Bit Alliance maintains a list of these courses on a portal dedicated to the ICT sector and developing ICT careers.¹⁴⁸ Some training centres offer online learning platforms, such as Akademika (online basic and advanced ICT courses), IT Academy (online learning platform and a distance-learning programme) and SmartLab (online and offline training) (Bit Alliance, 2019^[132]). The need for highly skilled ICT professionals is clearly identified by market stakeholders. According to the Agency for Statistics of BiH, 15.2% of enterprises employed ICT professionals in 2020. However, a skills mismatch has been identified, with the education system not meeting the demands of the labour market in terms of ICT professionals. According to the European Training Foundation, 67.5% of IT companies in BiH rely on in-house training, and 9% provide various adult training courses (ETF, 2019^[131]).

Bosnia and Herzegovina has not adopted a policy framework that targets **ICT sector promotion** at any level of government. The Policy of the Information Society Development (2017-2021) includes a pillar on supporting the software industry as a subsector of the ICT sector, but an action plan with specific measures and budget on ICT sector promotion has not been adopted. There are also no measures providing tax incentives or tax relief to support ICT sector companies. The key actors of the IT industry in BiH are united as the Bit Alliance, which includes 58 companies employing around 80% of IT personnel in the economy. The Bit Alliance undertakes initiatives and implements projects targeting the strategic strengthening of the IT industry in BiH in co-operation with authorities, academia and international donors. According to Bit Alliance research, IT industry income has been growing continuously by approximately 25% annually for the past ten years. The total income of the 382 registered software development companies was over EUR 400 million in 2017 (Bit Alliance, 2019^[132]). The Bit Alliance has adopted the IT Manifesto, which is a model for the Strategy for the Development of the IT Industry in BiH. The IT Manifesto defines three pillars as the most significant for the further development of the industry: 1) education; 2) legislation; and 3) economy. These are in line with the EU 2020 Strategy. Among several other strategic objectives, the IT Manifesto proposes the initiation of new legal solutions that support the digitalisation of business and education; reforms in taxation policy that support the IT industry; support for the IT start-up ecosystem by strengthening IT clusters, start-up hubs, technology incubators and similar systems; and support for the

application of IT in the modernisation of business operations in all branches of industry (Bit Alliance, 2019^[133]).

Sub-dimension 10.4: Society

Bosnia and Herzegovina has not made notable progress in improving its **digital inclusion framework** since 2018. However, the Policy of the Information Society Development (2017-2021) includes a pillar promoting e-inclusion and a vision to address the digital divide, although this has not been translated into specific budgeted activities. The existing legal framework at the state level includes the 2009 Guidelines on the Construction and Maintenance of Official Websites of Institutions in Bosnia and Herzegovina that aims to promote e-accessibility by ensuring that public bodies are presented online in accordance with international standards. Every public procurement process for products and services at state or entity levels, including the ICT domain, has to be published on the e-procurement portal¹⁴⁹ of the Public Procurement Agency and the Procurement Review Body of Bosnia and Herzegovina, according to the 2014 Public Procurement Law. Measures to ensure the inclusion and participation of the public in the design, implementation and monitoring of strategic plans, public policies and regulations are included in the SFPAR. These obligations are partially implemented (for state-level institutions) through the eConsultation portal. To promote innovation in the public sector, the United Nations Development Program (UNDP) will support the piloting of policy innovation clinics, which will provide the opportunity for policy makers to apply innovative, people-centred and inclusive approaches to policy making related to the digital transformation. The UNDP (BiH) officially launched the Accelerator Lab in BiH in October 2019, as part of the UNDP Accelerator Labs network. Civil society organisations in BiH are also implementing projects, mostly donor funded, to promote digital inclusion for marginalised groups (e.g. women), such as the project by non-governmental organisation (NGO) Amica Educa, Digital inclusion of marginalized women.¹⁵⁰ However, the impact from these programmes is limited by the relatively small number of beneficiaries. Indicators on digital inclusion are not systematically monitored by any institution in BiH.

Sub-dimension 10.5: Trust

The current framework on digital **privacy protections** in Bosnia and Herzegovina is largely outdated. The framework on Personal Data Protection (PDP) is not yet aligned with the EU's General Data Protection Regulation (GDPR) and Police Directive on personal data processing by competent authorities investigating criminal offences. A new Law on PDP was drafted in 2018 but has not been adopted. The framework on PDP includes the 2013 Law on the Protection of People who Report Corruption (whistle-blowers) in the Institutions of Bosnia and Herzegovina, as well as subsequent secondary legislation. The Agency for Personal Data Protection is responsible for the implementation of the PDP framework in BiH. It publishes annual reports on data protection activities, but its resources are insufficient to perform its tasks effectively, especially given the SAA obligation to comply with the GDPR by 2021. The Agency for Personal Data Protection employed only 24 staff members at the end of 2018, although staff have received training on the GDPR through TAEX, which is positive. The Ministry of Security of BiH in co-operation with other ministries and NGOs, has prepared the Action Plan for Child Protection and Prevention of Violence against Children through ICT (2014-2015), which addressed online privacy protection for children. However, the practical implementation of this action plan has not received due attention, and there have been no updates. The RS government is preparing a law on information security that will also cover digital privacy issues.

Development of the framework on **consumer protection in e-commerce** in Bosnia and Herzegovina is uneven. At the state level, consumer protection in e-commerce is only partially covered by the 2007 Law on Electronic Business and Legal Traffic, which is aligned with the Electronic Commerce Directive. However, this law is not fully operational as the e-signature legislation (adopted in 2006) is outdated and not being implemented (European Commission, 2019^[4]). Other regulations concerning consumer protection are under the jurisdiction of the Institution of Ombudsman for Consumer Protection in BiH and the Market Surveillance Agency of Bosnia and Herzegovina, under the Law on Consumer Protection

(adopted in 2006), which does not address consumer protection in e-commerce. The RS Law on Consumer Protection was adopted in 2012 and amended in 2017, and relevant legislation on e-commerce and e-signature have also been recently updated and are under implementation. The FBiH government has not yet adopted a framework for e-commerce and consumer protection in e-commerce. Indicators on consumer protection in e-commerce are not being monitored by any institution in Bosnia and Herzegovina, with the exception of general indicators on Internet use by the Agency for Statistics.

Bosnia and Herzegovina has made limited progress in creating an effective **digital risk management framework** since the CO2018 assessment. It has not yet adopted a strategic framework for information systems security and for combating cybercrime. Cybersecurity and cybercrime related provisions are dispersed across four criminal codes and laws on criminal procedure (one at the state level and three at the entity level). Bosnia and Herzegovina is obligated to adopt legislation and other necessary measures for combating cybercrime to harmonise its framework with the other signatories of the Convention on Cybercrime in terms of felony treatment, data acquisition, processing and storage. The Ministry of Communication and Transport is planning to draft the new law for information security and security of networks and information systems, in line with the EU's Network and Information Security (NIS) Directive, but the adoption timeframe has not been announced. The Ministry of Security of BiH adopted a strategy for the establishment of a computer emergency response team (CERT) in 2011, but this was never implemented, which has left BiH without state-level co-ordination of cybersecurity incident response and management. There is no economy-wide accepted definition of domestic critical information infrastructure (CII) and no formal categorisation of CII assets in BiH. However, the Ministry of Defence has developed its own cyber-defence strategy to establish a secure cyber environment for its information systems. While the FBiH depends on state-level authorities to tackle digital security risk management, the RS government is preparing a Strategy for Information Security and a new Law on Information Security to replace the existing 2011 law. Republika Srpska also established the only operational CERT in 2015, which became an organisational unit of the Ministry of Scientific and Technological Development, Higher Education and Information Society in 2018. Indicators on digital risk management and information security are not regularly monitored by any institution in BiH. It is evident that cybersecurity is not yet instilled in public and private sector mindsets in Bosnia and Herzegovina, and public and private sector stakeholders have an overall low level of awareness of the values, attitudes and practices necessary for a healthy cybersecurity ecosystem (GCSCC, 2019^[134]).

The adoption of a new law on electronic identification and trust services for electronic transactions in compliance with the EU *acquis* is still pending. Although state-level e-signature legislation from 2006 has not been practically implemented in Bosnia and Herzegovina, the Ministry of Communication and Transport established the Office for Supervision and Accreditation of Certifiers at the state level to supervise and inspect certifiers' compliance with the Law on Electronic Signature and related regulations, and to maintain the electronic register of accredited certifiers. In October 2019, the Office for the Supervision and Accreditation of Certifiers registered the first trusted service provider to introduce qualified e-signatures in BiH (European Commission, 2020^[39]). In Republika Srpska, the updated e-signature framework is under implementation, supervised by the Ministry of Finance, the Ministry of Science and Technology, and the Agency for Information Society. The RS government has also adopted bylaws related to the accreditation and certification of qualified e-signatures and issuers of services, including the unique register of service issuers, the use and protection of e-signatures, means of drafting e-signatures, and the obligatory insurance of service issuers.

The way forward for digital society

Despite some important steps taken to improve the digital society policy framework in Bosnia and Herzegovina, the government should pay more attention to the following aspects:

- **Accelerate the adoption of the broadband strategy and ensure consensus and sufficient budgetary allocation for its implementation. Prioritise network infrastructure development in rural and remote areas.** Develop a budgeted action plan for broadband infrastructure development that will be agreed by all competent institutions at all levels of government. Seek donor financing, following the example of neighbouring WB economies, and secure sufficient funding from loans that will support private sector investment in scarcely populated areas. Improve the broadband infrastructure development framework, align state aid rules with the EU framework, and investigate the practical and financial feasibility of proposed network investment projects.
- **Accelerate the adoption of the new Law on Electronic Communications to complete alignment with the EU regulatory framework, and implement the broadband mapping exercise.** The alignment of the electronic communications regulatory framework with the EU *acquis* is the first step towards the creation of an enabling broadband investment framework that facilitates co-usage and co-deployment and reduced costs for broadband deployments. The broadband mapping exercise is a valuable tool for monitoring network availability and development progress, as well as promoting infrastructure sharing, particularly in under-served areas.
- **Prioritise sufficient budgetary allocations for implementation of the Strategic Framework for Public Administration Reform 2018-2022 (PAR) and implement economy-wide interoperability** for the exchange of data between institutions to deliver effective e-services to citizens. Economy-wide interoperable information technology systems are a prerequisite for joining the EU and exchanging data with other states. Transposing the relevant EU Interoperability Directive into domestic legislation would ensure the compatibility of information systems and processes, and would lead to unified, high-quality services for citizens and businesses across Bosnia and Herzegovina. Reforms across all levels of the government outlined in the SFPAR action plan will need to be accelerated, and practical implementation of the e-signature framework will need to be expedited across the state.
- **Design programmes promoting the digitalisation of businesses in collaboration with chambers of commerce and other industry stakeholders.** Programmes could provide capacity building for e-commerce development, consulting services for assessing digitalisation needs, and support or incentives for buying ICT equipment. International and regional good practices could be considered when designing these programmes, such as Serbia's Digital Transformation Support Programme for micro, small and medium-sized enterprises implemented by the Development Agency of Serbia.¹⁵¹
- **Adopt an ICT sector strategy aimed at improving the legal framework, align the education system with ICT industry needs and stimulate ICT innovation.** Research and regional experience show that the ICT sector can become a driver for economic growth if provided with highly skilled ICT professionals, support for innovation and an enabling ICT legal framework. The ICT strategy would need to align with the SFPAR and ensure consensus across all levels of government. This strategic document will need to be a product of collaboration between all competent institutions, the ICT industry and academia. The process could benefit from strategic proposals outlined in the Bit Alliance IT Manifesto.
- **Accelerate the adoption of a new Law on Personal Data Protection to transpose the EU's GDPR and Police Directive into domestic legislation.** The Agency for Personal Data Protection would need to be strengthened with financial and human resources to be able to perform its tasks effectively, particularly regarding implementation of the new law. The agency would need to develop a plan for delivering the necessary training on the new law to data protection officers from the public and private sector.

- **Adopt a strategic framework for information security and cybercrime, and accelerate the establishment of a domestic CERT with sufficient resources.** The state will need to adopt a framework for information and network security, in accordance with the NIS Directive, to fight cybercrime and to align with commitments under the Convention on Cybercrime. BiH will need to establish a domestic CERT tasked with co-ordinating international co-operation for the fight against cybercrime, define CII and the formal categorisation of CII assets in BiH, and promote economy-wide efforts to establish a network of computer security incident response teams (CSIRTs) in the public and private sector.

Transport policy (Dimension 11)

Introduction

Since the last CO assessment, the main improvements in Bosnia and Herzegovina concern aviation operations and inland waterways (IWW) policy. Moderate development has been observed in the railway sector. There has been stagnation in asset management and slow progress in other fields. Bosnia and Herzegovina's performance in the transport dimension is significantly below the Western Balkan regional average across all sub-dimensions (Table 21.17).

Table 21.17. Bosnia and Herzegovina's scores for transport policy

Dimension	Sub-dimension	Score	WB6 average
Transport policy dimension	Sub-dimension 11.1: Planning	1.5	2.3
	Sub-dimension 11.2: Governance and regulation	1.9	2.6
	Sub-dimension 11.3: Sustainability	0.8	1.3
Bosnia and Herzegovina's overall score		1.3	2.0

State of play and key developments

Sub-dimension 11.1: Planning

Regarding **transport vision**, since the last CO assessment Bosnia and Herzegovina has identified a set of measures to improve the transport sector through the Framework Transport Strategy (FTS) (2016-2030) (Ministry of Communication and Transport, 2016^[135]), which consists of transport strategies in the two entities and the Brčko District. The FTS takes into consideration various other policy documents at both state and entity levels,¹⁵² but is currently not aligned with the tourism policy and other relevant strategies (e.g. those related to the environment), which shows the lack of a holistic policy-making approach. The level of harmonisation with the EU's Transport Community Treaty (TCT) (EUR-Lex, 2017^[136]) in the RS only covers 6% of the legislation prescribed by the TCT, of which only 4% is presented as fully transposed and 2% as partially transposed.¹⁵³ Some legislation has been adopted as a result of the FTS (as presented in transport modes below), but the level of adoption is not fully known.

Since the last CO assessment, the monitoring reports for FTS implementation in RS were prepared for 2016-2018; such reporting is not available for the FBiH. The Ministry of Communications and Transport is responsible for the development of the monitoring reports for FTS implementation. The FTS covers all transport modes with very clear overall and specific objectives, but intermodal transport is covered only partially within the railway transport mode.

The priority projects presented in the FTS were adopted after a wide range of consultation processes with the relevant stakeholders (transport ministries, implementing agencies for all transport modes, non-governmental sector, etc.). The strategic actions have been proposed to achieve specific and general objectives of the strategy without the use of any state-of-the art methodologies (transport models) to assess proposed transport infrastructure measures and prioritise them accordingly. Strategic actions are presented through measures and indicators, which must be followed by the Ministry of Communications and Transport as prescribed in the FTS. The implementation timeline is defined in the strategy as short-term (2016-2020), mid-term (2021-2025) and long-term (2026-2030). The budgets to meet the objectives were assessed for each listed project within the FTS. The proposed 15-year implementation timeline is long for there to be no update, and the strategy does not propose any update before it expires. The planning framework and transport vision are set out in the strategy, but some important fields need to be upgraded, such as the development of the transport model, which should be used in the prioritisation process for the measures proposed within the FTS (if the concrete projects are set there) and through the state-level Transport Master Plan and Single Project Pipeline (SPP).¹⁵⁴ Proposed measures and actions

through the transport strategy should be assessed and evaluated through the outputs of the transport model, otherwise the transport model developed as part of the strategy would not be useful.

The methodology applied for **transport project selection** is not presented through the FTS nor through domestic legislation. There is an SPP for Bosnia and Herzegovina, developed in December 2018, that includes the scoring of projects and shows that prioritisation is in place; however, the SPP, including the methodology for scoring, is not publicly available. The Annual Programme of the Government of the RS,¹⁵⁵ which represents an input for the SPP, is in line with the FTS. The SPP should be updated every six months, but it has not been updated since 2018. The Annual Programme of the RS is updated every six months, but currently only for roads and for railways. Responsibility for the project prioritisation process between the state and the FBiH is not clear as the division of responsibility is not clearly defined. There are no cost-benefit analysis (CBA) guidelines for transport projects, including all accompanying survey, analysis and technical instructions. These need to be developed and updated every few years to help prioritise and control funds. A good example of the procedure for the identification of projects, as well as their pre-selection, financing, implementation, monitoring, *ex post* monitoring, and impact assessment, can be seen in other WB economies (e.g. Albania and Serbia) (Box 21.12).

Co-operation with the WB economies to exchange experiences regarding a common approach to transport planning could be improved. Such co-operation has so far been conducted mainly through participation in thematic working groups organised by the transport community and cross-border co-operation programmes,¹⁵⁶ as well as through projects related to transport facilitation at the border crossing points with Croatia, Montenegro and Serbia. Co-operation and exchange of good practice with WB economies needs to be enhanced and intensified and take place regularly. Such regular regional discussion would help pave the way for a single and competitive regional transport market.

The level of harmonisation of the procurement rules applicable to the transport sector with the TCT is not available. Based on the Law on Public Procurement,¹⁵⁷ alternative procurement processes are allowed for some specific groups¹⁵⁸ defined within the law. The roles and responsibilities of the government bodies within the transport sector are defined, but there is no established department within the transport ministry responsible for combined transport. The institutions and implementing agencies carrying out activities related to procurement and implementation procedures do not have sufficient human and financial capacity to carry out their tasks. Projects and grants funded by international financial institutions are subject to the domestic procurement procedure, as per the Law on Public Procurement. There has been no exchange of good practices related to the lessons learned for the **implementation and procurement** of public-private partnership (PPP) projects in the region. National bodies have not been given oversight roles for the procurement and monitoring of PPPs. There is no clear evidence of procurement procedures or project outputs being consistently monitored, and no evidence of *ex post* evaluation of procurement procedures. A good example of a project implementation and monitoring tool can be seen in other WB economies, as stated above.

Bosnia and Herzegovina is in the early stages of developing an **asset management**¹⁵⁹ system in the transport sector, which so far only covers the road and railway sectors. Such a system is not mandatory for every transport mode based on current legislation in force. Some efforts have been made in recent years to establish an asset management system, as presented in the report, Preparation of Maintenance Plans 2018-2022 for Road/Rail TEN-T indicative extensions to WB6 (CONNECTA, 2018^[137]). However, these efforts have not been successful. The main obstacles are related to the legal framework, implementation capacities, and funds for frequent and costly updates. Some data on assets are surveyed occasionally, but without regular updates, and the level of development is not co-ordinated throughout BiH and its entities. To follow and implement regional asset management plans (rail and road maintenance plans, performance-based maintenance contracting, road asset management system, railway infrastructure asset management system, etc.), more efforts are needed from the government side (e.g. Albania and Kosovo have adopted railway and road maintenance plans).

The road asset management system needs to be institutionalised so that it can effectively continue with efforts in this field. The key objective of a well-developed asset management system is to provide justification for the maintenance budget and to help direct limited funds to areas with the greatest return on investment. Such a developed system should be considered an integral component of the above-mentioned transport planning, identification, prioritisation, implementation and monitoring processes. A good example recently established in the region is the Albanian financial management system, which includes asset values. Other good examples (road asset database, bridge asset databases, etc.) can be found in North Macedonia and Serbia.

Box 21.12. Effective tools to manage transport projects in Albania and Serbia

Albania and Serbia are the only two economies with a sound tool for transport project identification, selection, prioritisation and implementation in the WB region.

In 2018, Albania adopted the Decision on the Public Investment Management Procedures. For the purpose of budget planning on investment expenditure, the projects are divided into two groups: 1) capital administrative expenditure on equipment, furniture, computers, IT, etc; and 2) expenditure on investment projects, including capital expenditure on infrastructure such as new constructions, reconstructions, rehabilitation with design costs, expropriation costs, purchase of larger technological equipment, implementation of works and supervision; and capital expenditure for capacity development, including research projects, technical assistance and capacity building.

The following project management cycle is applied:

1. Project identification based on an analysis of the public's needs.
2. Project evaluation and preparation, including an evaluation of the economic and financial justification.
3. Project approval and financing.
4. Project implementation.
5. Monitoring of project implementation, which should ensure that project activities are in line with planned activities.
6. Evaluation and audit, including implementation-related reporting and financial audit through the project performance indicators.

The following steps are applied based on the project cycle presented above:

1. Identify the project idea.
2. Review the draft idea (done by the project management team leader and responsible authorities).
3. Prepare detailed project and evaluation, and a shortlist of alternatives.
4. Submit investment project proposal to the ministry responsible for investment projects.
5. Review the proposal (done by the Council of Ministers).
6. Final approval, after the approval of investment projects within the annual budget.

As per Decision No. 290 of 11 April 2020, a financial management information system has been installed in every spending unit, including in all ministries, and is integrated into various departments to be used for all steps in the project management cycle.

In Serbia, the procedure for project identification, analysis of relevance, pre-selection, funding, implementation and monitoring is clear and publicly available, and co-ordinated through the Ministry of Finance. This procedure was adopted in 2019 though the Rulebook on the Management of Capital Projects.

The prioritisation process, which is applied to all projects, applies a CBA, an environmental and social impact analysis, and a safety assessment, among other things. Once the project is approved for financing there is a special procedure, similar to the one in Albania, that forms the preparation of a plan for project implementation. During project implementation there are specific procedure forms for reporting. One type of report is the interim report for the presentation of the current project status, which covers the activities carried out and the plan to execute the remaining project activities. At the end of the project, a final report needs to be developed.

There are three categories of project: 1) less than EUR 5 million; 2) between EUR 5 and 25 million; and 3) over EUR 25 million. *Ex post* monitoring is conducted for the third category three years after completion, which is a significant advancement on local legislation.

Source:, (Republic of Albania, 2018^[138]) - *Decision of the Council of Minister No 185/2018*, [http://80.78.70.231/pls/kuv/f?p=201:Vendim%20i%20KM:185:29.03.2018](http://80.78.70.231/pls/kuv/f?p=201:Vendim%20i%20KM:185:29.03.2018;); (QBZ, 2020^[139]), *Albania - Decision of the Council of Minister No 209/2020*, <https://qbz.gov.al/eli/vendim/2020/04/11/290>; (Ministry of Finance, 2019^[140]), *Serbia – Rulebook on the management of capital projects*, <https://www.mfin.gov.rs/UserFiles/File/podzakonski%20akti/2019/Uredba%20o%20upravljanju%20kapitalnim%20projektima.pdf>; (Ministry of Finance, n.d.^[141]), *Serbia – Project cycle process – Forms*, <https://www.mfin.gov.rs/dokumenti/saobracaj/>.

Sub-dimension 11.2: Governance and regulation

Since the last CO assessment, regulatory reforms have continued¹⁶⁰ in the field of **aviation regulation**. Bosnia and Herzegovina's Air Navigation Services Agency (BHANSA) took over responsibility for air traffic control of BiH skies in December 2019 from Croatia, Montenegro and Serbia, which had undertaken air traffic control for BiH since 1992. This means that BiH will have full air control over its territory, and all charges will be now paid directly to Bosnia and Herzegovina. The Single European Sky (SES) I package has been fully transposed into domestic law, while the SES II provisions have been partially transposed (the exact extent of transposition is not available). Bosnia and Herzegovina's Directorate for Civil Aviation (BHDCA) is a member of the Functional Airspace Block Central Europe,¹⁶¹ which identifies that domestic fragmentation negatively impacts on safety, limits capacity and adds to cost. The mission of the National Supervisory Authority is to ensure the supervision of the air traffic management regulatory framework; however, it does not have adequate staff or capacity to fulfil its obligations.

The Airport Charges Directive has not yet been transposed. The market is not monitored as per Air Service Regulation, which provides the economic framework for air transport in terms of granting and overseeing the operating licences of community air carriers, market access, airport registration and leasing, public service obligations, traffic distribution between airports, and pricing. The Air Traffic Management Plan¹⁶² was developed within the Bosnia and Herzegovina Air Traffic Management Strategy and is monitored regularly through Local Single Sky Implementation Monitoring (EUROCONTROL, 2021^[142]). A safety culture programme, including safety risk assessment and safety assurance, has not yet been adopted. The State Safety Programme, designed as an integrated set of regulations and activities aiming to improve safety (e.g. safety risk management, safety assurance), is in progress.

Air traffic is growing in Bosnia and Herzegovina, with the total number of transported passengers from all airports increasing in the period 2016-2018 by approximately 38%, which amounted to 1.7 million passengers annually in 2018. This is an excellent achievement in comparison with the world average, which increased by 14.7% over the same period (Statistica, 2020^[143]), and shows how the air transport industry in BiH has grown in importance. Given the significant growth of this transport mode and its projected importance for the economy, Bosnia and Herzegovina must continue regulatory reforms and bring the governance of the aviation sector closer to European standards and international good practices.

In FBiH there has been moderate development in the **railway regulation** sector since the last CO assessment, with rail reforms initiated. In RS, the public enterprise Railways of Republika Srpska is due to complete restructuring at the end of 2021. The FBiH has not yet begun the harmonisation process with the TCT, while the RS has partially aligned its legislation¹⁶³ (as explained in Sub-dimension 11.1: Planning). The level of implementation of the regional Rail Action Plan (Transport Community, 2020^[144]) is not currently available. Network statements are prepared in BiH but not published. According to an EU directive,¹⁶⁴ such statements should be published to ensure transparency and non-discriminatory access to rail infrastructure, and to services in service facilities. Market access has not yet been approved, which means that foreign companies cannot access the rail infrastructure and service facilities. Infrastructure management has not yet been separated from railway undertakings in both entities. The Railway Accident Investigation Body is operational and issues investigation reports. There is no Rail Freight Corridor Regulation, which is a prerequisite for a high-capacity and competitive modal shift to rail, and no Technical Specifications for Interoperability, which are an important component of the development of international railway transport. Regulations regarding passengers' rights and obligations, which prescribe the framework to safeguard users' rights and to improve the quality and effectiveness of rail passenger services in order to increase the share of rail transport in relation to other modes of transport, have not yet been transposed.

Table 21.18 presents current trends in the railway transport of passengers and goods in Bosnia and Herzegovina, with 77.6% of railway traffic (train*km travelled) taking place in the FBiH and 23.4% in Republika Srpska.

Table 21.18. Trends in rail transport in Bosnia and Herzegovina (2017-19)

Rail network utilisation	Change over 2017-19 (%)	2019 (million)	Share of the EU average (2017) (%)
Passengers (passengers*km/km of track)	+87.4	0.054	1.34
Freight (tonnes*km/km of track)	+12.8	1.237	56.60

Source: Inputs provided by the government as part of the quantitative questionnaire (CO2021); (Eurostat, 2021^[145]), *Eurostat database*, <https://ec.europa.eu/eurostat>; (Agency for Statistics of Bosnia and Herzegovina, n.d.^[15]), *Agency for Statistics of Bosnia and Herzegovina homepage*, <http://www.bhas.ba/?lang=en>.

The rail sector in Bosnia and Herzegovina is not reaching its full potential, even though there has been an increase in railway transport. Examples of activities that would help achieve the numbers necessary for a cost-effective rail network and rail fleet utilisation in BiH, and help reach the EU average level of network utilisation, include the full opening of the market, incentives for shifting transport from road to rail, development of rail freight corridors and development of multimodal facilities.

Limited progress has been made regarding **road market regulation** in BiH since the last CO assessment, with some efforts undertaken to harmonise legislation with the TCT (as explained in Sub-dimension 11.1: Planning). Many other fields require further work to ensure full harmonisation (e.g. tachographs, enforcement of social legislation, intelligent transport systems). BiH continues to participate in the multilateral quota system of the European Conference of Ministers of Transport (ITF, 2014^[146]), which enables hauliers to undertake an unlimited number of multilateral freight operations in 43 participating European countries. The regulation complies with the road haulage qualifications standards for companies, managers, and drivers under the Quality Charter for Road Haulage (ITF, 2015^[147]). The implementation of market access agreements and EU legislation is not monitored in BiH. Domestic limits on the maximum weights and dimensions for road vehicles have been harmonised with EU requirements.

In 2019, the average age of passenger cars in BiH was 16.5 years, which is almost 60% higher than the EU average (10.6 years) in 2018 (ACEA, 2019^[148]).

Table 21.19. Trends in road transport in Bosnia and Herzegovina (2017-19)

Road network utilisation	Change over 2017-19 (%)	2019 (million)	Share of the EU average (2017) (%)
Passengers (passengers*km/km of road)	+3.8	0.20	18.9
Freight (tonnes*km/km of road)	+2.8	0.47	126.3

Source: Input provided by the government as part of the quantitative questionnaire (CO2021); (European Commission, 2019^[149]), *Statistical Pocketbook 2019*, https://ec.europa.eu/transport/facts-fundings/statistics/pocketbook-2019_en; (Agency for Statistics of Bosnia and Herzegovina, n.d.^[15]), *Agency for Statistics of Bosnia and Herzegovina homepage*, <http://www.bhas.ba/?lang=en>.

The freight mode share of road transport is higher than that of rail transport with shares of 88.7% and 21.3% respectively. The 2018 EU averages for freight transport are 75.3% carried by road, 18.7% carried by rail and 6% carried by inland waterways (Eurostat, 2021^[150]). Such a high road freight share points to negative effects on air pollution and climate change, and the incentives for shifting from road to rail could have a positive impact on reducing air pollution and climate impact. Recent trends show slight increases in road network utilisation (Table 21.19).

The COVID-19 outbreak is affecting the global transport and mobility market, including those in WB economies. Bosnia and Herzegovina introduced measures at border and customs control in the second quarter of 2020 to enable the provision of essential goods and medical equipment. These measures include “green lanes” in the major corridors for the transport of emergency goods, which require that freight vehicles and drivers are treated in a non-discriminatory manner. Passing through these green lane border crossings (including any checks and screenings) should not exceed 15 minutes, and procedures should be minimised and streamlined. The implementation of the above measures could directly impact how border crossings in the region are treated in the future by installing measures that minimise crossing time (Transport Community and CEFTA, 2020^[151]; Transport Community, 2020^[152]; Government of Serbia, 2019^[153]; Estonia Border, n.d.^[154]).

Maritime and inland waterway (IWW) market regulations are in the early stage of preparation in BiH, and a very little has been done so far. Since the last CO assessment, Republika Srpska adopted the Law on Inland Waterways, which has fully aligned only a part of the prescribed legislation with the TCT. The institutional, legal and regulatory set-up of waterway transport in BiH should be further developed. A framework on market access to port services and the financial transparency of ports, in line with EU regulations, has not yet been transposed. Both IWW and maritime transport are not considered a priority in BiH, and there are no specific incentives prescribed for shifting to the use of IWW and maritime transport. BiH should consider developing a roadmap for institutionalisation and the creation of a policy and operational framework regarding IWW and maritime transport.

Monitoring indicators to assess the performance of all transport modes either do not exist, are not properly established or are not properly updated (missing indicators include average user costs, travel time satisfactory level reliability, value of assets, market research and customer feedback, quality of user information, and audit programmes). Regular data surveys are neither planned soundly (including the purpose, level of data needed and budget allocated) nor conducted regularly. Surveys conducted have only been for the purposes of the specific project and not for general transport infrastructure assessment and planning. Therefore, the basis for assessing the quality of transport network performance is lacking.

Sub-dimension 11.3: Sustainability

Since the last CO assessment there has been moderate improvement within the field of **road safety** in RS, and stagnation in the FBiH. Bosnia and Herzegovina needs to enhance institutional, administrative and financial capacities to improve road safety. Implementation of the existing road safety framework and related measures remain a concern. The establishment of the Road Safety Council was approved by the Council of Ministers in 2019. There is a Road Traffic Safety Strategy (RTSS) in RS for the period 2013-2022, but it does not provide a budget for measures and actions proposed (TSA, 2013^[155]). The FBiH has not yet adopted such a strategy. The monitoring report of RTSS implementation in RS for the period

2015-2018 has been issued, as has the new implementation plan for the period 2019-2020, but it is not clear if the lessons learnt from the previous monitoring report have been implemented. Based on the previous monitoring report of RTSS implementation in RS, approximately over 50% of the RTSS has been implemented. The RTSS is not fully aligned with the TCT and EU *acquis* to ensure harmonisation (outstanding areas include road infrastructure safety management, safe system approach, "forgiving" roads). The Traffic Safety Agency of the RS is a member of the European Council for Transport Safety, which means that it can participate in international co-operation on road accident data and analysis, including the promotion of effective measures to reduce transport crashes and casualties, based on international scientific research and good practices. The draft Road Safety Regional Action Plan, developed by the Transport Community Permanent Secretariat (TCPS) in 2019, has been neglected, and there is no monitoring body to co-ordinate its implementation. The Regional Action Plan (Transport Community, 2020^[156]) has been endorsed by the Council of Ministers of the TCPS in October 2020, and Bosnia and Herzegovina needs to align its domestic plans to achieve the goals set within this plan (strengthening road safety management, promoting safe infrastructure, protecting road users, enhancing co-operation and exchange of experience). Data on road safety are collected by the Ministry of the Interior of the RS.

The goal of the EU publication, Policy Orientation on Road Safety for 2011-2020 (European Commission, 2010^[157]), was to reduce road fatalities by 50% between 2010 and 2020, as per the Decade of Action for Road Safety 2011-2020 officially proclaimed by the UN General Assembly in March 2010. This goal has been difficult for BiH to achieve, and it has seen approximately only a 2% annual decrease in road fatalities between 2010 and 2019 (Table 21.20). Therefore, significant additional efforts are needed to meet the newly defined goal of the European Vision Zero strategy for 2050 (European Commission, 2019^[158]), which also aims for a 50% decrease in road fatalities in the decade 2020-2030. As there is no developed clear framework for road safety at the state level in Bosnia and Herzegovina, and no strategy in RS for the new decade beyond 2022, expectations for the new goal are not high. In addition to Vision Zero, the RTSS in Republika Srpska also aims to decrease the number of fatalities by 50% in the period 2011-2022. This will only be possible if significantly more efforts (road safety campaigns, enforcement of legislation, etc.) are undertaken by the government. However, RS has made a good start, with the annual number of fatalities decreasing by approximately 37% between 2011 and 2019, from 163 in 2011 to 102 in 2019. Innovative practices to promote and incentivise road safety could be taken over from projects being implemented in Montenegro (Box 21.13).

Table 21.20. Road safety trends in Bosnia and Herzegovina (2010-19)

	Change over 2010-19 (%)	Change over 2017-19 (%)	2019
Number of fatalities (Bosnia and Herzegovina)	-18	-13.6	261
Change in the number of fatalities (EU)	-23	-2.5	-
Number of fatalities per million inhabitants (Bosnia and Herzegovina)	-	-	74.6
Number of fatalities per million inhabitants (EU)	-	-	51

Source: (European Commission, 2019^[159]), *Press Corner: 2019 Road Safety Statistics: What is behind the figures?*, https://ec.europa.eu/commission/presscorner/detail/en/ganda_20_1004. (TSA, n.d.^[160]) Traffic Safety Agency, <https://absrs.org/>. (Agency for Statistics of Bosnia and Herzegovina, n.d.^[15]) Agency for Statistics of Bosnia and Herzegovina homepage, <http://www.bhas.ba/?lang=en>. Information provided by the government for this assessment.

Some of the **environmental sustainability** goals¹⁶⁵ related to the transport sector are addressed in other strategies,¹⁶⁶ and as such are difficult to monitor. It is necessary to integrate a clear chapter dealing with sustainability in all transport modes through state and entity-level transport strategies, or through transport sector strategies for each specific mode. There is no evidence that the governments in BiH are preparing environmental sustainability strategies.

The legal and regulatory framework to support **combined transport**¹⁶⁷ as a transport mode that has the best cost efficiency and that decreases environmental pollution and increases co-operation between freight

forwarding network companies still needs to be developed. There is no combined transport strategy in place or planned, with intermodal transport addressed in the railway chapter in the FTS, which proposes incentive schemes for shifting to intermodal transport and the construction of intermodal terminals throughout BiH. The total amount of transported freight using combined transport is not presented though the official statistics of Bosnia and Herzegovina.

The World Bank's Logistics Performance Index is a multi-dimensional assessment and international benchmarking tool focused on trade facilitation. The Index's most recent scoring (2018) ranked BiH 72 out of 160 with a score of 2.81, which is slightly below the world average (2.85) and far below the EU average (3.52). The best score given to Bosnia and Herzegovina was for the logistics competence indicator¹⁶⁸ (ranked as 65) while the worst score was for infrastructure indicator¹⁶⁹ (ranked as 97) (World Bank, 2020^[161]).

Data collection, which is currently weak, needs to be one of the key actions for the assessment of performance in all sustainability areas, and a strategy for data collection needs to be established as a basis for the assessment of the transport sector and to directly influence the prioritisation processes within transport policy in general.

The way forward for transport policy

BiH has taken some important steps in the development of a competitive transport sector, as presented above, but special attention should be paid to the following areas:

- **Update the state-level transport strategy every four years.** An update of the existing strategy is not proposed within the FTS. However, one should be carried out based on the monitoring reports for the implementation of the FTS. The lessons learnt should be applied in the updated strategy and implementation plans.
- **Develop domestic CBA guidelines for all transport modes.** Economies should develop and regularly update their CBA guidelines with accompanying technical instructions. The guidance needs to be updated at least every two years. A good example is the United Kingdom's Transport Analysis Guidance (UK Government, 2019^[162]), which provides information on the role of transport modelling and transport project appraisal tailored to the UK market. Develop a benchmark for all technical and economic parameters to ensure consistency in the discount rates used for similar projects in the same economy, including the financial and economic discount rate in the state guidance documents. Apply the benchmark consistently in project appraisal at the state level. Empirical research needs to be conducted at the state level to generate input data for the calculation of externalities.
- **Develop/update a tool for project identification, selection, prioritisation and implementation.** This tool should be applied to all transport projects in BiH. Good examples could be taken from other economies in the region, such as Albania and Serbia (Box 21.12), which have recently introduced well-developed systems that are currently in the initial stage of implementation. These systems comprise all processes, from identification to *ex post* monitoring of implemented projects to the financial management of an information technology system planned to be implemented in all spending departments of governmental institutions and implementing agencies.
- **Continue rail reforms in RS, and begin rail reforms in the FBiH.** Structural and access reforms that started in RS need to be continued, while at the same time parallel reforms should take place in the FBiH. Reforms in the FBiH should cover at least structural reforms to promote competition. Access reforms are key as they enable efficient systems with better performance. Freight corridor management reforms are also key as they are a prerequisite for the next steps to achieving high-quality capacity and a competitive modal shift to rail (which is also related to the lack of a logistics strategy). Reforms regarding passengers' rights and obligations, as well as interoperability reforms, should be undertaken gradually as they take time and funds, but are very important for the development of international railway transport.

- **Develop a study on the institutional, legal and operational framework for maritime and IWW transport to define the roadmap for this transport mode.** Maritime and IWW transport are at the early stage of development in BiH. As a result, a detailed needs assessment should be conducted, accompanied by a roadmap for institutionalisation and a policy and operational framework that includes the responsible institutions and agencies, timelines for implementation and budget allocation.
- **Ensure that transport facilitation remains a priority.** Implement one-stop shops¹⁷⁰ and other measures as per the regional Action Plan for Transport Facilitation (Transport Community, 2020^[152]) endorsed in October 2020, which includes an electronic queuing management system, improvement and upgrade of existing ICT infrastructure, construction or modernisation of infrastructure to remove physical and technical barriers and to increase existing capacities, and capacity building to improve performance efficiency. The implementation of these measures will be key for increasing the competitiveness and connectivity of the WB region to help it further integrate into the European market. Good examples could be taken from other economies in the region, such as North Macedonia and Serbia, which have recently introduced a well-developed one-stop shop system and are currently in the initial stage of implementing a pilot project for an electronic queuing management system.
- **Implement asset management principles in the transport sector in line with the domestic inventory system.** Developing sound asset management practices¹⁷¹ enables economies to collect data (through annual data collection planning and budget allocation) and to manage and analyse conditions across all the transport modes. This information will then be used to optimise transport sector maintenance strategies and justify maintenance budgets by directing funds to areas with the greatest return on investment. Performance-based maintenance contracts, although not extensive, are already implemented in some WB economies such as Albania, BiH and Serbia (CONNECTA, 2018^[137]). These are an essential component of the road asset management system and, if well-developed, lead towards predefined good road conditions at relatively low cost.
- **Develop an Integrated Environment and Transport Action plan.** This plan needs to integrate existing indicators and develop additional indicators through the development of a framework for environmental sustainability in the transport sector. Measures and indicators should be applied in the relevant strategies, including the new transport strategy. A good example was developed by the European Environmental Agency in the form of the Transport and Environment Reporting Mechanism, which prescribes indicators for tracking transport and environment in the EU (EEA, 2000^[163]).

Box 21.13. Innovations in road safety: Road safety social impact bonds, Montenegro

In 2018, the United Nations Development Program (UNDP) in Montenegro, in co-operation with the key domestic players in road safety, developed the idea of road safety social impact bonds as an innovative and alternative performance-based public financial instrument that shifts the policy framework from inputs and outputs to outcomes and value-for-money. This innovative idea involves the private sector investing in road safety improvements to strengthen sustainability together with the public sector. The public partner commits to paying the outcome payments to the investor if (and only if) the predefined and measurable social goals are met. This idea has great potential to help other economies in the region (and beyond) replicate and scale-up the model.

Source: (UNDP Montenegro, 2014^[164]), *Rethinking Road Safety in Montenegro*,
<https://www.me.undp.org/content/montenegro/en/home/projects/RoadSafety.html>.

Energy policy (Dimension 12)

Introduction

Bosnia and Herzegovina has made some progress since the last Competitiveness Outlook, with its score rising from 1.4 to 2.1 (Figure 21.1). The most pronounced progress has been in the security of supply sub-dimension, where Bosnia and Herzegovina has shown progress in building a more robust energy market, in part due to seeking to expand supply routes and supply diversification in natural gas. Good progress has also been made in the energy markets sub-dimension, where Bosnia and Herzegovina has made progress regarding unbundling key public monopolies in electricity, and a small amount of progress within the natural gas sector (Table 21.21). Nonetheless, despite progress in the deployment of a Third Energy Package (Box 21.14) compliant legislative framework for the natural gas market in some of BiH's jurisdictions, FBiH's natural gas market continues to not even be compliant with the Second Energy Package. Moreover, bundled monopolies are still present in some jurisdictions, and the natural gas market remains closed to competition.¹⁷²

Table 21.21. Bosnia and Herzegovina's scores for energy policy

Dimension	Sub-dimension	Score	WB6 average
Energy policy dimension	Sub-dimension 12.1: Governance and regulation	1.7	3.1
	Sub-dimension 12.2: Security of energy supply	2.6	2.9
	Sub-dimension 12.3: Energy markets	1.8	3.0
Bosnia and Herzegovina's overall score		2.1	3.0

State of play and key developments

Sub-dimension 12.1: Governance and regulation

The **energy policy, legal, and institutional framework** reflects the complicated constitutional set up of Bosnia and Herzegovina, with differentiated approaches between the entities. However, not only is there a fundamental difference between state-level BiH, and the FBiH and RS, there are also significant differences across the different energy markets.

Although an energy policy, legal and institutional framework is in place, there is significant room for improvement. The Energy Community Secretariat¹⁷³ judges that Bosnia and Herzegovina has transposed 22% of the EU's Third Energy Package (Box 21.14), with a further 47% transposed but requiring adjustment, and 31% not transposed at all (Energy Community, 2020^[165]). This is mirrored in terms of implementation, where the Energy Community Secretariat rates average implementation to be around 39%, ranging between 20% and 55% across the different sub-sectors (Energy Community, 2020^[165]).

Considering the electricity sector, although there is a legislative and policy framework that works towards some transposition of the Third Energy Package, the state of legislation differs across entities. There is more unison regarding policy, as although there are different policy documents in the different entities, there is also a state policy framework based on the entities' respective policies. However, the policy framework for the electricity sector needs to be refreshed, as such there is ongoing work to jointly draft a National Energy and Climate Plan. Moreover, it should be stressed that there is also ongoing work to adjust the legislative framework to increase compliance. Electricity markets are mostly deregulated, and consumers are free to choose their supplier (see Sub-dimension 12.3: Energy markets).

Box 21.14. The EU's Third Energy Package

In 2007, the European Commission proposed a new legislative package, the Third Energy Package, in an effort to further enhance and harmonise the EU's Energy Union and internal energy market. This package entered into force in September 2009 and consisted of several important directives and regulations.¹

The Third Energy Package largely rests on four pillars: 1) transparency; 2) non-discrimination; 3) a strong, independent national regulator; and 4) sustainability. Together, these pillars represent EU best practice and aim to establish a fair and level-playing field for competitive energy markets that seek to optimise scarce resources. For example, the first two pillars drive the need for unbundling the transmission and distribution system, combined with guaranteed, non-discriminatory and open access to those networks to all users backed by transparent rules and prices. Without such unbundling requirements and third-party access, it is very possible that the system operators, which are natural monopolies, could prohibit market entry and lead to sub-economic market outcomes.

In addition to these pillars, the Third Energy Package also seeks to enhance international co-operation within the EU by establishing an international regulatory agency (the Agency for the Co-operation of Energy Regulators, ACER) and promoting regional integration. Regulation (EC) No 714/2009 contains clauses that open and allow for further regulation to be drafted to enhance harmonisation in the form of network codes.

In 2019, the EU introduced the Clean Energy Package which supplements and in part replaces the Third Energy Package. That is, while the Clean Energy Package retains the key legislative aspects of the Third Energy Package, it expands measures for sustainability and green energy growth, as well as consumer rights and protections. Despite this, the Third Energy Package remains a good starting point for all of the WB economies as many of its key pillars have so far not been introduced or implemented in their entirety in the region. Aligning with it is also a requirement for the WB economies as members of the Energy Community, whose *acquis* reflects most of the Third Energy Package. Moreover, with many WB6 economies aspiring to become EU members, the transposition and implementation of the Third Energy Package and subsequent Clean Energy Package are accession requirements. To conclude, the Third Energy Package provides for the implementation of international best practice on competitive markets, and is also a firm requirement for the Western Balkan economies.

1: Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC; Directive 2009/73/EC concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC; Regulation (EC) No 714/2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003; Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005; Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.

The largest difference between entities is within the natural gas sector, where there is no basis for state-level reform and entities have very divergent policies and natural gas markets. RS introduced a legislative package in 2018 that approximates significant elements of the Third Energy Package, while the FBiH continues to follow outdated legislation that is not even compliant with the Second Energy Package.

There are also significant differences in the approach to **energy regulations** between the entities, cantons and state. While stakeholders surveyed for this assessment suggested that all relevant regulatory entities are independent and conform with the European Union's Third Energy Package requirements, the Energy Community Secretariat perceives that Bosnia and Herzegovina's energy regulator is the least compliant regulator within the Western Balkans due to non-compliance of the governing legislative framework and lack of regulatory competences (Energy Community, 2020^[165]).

The non-compliance, and thus low score in this sub-dimension, are due to a number of reasons. The regulator is not established as a single regulatory authority with economy-wide competences across natural gas and electricity. Bosnia and Herzegovina's regulatory structure includes three institutions: the State Electricity Regulatory Commission (SERC), the Regulatory Commission for Energy in the FBiH (FERK) and the Regulatory Commission for Energy of the RS (RERS). These three regulatory authorities have different areas of competence and are not equipped with all the competences prescribed in the Third Energy Package. Furthermore, in the past there have been political interventions related to the operation of the regulatory authorities, which brings into question their independence, and so far no actions have been taken to limit such political intervention in the future. The autonomy of the regulatory authorities has been limited in terms of staff management, with salaries limited to general civil servant salary schemes. The energy sector is highly competitive, which means that regulatory agencies could find it difficult to find and retain key staff if they are bound by public salary limitations.

There are significant deficiencies regarding the regulators' governing board, the Board of Commissioners. The appointment of new commissioners is subject to considerable delays, which has resulted in some commissioners overstaying their terms in office without a renewed mandate. The delays are partly due to an overly complicated selection process in which criteria are not limited to standard requirements such as education, experience and neutrality, but also include, for example, strong ethnic requirements. The process is also subject to significant political influence. Regarding the dismissal of commissioners, reasons for dismissal are not limited to cases of criminal offence, non-compliance with independence requirements, illness rendering person incapable to perform the duties, violation of the Code of Ethics or non-performance of duties (failure longer than six weeks to participate in proceedings). Also, all SERC decisions need to be taken in unanimity, which limits the capacity to take timely decisions.

Nonetheless, the Energy Community Secretariat has noted that despite issues, the regulators, particularly SERC, co-operate internationally and try to implement as much as possible of the Third Energy Package within their limited scope. Moreover, information provided by stakeholders states that regulators have sufficient staff and training opportunities. The monitoring of regulatory activities is also in line with international good practices.¹⁷⁴ Furthermore, despite the negative assessment by the Energy Community Secretariat regarding compliance, there is a legislative framework in place, although as stressed above key regulatory competences are missing (Energy Community, 2020^[165]).

The **management of energy infrastructure** is guided by a variety of legislation and policy documents. However, this framework needs to be improved, with the Energy Community Secretariat assessing the transposition of the elements of the Third Energy Package pertaining to infrastructure management as not complete, and implementation at just 8% (Energy Community, 2020^[165]).

There is therefore significant room for improvement regarding the legislative and policy framework and implementation. One of the most pressing issues is the final transposition and implementation of EU regulation 347/2013 on guidelines for trans-European energy infrastructure. This regulation promotes infrastructure management within an economy and aims to promote a regional co-operative approach. Connected to this is the lack of a Manual of Procedures, which has not been published in BiH. Article 9 of the EU regulation 347/2013 on guidelines for trans-European energy infrastructure also states that all economies need to publish a procedure on the permitting process for projects of common interest. This procedure facilitates cross-border projects and is currently missing in BiH. Some guidelines for investors were published in 2018, but these did not fully comply with the requirements set forth by the aforementioned EU regulation.

Related to the issue of cross-border projects, BiH has not designated a competent authority in line with Article 8 of EU regulation 347/2013 on guidelines for trans-European energy infrastructure. The role of such an authority is to support the granting of regional infrastructure projects, and thus support the management of infrastructure and regional integration. The regulator should publish the methodology or criteria used for the evaluation of investment in infrastructure projects, in particular with reference to impact on tariffs. These methodologies are needed to provide more certainty for investors regarding the projects

they are investing in and the recovery of their investment. It should be highlighted that BiH is aware of these shortcomings and plans to tackle them with the help of a working group established to transpose and implement EU regulations.

Power and natural gas Ten-Year Network Development Plans (TYNDP) for 2018-2027 have been drafted and adopted in BiH. However, some new versions of the TYNDPs are outstanding, with one of the plans for 2021-2030 having been drafted by Elektroprenos BiH, but not yet consulted on or approved, although this is expected to happen soon. While the lack of or non-timely adoption of plans is currently a small issue, it could signal a systemic issue going forward as the lack or non-timely adoption of such plans reduces the sector's guidance in infrastructure development.

One issue regarding infrastructure management connected to the electricity supply framework is network losses. Western Balkan economies, including BiH, are in line with the European average in terms of transmission losses; however, they are lagging behind in terms of distribution losses – although Bosnia and Herzegovina performs better than most of its neighbours (Table 21.22).¹⁷⁵ Urgent action is needed to upgrade infrastructure to avoid wasting energy.

Table 21.22. Distribution losses as a share of final electricity consumption

	2014	2015	2016	2017	2018
EU	10.7%	8.0%	7.8%	7.6%	6.7%
BiH	10.7%	10.4%	10.2%	9.8%	9.3%
CEEC	5.9%	5.8%	5.5%	5.3%	5.2%

Note: EU and CEEC exclude Bulgaria and Romania.

Source: (CEER, 2020^[166]), *2nd CEER Report on power losses*, <https://www.ceer.eu/documents/104400/-/-/fd4178b4-ed00-6d06-5f4b-8b87d630b060>.

On a positive note, FBiH and RS have an infrastructure project list that includes additional interconnection to Serbia for natural gas. Moreover, the FBiH pursues some form of active monitoring and data collection, and has indicated that it has an asset management system in place that includes the monitoring of the condition of existing infrastructure.

Sub-dimension 12.2: Security of energy supply

The **natural gas supply framework** is governed by a legislative and policy framework. While the legislation is drawn up by the entities, the policy side encompasses both state policy¹⁷⁶ and entity-level policies.¹⁷⁷ These policies largely reflect EU standards and are defined along five key strategic goals:

1. Efficient use (exploitation) of resources.
2. Safe and affordable energy.
3. Efficient use of energy.
4. Energy transition and environmental responsibility.
5. Development and harmonisation of the regulatory institutional framework.

The policy recognises the importance from a supply security perspective of further enhancing and expanding the natural gas infrastructure (see Table 21.23 below for a list of projects).

Table 21.23. List of strategic natural gas infrastructure projects

Level	Gas project	Commercial operation date				Focus
		By 2020	By 2025	By 2030	By 2035	
FBiH	Southern interconnection (Zagvozd - Imotski – Posušje – Novi Travnik / Travnik with branch towards Mostar)		✓			●
	Northern interconnection (Slobodnica – Brod – Zenica)		✓			●
	Western interconnection (Rakovica – Tržac – Bosanska Krupa with section towards Bihać & Velika Kladuša as part of phase I.)		✓	✓		●
	Western interconnection – extension (B. Krupa – Ključ as part of phase II. and Ključ – B. Petrovac i Pećigrad – Bužim as part of phase III.)			✓	✓	●
	LNG supply via Port of Ploče by railway or trucks		✓			●
	Gasification of Gornje Podrinje			✓	✓	●
	Network expansion Travnik – Gornji Vakuf and Jajce			✓	✓	●
	Gasification of Orašje			✓	✓	●
	Underground gas storage Tetima with connection pipeline			✓	✓	●
	Kladanj – Tuzla – Tetima					
	Gasification of Bijeljina	✓				●
	Interconnection with Serbia in the area of Bijeljina (Novo Selo)		✓	✓		●
RS	Main gas pipeline (Bijeljina - Banja Luka - further)		✓	✓		●
	Gasification of Gornje Podrinje			✓		●
	Gasification of Trebinje from IAP		✓	✓		●
	Connection with Croatia (Gradiška and Brod)			✓		●
	Gasification of Brčko District of Bosnia and Herzegovina		✓	✓	✓	●
BD BiH						

Source: Information provided by BiH authorities as part of this assessment.

The entities of BiH have undertaken energy security stress tests to test the supply framework,¹⁷⁸ and natural gas security of supply plans are in place.¹⁷⁹ Extensive monitoring and indicator collection is also being undertaken by the different entities.

However, there are some concerns, notably regarding the legislative framework. As mentioned above, each entity has its own framework in place, with no mandate for a state legislative framework or reform. The entities' frameworks have evolved at different speeds. The legislative package adopted in 2018 in RS approximates the Third Energy Package, while the FBiH is governed by a decree from 2007 that is not even compliant with the Second Energy Package and does not transpose key aspects like third party access or market liberalisation.

Also of concern is that natural gas supplies are being priced based on oil indexation, which often leads to supply not being reactive to market signals, especially as natural gas is largely sold as an independent product from oil (both from a supply and demand perspective).¹⁸⁰ Another area of concern is the fact that supply is imported exclusively from Russia via one key route through Ukraine, Hungary and Serbia. This exposes BiH to key supplier and route risks. Although BiH is not the only Western Balkan economy subject to this risk, it is important that it seeks diversification. BiH is working on importing natural gas via alternative routes for Russian supplies (through Turkey and Serbia) and alternative sources (via the Ionian Adriatic Pipeline that uses natural gas sourced from Azerbaijan).

The **electricity supply framework** includes legislative policies drawn from all entities. Broadly speaking, the policies conform with good practices and focus on four goals:

1. Harmonisation with EU directives.
2. Upgrading of regulatory mechanisms to encourage efficiency and quality and relationships with market stakeholders.
3. Reduction of network losses and increased supply quality.
4. Flexible and technologically modern Distribution System Operators as a basis for energy sector modernisation.

Monitoring and data collection relating to electricity is being undertaken based on good practices.

Despite there being some good practices in place in BiH, there are also some concerns. For example, BiH intends to continue its reliance on coal-fired generation within its power mix as it is seeking to build new coal plants to replace older coal-fired power plants. Information provided by the authorities suggests that the lack of a natural gas supply and limited growth in renewable generation is a key driver behind this decision. However, although BiH does have coal resources, unless it invests in additional natural gas infrastructure and renewable generation it will continue to perpetuate the problem of there being insufficient alternatives to coal. Moreover, pursuing the expansion of natural gas and renewable generation would not prohibit the future use of coal, but rather extend the diversification of energy generation, thus increasing the security of supply across different energy types. Accordingly, alternative sources should be pursued aggressively.¹⁸¹ Although environmental factors were considered in the decision to build new coal plants,¹⁸² it appears that BiH did not factor in the explicit pricing of greenhouse gas emissions. This also reflects the fact that there are no plans in BiH to introduce an emissions market aligned with the EU Emissions Trading Scheme.¹⁸³ BiH is a signatory of the Sofia Declaration, which involves signatories committing to “continue alignment with the EU Emissions Trading Scheme, as well as work towards introducing other carbon pricing instruments to promote decarbonisation in the region” (Berlin Process, 2020, p. 2_[167]). However, at the state level there is currently no concrete plan or action taken to deploy a carbon tax or other kind of greenhouse emission pricing scheme. Moreover, the legislative and regulatory framework for the monitoring and reporting of greenhouse gas emissions is not complete and will need to be finalised before any pricing of greenhouse gas emissions will be possible.¹⁸⁴

Bosnia and Herzegovina generated around 35% of its energy from **renewable energy** sources in 2018 (Eurostat, n.d._[168]). Moreover, nearly all renewable energy is generated from hydro generation, with wind and solar accounting for only around 2% of electricity: wind generated 103 gigawatt hours (GWh) and solar generated 21 GWh in 2018 (Eurostat, n.d._[168]), although this share is expected to expand as new projects were connected for the first time in 2018 and 2019. BiH has considerable potential for renewable energy generation, particularly beyond hydro generation. The International Renewable Energy Agency estimates that Bosnia and Herzegovina has a renewable energy potential of 23 gigawatts (GW) of installed capacity, out of which only 2.3 GW is being currently utilized, with 110 megawatts (MW) from non-hydro renewable energy sources (IRENA, 2017_[169]; IRENA, 2019_[170]; Energy Community, 2020_[165]; Eurostat, n.d._[171]). Moreover, out of the 23 GW, only 6.1 GW is hydro and 17.1 GW is other renewable energy sources (IRENA, 2017_[169]; IRENA, 2019_[170]).

As in the other sub-dimensions, there are multiple legislative and policy frameworks for renewable energy across the state and entities in BiH. The Energy Community Secretariat rates the transposition of the Third Energy Package as not complete due to issues relating to simplified administrative procedures, operational deployment, and the functioning of the system for the issuing, transfer and cancellation of guarantees of origin (Energy Community, 2020_[165]). Overall, the Energy Community Secretariat rates the implementation of the Third Energy Package at 49% in BiH (Energy Community, 2020_[165]). BiH has a National Renewable Energy Action Plan that guides the sector,¹⁸⁵ and has established a 40% target for the share of renewable energy in gross energy consumption and a 10% target in transport, although the share of renewable energy in transport was only 0.44% in 2019 (Energy Community, 2020_[165]). Moreover, BiH has published two out of three progress reports – one in 2017 and one in 2019. BiH is also in the process of drafting the National Energy and Climate Plan, which is expected to be completed by the end of 2021. Legislation grants renewable generators priority dispatch and connection to the distribution network, and there are clear

guidelines for connection to the transmission system to facilitate the speedy connection of renewable energy generators.

There are, however, some challenges regarding renewable energy in BiH. There is currently no competitive assignment of renewable projects, which means that the competitive forces of, for example, an auction are not harnessed to choose and allocate projects that represent best value added. In addition, apart from RS which uses feed-in-premiums, a feed-in tariff scheme is currently being used, which is a subsidisation approach that has fallen out of favour as it creates a disconnect between renewable generator incentives and market signals. However, it should be noted that legislation for the competitive assignment of renewable projects and the use of a feed-in premium (with a feed-in tariff for small-scale renewable energy projects) has been drafted but not yet adopted. Similarly, the concept and importance of small-scale distributed renewable (self-) consumers (prosumers) are recognised in new draft legislation that has not yet been adopted. Although the entities recognise the importance of Guarantee of Origins,¹⁸⁶ there is no system for issuance, transfer and cancellation. Guarantee of Origin is a key channel for further monetising generated renewable energy both within the state subsidisation scheme (where the state can benefit from product differentiation and higher paying margin customers) or for renewable projects outside the state support scheme (where the project owner can increase the income stream). The Energy Community Secretariat has also noted that renewable energy generators within a support scheme have limited imbalance responsibilities, which is a significant market distortion as it encourages generators to deviate from optimal behaviour based on market signals and good practices for forecasting.

BiH has a partial legislative and policy framework in place for **energy efficiency**.¹⁸⁷ However, energy efficiency legislation is still lacking, and further action is necessary to achieve full compliance with international good practice.¹⁸⁸ There has been no progress since 2018 regarding adjusting product labelling regulation, despite a Ministerial Council decision adopted in November 2018 that required adjustments. The Energy Community Secretariat assesses Bosnia and Herzegovina's transposition of energy efficiency legislation related to the Third Energy Package as not complete, measuring it at 48% (Energy Community, 2020^[165]).

Energy efficiency strategies in BiH are out of date, with the National Energy Efficiency Action Plan 2019-2021 and a long-term building renovation strategy drafted but not adopted. Furthermore, energy efficiency laws in the FBiH and RS have not transposed the Third Energy Package, and implementation is far from complete. For example there has been no implementation of an energy efficiency obligation scheme nor a comprehensive energy management and information system. Additionally, human resources within public institutions dedicated to the topic of energy efficiency need to be enhanced.

Some monitoring and data collection is in place, but it could be systematically improved. For example, there is no inventory of buildings, which means that it is difficult to assess the extent to which energy performance has been deployed and what remains to be done with regards to BiH building stock.

Positively, both entities have established energy efficiency funds, and the concept of an Energy Service Companies market (ESCO) has been established within the legislative framework, although it is currently not operational due to a variety of issues regarding public procurement and the lack of model ESCO contracts. BiH has been publishing regular progress reports on implementation of the National Energy Efficiency Plan. The fourth progress report was published on 31 August 2020. BiH is also working on drafting the National Energy and Climate Plan. Both entities have implemented an energy efficiency audit and certification scheme for all new buildings and buildings undergoing major renovations.

Sub-dimension 12.3: Energy markets

Regarding energy **market operations**, there is a wide divergence between natural gas and electricity, as well as between the entities of BiH.

The wholesale electricity market is largely deregulated, except within RS, where electricity generation prices remain regulated, although price regulation is being phased out. There is no legislation or target to

establish and deploy a power market and associated day-ahead market¹⁸⁹ (i.e. an organised market). Moreover, BiH does not have the required legislative text that allows for the mutual recognition of trading licences with other economies. However, Transparency (REMIT) Regulation¹⁹⁰ and Connection Network Codes¹⁹¹ have been transposed and implemented. The balancing market¹⁹² has been operating since 2016 as an efficient market covering the energy needed for balancing the system and the acquisition of reserve capacity.

The electricity retail market is formally deregulated, with only households and small consumers allowed to use the Universal Supplier at a regulated price. Supplier switching is codified but remains low, and as a result so does market liquidity.

The situation is less favourable in the natural gas market where, as mentioned above, the FBiH is not even compliant with EU's Second Energy Package. The wholesale market is dominated by the incumbent BH-Gas, which also has a monopoly in the retail market. There is a more positive situation in RS, which has a wholesale market, although the virtual trading point is not operational, which means that transactions are done on a bilateral basis. Switching rules are in place, and only a small portion of consumers are supplied under regulated public supply conditions. However, the market remains highly centralised, with the incumbent GAS RES which has a market share of more than 85%.

The complexity of the constitutional set up in BiH is also reflected in the successes and failures of **unbundling and third-party access**.

Regarding electricity, Bosnia and Herzegovina's transmission system is operated by the independent system operator NOS BiH, which is involved in the management of the transmission network, the day ahead and intraday markets, the balancing market, security analysis, cross-border mechanisms, development of long-term plans, and the transmission company Elektroprenos BiH, which owns the transmission network and associated facilities and is responsible for electricity transmission. They are owned by the two entities and controlled by the Council of Ministers of BiH. However, the ownership is such that they are part of an ownership structure in which there is also control over the generation and supply of electricity. Accordingly, the transmission network in BiH is not unbundled in the sense of the Third Energy Package. The legal basis for unbundling at the state level is missing, and is unlikely to be resolved anytime soon.

Concerning electricity distribution system unbundling, the legal unbundling requirement according to the Third Energy Package is reflected in the legislation of both entities. Functional unbundling is also covered in legislation, but only in RS. Nonetheless, the distribution system operators in both entities continue to operate as legal and functionally bundled companies. In the FBiH there is no legal requirement for compliance programmes, as there should be in line with international good practice.

Positively, third-party access is enshrined in legislation and, as mentioned, Transparency (REMIT) Regulation and Connection Network Codes are transposed and implemented.

Regarding the natural gas sector, BiH is operating outside of the EU *acquis*, and is not even in line with the Second Energy Package. In the absence of a state-level approach, the entities have implemented divergent regulatory frameworks.

The most promising actions have taken place in the RS, which in 2018 transposed Third Energy Package legislation regarding natural gas. As part of this legislative package, the RS established the basis for unbundling. One of the three natural gas transmission system operators in BiH, Gas Promet Pale a.d. is currently seeking unbundling certification and which was granted by the RS energy regulator, RERS. However, the Energy Community Secretariat has not yet given its positive opinion regarding this certification. Gas Promet Pale a.d. operates as a transmission system under network system rules that do not conform with the EU Capacity Allocation and Congestion Management Regulation. The other two transmission system operators have no legal basis for unbundling and thus have not attempted to be certified as unbundled transmission system operators.

Third-party access is only enshrined in legislation in the RS, and even there third-party access to pipelines is granted under regulated tariffs for only some parts of the network. In the FBiH there is no legal basis for guaranteed non-discriminated third-party access, which is only granted on bilateral negotiated contracts. However, the FBiH is currently working on implementing an Energy Sector Restructuring Programme that would address some of the shortcomings and establish the legal basis to move ahead with unbundling and third-party access. However, so far, this programme has not been adopted.

Regional integration is governed at the state level in BiH and is subject to a legal framework.

Regarding natural gas, the sole interconnector with Serbia is governed by an agreement that conforms with EU Regulation 2015/703 on establishing a network code on interoperability and data exchange rules. For electricity, the capacity of the interconnectors is allocated using good practice in the form of the joint auction facilities of the Co-ordinated Auction Office in South East Europe – except for the interconnector with Serbia where bilateral joint auctions are used. Positively, there is balancing co-operation between Bosnia and Herzegovina and its fellow load frequency bloc members, Croatia and Slovenia, as well as with Montenegro and Serbia on bilateral agreement basis.

The Energy Community Secretariat notes that day-ahead market integration and coupling has ceased (Energy Community, 2020^[165]). This largely reflects that there is no power exchange, and any progress is conditioned on yet to be adopted state-level laws. BiH does not have the required legislative text that allows for the mutual recognition of a trading licence with other economies, which represents a hurdle for regional integration as it means that any trader from neighbouring economies would need to seek an additional licence in BiH. Also concerning is the use of congestion income/revenue, with information provided suggesting that income is used as cross-subsidisation to lower network tariffs. While not prohibited by Article 16 Paragraph 6 of EU regulation 714/2009 on conditions for access to the network for cross-border exchanges in electricity, it does encourage the use of income to guarantee the availability of capacity or to maintain or increase interconnection capacity in an attempt to further the interconnection of the economy, rather than to lower transmission costs domestically.

Cross-cutting policy area: Energy incentives – direct and indirect subsidies in the energy sector

In addition to the use of congestion revenues, there are several instances of subsidisation and cross-subsidisation in BiH. Another form of subsidisation appears to take place between households supplied by the Universal Supplier and commercial consumers, where the prices for households supplied by the universal supplier are below the market cost, and compensated by commercial consumers. However, this issue is currently being tackled by the regulator, which aims to reduce and eventually eliminate this form of cross-subsidisation.¹⁹³

BiH is also subsidising coal production, with a cascading effect onto power via the five coal-fired power plants. A study by Miljević (2020^[172]) estimates that between 2015 and 2019 BiH provided direct annual subsidisation to coal/lignite electricity producers amounting to EUR 166.6 million, or roughly EUR 33 million per year. Miljević (2020^[172]) estimated that this subsidisation amounted to an indirect subsidisation of electricity generated from coal of about EUR 2.1/MWh, meaning that coal-fired generation was around EUR 2.1/MWh cheaper than it would have been without direct subsidisation. This subsidisation has market distorting effects that lead to higher consumption due to cheaper electricity consumption away from market equilibrium and optimal outcome, while also making it harder for renewable energy to compete as it lowers prices. This is especially counterproductive as the public financial support mechanism for renewable energy will have to compensate for lower fossil fuel prices.

Regarding thermal generation, another subsidisation concerns BiH's support in the form of state guarantees for a loan to Elektroprivreda BiH d.d. Sarajevo for the Tuzla 7 project, a thermal power plant. This constitutes state aid and thus the subsidisation of a coal-fired power plant as it mitigates the risk of investment via state funds.¹⁹⁴

The way forward for energy policy

The following are recommendations for actions to be taken by BiH to improve its energy markets and align with good practices:

- **Harmonise energy policy frameworks across energy sectors and markets, and between the entities.** This would facilitate the internal efficiency of energy markets and cross-entity operations by stakeholders.
- **Undertake wide-ranging reforms to finalise the transposition and implementation of the Third Energy Package (and possibly start on the Clean Energy Package),** particularly in the areas of natural gas, unbundling and third-party access. Finalisation of the transposition and implementation of the Third Energy Package will move BiH's energy market into a position where international good practices are used to drive a competitive energy market where economic forces such as liquidity and competition are used to achieve the greatest benefit for the people and economy of Bosnia and Herzegovina. This is particularly an issue with natural gas, where bundled natural monopolies and the lack of third-party access means that markets are closed and dominated by monopolies. This largely means that no competitive forces are harnessed, and economic rent is not necessarily fairly distributed.
- **Develop and implement a strategy for the introduction of EU-style organised markets in electricity and natural gas markets** (i.e. power exchanges and associated day-ahead markets). Such markets contribute to the efficient allocation of scarce resources and the distribution of economic rent between producers and consumers. They also minimise transaction costs as market transactions are centralised.
- **Pursue a reinvigorated reform to increase market integration and market coupling.** International trade flows are a useful tool to promote market liquidity and competition, and thus limit the market powers of dominant domestic incumbents.
- **Introduce the competitive assignment of renewable projects in combination with good practice subsidisation schemes** (Box 21.15) **and simplified procedures.** This will support the growth of renewable energy as it reduces costs and minimises risk, while assuring the best value for money for Bosnia and Herzegovina. Competitive renewable energy will also contribute and support the consideration of coal phase out as renewable energy costs are reduced.
- **Consider designing a strategy and deploying a greenhouse gas pricing scheme** (either as a tax, trading scheme, a combination or a sequential introduction). This would support the phasing out of coal and the decarbonisation of the power sector, and shift the entire economy to a more environmentally friendly and sustainable state. A greenhouse gas pricing scheme will support the power sector to decarbonise as it shifts the explicit cost function in favour of renewable energy by introducing the environmental and climate impact of fossil fuels as an explicit cost factor. Moreover, the scheme would offer income flows for the government and companies. The government would benefit through sales of emission certificates, and companies would be rewarded for efficiently reducing emissions. The consideration of the introduction of a scheme becomes more pressing as the EU is considering introducing a carbon border tax.
- **Expand and pursue a policy to advance energy efficiency.** While energy efficiency is a good tool to minimise the cost burden of energy within the economy, it also supports efforts to decarbonise the power sector, and thus support environmental and climate goals.

Box 21.15. A new approach to subsidising renewable energy

Feed-in tariffs were the dominant form of financial support for renewables within the EU at the beginning of the 21st century. In this system, power plant operators receive a fixed payment for each unit of electricity generated, independent of the electricity market price (Banja et al., 2017^[173]).

Feed-in tariff schemes offer several advantages, but mainly they insulate new market entrants from market price risks, which lowers their capital costs and enables private investment. The simplicity of feed-in-tariffs makes them suitable for markets with a large number of non-commercial participants such as households or local community-based initiatives (European Commission, 2013^[174]).

However, feed-in tariff schemes exclude producers from actively participating in the market, which hinders efforts to develop large, flexible and liquid electricity markets as the share of renewable energy grows. This limits growth to certain technologies and sizes of installations, and creates difficulties in setting and adjusting appropriate tariff levels (European Commission, 2013^[174]), which is a particular problem as costs of renewable generators have fallen rapidly in recent years.

The European Commission suggests switching from feed-in tariff to feed-in premium schemes (European Commission, 2013^[174]). In these, plant operators sell the electricity generated directly on the electricity market and earn an additional payment on top of the electricity market price. This is received as a fixed payment or one adapted to changing market prices, thereby limiting price risks for plant operators, as well as the risks of providing windfall profits (Banja et al. 2018). Feed-in premium schemes are beneficial because they force renewable energy producers to find a seller on the market. They also ensure that renewable energy operators are exposed to market signals. A well-designed premium scheme can limit costs and drive innovation by using a competitive process to allocate support. Such schemes also include automatic and predictable adjustments to cost calculations, which give investors the information and confidence necessary to invest (European Commission, 2013^[174]).

The European Commission (2013^[174]) suggests using a feed-in premium scheme in combination with the following good practice recommendations:

- Do not pay premiums for production in hours where the system price is negative or above the level of remuneration deemed necessary.
- Assign renewable projects and associated premiums using competitive allocation mechanisms such as auctions.
- Make planned volume-based premium reductions for new installations dependent on when they are approved, connected or commissioned.
- Conduct regular, planned and inclusive reviews of premiums for new installations.

The Council of European Energy Regulators (2018^[175]), reports that in 2016/17, some 17 of the 27 EU Member States still used some form of feed-in tariff (although mainly for small projects), while around 16 used feed-in premiums, including to complement feed-in tariffs.

For more information on the different renewable support schemes employed across Europe please see <http://www.res-legal.eu/home/> and for an overview of auctions and outcomes (including databases on auctions) see <http://aures2project.eu/>.

Source: (Banja et al., 2017^[173]), "Renewables in the EU", doi:10.2760/521847; (CEER, 2018^[175]), *Status Review of Renewable Support Schemes in Europe for 2016 and 2017*, <https://www.ceer.eu/documents/104400/-/-/80ff3127-8328-52c3-4d01-0acbdb2d3bed>; (European Commission, 2013^[174]), *Guidance for the design of renewable support schemes*, https://ec.europa.eu/energy/sites/ener/files/com_2013_public_intervention_swd04_en.pdf; (EUR-Lex, 2014^[176]), *Guidelines on State Aid for Environmental Protection and Energy 2014-2020*, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52014XC0628%2801%29>.

Environment policy (Dimension 13)

Introduction

With an overall score of 1.7 in the environment policy dimension, Bosnia and Herzegovina is the lowest performing Western Balkan economies (Table 21.24). Nevertheless, several initiatives have been undertaken, and the economy slightly increased its performance since the previous assessment, particularly in the environmental quality of life sub-dimension (Figure 21.1).

Table 21.24. Bosnia and Herzegovina's scores for environment policy

Dimension	Sub-dimensions	Score	WB6 average
Environment policy dimension	Sub-dimension 13.1: Resource productivity	1.7	2.0
	Sub-dimension 13.2: Natural asset base	1.7	2.1
	Sub-dimension 13.3: Environmental quality of life	1.8	2.3
Bosnia and Herzegovina's overall score		1.7	2.1

State of play and key developments

Sub-dimension 13.1: Resource productivity

Bosnia and Herzegovina has committed to combat climate change by undertaking activities to reduce greenhouse gas emissions and limit global warming to a maximum of 2°C by the end of this century, as a Non-Annex-I signatory to the United Nations Framework Convention on Climate Change (UNFCCC) and its Paris Agreement, and a party to the Kyoto Protocol. However, these efforts have been rather limited so far. The energy production sector remains the main carbon dioxide (CO₂) emitter, contributing to around 70% of total CO₂ emissions, followed by the transport sector that contributes around 23% (World Bank, 2016^[177]).

Major changes have occurred regarding the legislative **framework for climate change** in BiH since the last assessment in terms of adopted amendments in the RS to laws on water and renewable energy sources, and the new Law on Energy Efficiency in the FBiH. BiH is currently developing enhanced nationally determined contributions (NDCs), required under the Paris Agreement, which will state that 1990 emissions should be reduced by 37% by 2030 and by 61% by 2050. It is planned that NDCs will be adopted and submitted by mid-2021. There is a greenhouse gas inventory that is made publicly available, and measures regarding energy efficiency (renovation of public buildings and more energy efficient public lighting) and renewable energy sources (share in total energy mix increased to 38.7% in 2019) have been undertaken to align with the EU *acquis* regarding greenhouse gas emission reductions.

BiH was working on an adaptation plan at the time of drafting that will identify the necessary resources and set timelines for implementing climate change related policies and strategies. The Climate Change Adaptation and Low Emission Development Strategy (CCALEDs) of BiH was also under revision with an aim to be fully harmonised with the NDCs and the overarching Environmental Protection Strategy and Action Plan of BiH by the end of 2021. The CCALEDs will encompass sub-sector strategies for waste and water management, air quality and nature protection. The main energy strategies¹⁹⁵ are aligned with climate change mitigation goals and long-term low-emission development strategies in BiH, but this is still not the case for transport and industry or agriculture policies, although certain changes in this regard are expected once the revision of the CCALEDs is complete. Although no systematic monitoring and evaluation of the strategies is conducted, active policy implementation, as measured by programme inputs and outputs of the approved climate change adaptation and mitigation policy framework, has been recorded.¹⁹⁶

Competences for environment and climate change rest with the two entities and the Brčko District. In the FBiH, competence is shared between the federation and the ten cantons. At the state level, the Ministry of Foreign Trade and Economic Relations (MoFTER) is responsible for defining policies and basic principles, co-ordinating activities, and consolidating entity plans with those of international institutions in the area of energy, agriculture, protection of environment and use of natural resources, and tourism. Entity-level institutions are responsible for the strategic framework, policy setting, data exchange and reporting.¹⁹⁷

Administrative capacities and inter-sectoral co-operation need to be significantly improved to systematically address climate change and go beyond the current project-by-project approach to ensure further alignment with and effective implementation of the climate *acquis*. Regarding vertical and horizontal co-ordination, representatives of relevant state- and entity-level institutions participate in working groups and consultative meetings and contribute to the development of strategic/policy documents. However,

institutional capacities are limited, vertical and horizontal co-ordination for planning and implementation are weak (caused by a complex administrative structure and top-down approach), and stakeholder participation in strategic planning is limited. Capacity building is mainly ensured through project-based initiatives and the activities of NGOs. There are also financial constraints and a lack of local financial mechanisms to address climate change adaptation and mitigation issues.

Regarding climate change adaptation, major climate-related risks have been identified as a temperature increase (drought, heat waves) and a change in annual precipitation patterns. As mentioned, adaptation measures have been implemented, in particular those regarding landscape restoration and reforestation actions,¹⁹⁸ more secure facility locations and infrastructure,¹⁹⁹ and early warning systems in connection to water-related disasters.²⁰⁰

Bosnia and Herzegovina's municipal waste generation per capita of 356 kg is much lower than the EU average (492 kg per capita in 2018), and among the lowest in the Western Balkans (386 kg per capita on average in 2018) (Eurostat, 2018^[178]). A total of 36 municipal landfills have been registered in the RS, 44 in FBiH, and 1 in Brčko District, with few categorised as controlled landfills (Republika Srpska Institute of Statistics, 2019^[179]), (EEA, 2018^[180]). Households in rural areas with no available waste collection service need to organise their own collection and transport, which means that the majority of collected waste ends up disposed in illegal dumpsites (EEA, 2018^[180]). The problem of the unregulated incineration of waste, especially of plastic, waste tyres and agricultural waste, is also present throughout the economy, and no specific sanctions are taken in this regard.

Some steps have been taken in relation to developing a **circular economy framework** and **municipal waste management** in Bosnia and Herzegovina (especially in the RS) since the last assessment, although it remains underdeveloped. The RS Waste Management Strategy (2017-2026) is in force, in accordance with which the RS Waste Management Plan (2019-2029) has been adopted that outlines a comprehensive list of short (2019-2024) and long-term objectives (2024-2029).²⁰¹ In the FBiH, with the exception of amendments to the Law on Waste Management in 2017 there have been no changes in the policy framework following the expiration of the FBiH Environmental Strategy 2008-2018 that indirectly covered waste management. The new overarching Environmental Protection Strategy of BiH (to be adopted by the end of 2021) will indirectly cover these aspects.

Although there is no systematic monitoring and evaluation of the environment related policy documents in the two entities, evidence of policy implementation has been recorded in the RS, with the following measures completed since 2017:

- Harmonisation of the legal framework with EU regulations.
- Establishment of a packaging waste management system and introduction of the extended producer responsibility.²⁰²
- Promotion of environmentally friendly waste management through the introduction of recycling islands,²⁰³ and organised waste collection carried out as part of various awareness-raising activities.²⁰⁴
- Improvements in the municipal waste collection system and the rehabilitation and closure of municipal and illegal landfills.²⁰⁵
- Establishment of a system of joint landfill sites for the management of remaining municipal and non-hazardous industrial waste.²⁰⁶

Activities on waste prevention were also undertaken in RS in 2020 through the introduction of a fee for plastic bags. In addition, food waste has been recognised as an issue in the RS Waste Management Plan, particularly through the measure on “improvement of the data collection system on food waste”, which calls for identification of the types and quantities of food waste generated as a first step. The development of a feasibility study for the functioning of a food bank and the development of a guide for food donation is planned, but no concrete timeline had been set at the time of drafting.

In the FBiH, waste separation at source is conducted in certain municipalities, and measures are undertaken regarding resource efficiency along product life cycles (i.e. extended producer responsibility schemes), which has led to an increase in the share of recycled packaging, electronic and electric waste in the total electronic and electric waste.²⁰⁷ In 2018, the FBiH established the Waste Management Information System (WMIS) within the Environmental Protection Fund of FBiH to serve as an overall waste database. However, it is at the initial operational stage and the waste operators who are supposed to share or upload their information on waste to the WMIS are not properly informed about its existence.

The civil society organisation, Centers for Civic Initiatives, is planning activities for the coming period in co-operation with local governments, competent cantonal and federal ministries, the tax administration, and experts to develop guidelines for implementing regulations to treat illegal landfills²⁰⁸ and illegal waste disposal. This process has however been slowed due to the COVID-19 pandemic.

Similar to other WB economies, waste collection and treatment infrastructure in BiH is financed through waste collection fees, budget and donor funds, while waste collection and treatment services are funded from waste collection fees. Waste disposal tariffs have not changed since the last CO assessment. Certain investments in new waste treatment facilities have been undertaken in the FBiH, but they were of a small scope due to the overall lack of financial resources. In the RS there is a plan to invest in new waste treatment facilities using government funds and some donor support. Illegal dumping and the unregulated burning of waste have been recognised as challenges in both the FBiH and RS – around 15% of illegal dumpsites have recently been closed – and inspections have been taking place according to the annual plan for inspection visits. However, local stakeholders report poor inspection supervision and the insufficient prosecution of perpetrators in this regard.

Sub-dimension 13.2: Natural asset base

Bosnia is water-rich, with total renewable freshwater of 10 592 m³ per year per capita in 2017. However, there is uneven distribution across the territory and noticeable seasonal amplitudes, sometimes with extreme hydrological phenomena. The major users of water are households (approximately 82%) followed by industry (16%), with the remainder used in agriculture (UNECE, 2018^[181]; World Bank, 2017^[182]).

Bosnia and Herzegovina has a relatively well established **freshwater management framework**, but lacks investment plans on water management that would include implementing legislation and monitoring. There have been no major changes in the legislative and policy framework regarding freshwater management in BiH since the last CO assessment. The legislative framework in this area is based on EU water framework directives, which apply to all surface and groundwater, the prevention of pollution at source, emissions control, water quality standards, and prevention and protection against flood risks. At the time of drafting, flood hazards and risks were being mapped for the economy through the IPA project, Support to Flood Protection and Flood Risk Management (2016). Planning of hydropower conforms with the relevant EU legislation; however the strategic environmental assessment, environmental impact assessment, nature protection and water-related provisions of the EU *acquis* need to be better enforced to adequately address growing environmental concerns (European Commission, 2020^[39]). There is a system for prior regulations and/or specific authorisation for water extraction from groundwater and/or from surface waters, and a river basin management system has been developed. Co-operation with neighbouring economies in this regard has been established, especially with those at the Sava and Danube River Basins.

The main strategic document in RS is the Strategy of Integrated Water Management (2015-2024),²⁰⁹ but implementation remains limited as no related action plan was adopted, no measures or targets were set, and it is not aligned with sectoral strategies. Key policies in the FBiH are the Water Management Strategy (2010-2022) and the Action Plan for Flood Protection and Water Management (2014-2021).²¹⁰ Local stakeholders report that the implementation record of both documents remains modest, although regular monitoring is conducted (once every four years for the Water Management Strategy and annually for the Action Plan for Flood Protection and Water Management).

Numerous institutions regulate freshwater management in BiH,²¹¹ but they all lack the necessary financial and human resources to conduct their roles, and there are no regular capacity building activities. Vertical and horizontal co-ordination are also lacking. Data and projections on water demanded from agriculture, industry (including energy) and households are only partially available, and thus not guiding decisions about handling competing uses now and in the future. No data on water risk management are collected, and activities to raise awareness of water-related risks are lacking.

In terms of **biodiversity**, Bosnia and Herzegovina is one of the richest economies in Europe due to its specific environmental, climatic and geomorphological conditions. The large variety of land, freshwater, marine and underground habitats has resulted in an abundance of species and subspecies, including endemic species. However, its ecosystem is threatened by the unsustainable use of land and forests, habitat conversion, vegetation succession and invasive alien species, overexploitation of natural resources, waste mismanagement, inadequate fire protection, illegal hunting and fishing, and climate change as well as inappropriate integration of land, water and biodiversity concerns into development planning (UNECE, 2018^[181]). **Forests** make up a large share of the total land area of Bosnia and Herzegovina (around 43% in 2016), which is around the WB average of 42% (World Bank, 2016^[183]).

There have been no major changes in the legislative or policy framework since the last CO assessment. The Strategy on Nature Protection of the RS (2011-2017) expired and was not updated. In the FBiH, the Environmental Protection Strategy, which contained the Federal Nature Protection Strategy, expired in 2018 (the new strategy should be adopted by the end of 2021). The draft state-level Environmental Protection Strategy covers biodiversity aspects and outlines the following objectives: protection of biological, pedological and geodiversity of the economy through establishing and strengthening an institutional framework for the realisation of efficient measures for nature protection; sustainable use of natural resources; equal distribution of revenue from use of natural resources; reduction of pressure on biological and geodiversity in the economy; and establishment of financial mechanisms for the sustainable management of biological and geodiversity.

Although no reports were produced regarding the implementation of the RS Strategy on Nature Protection, certain activities in this field have been conducted. In particular, the government order on strictly protected and protected wild species was adopted in 2020, and an information system for nature protection was established in 2018 within the Institute for Protection of Natural and Cultural Heritage of the RS. In the FBiH, major activities relate to the adoption of a list of invasive species in 2019, the proclamation of five additional nature protected areas, and the establishment of an information system of nature protection in 2018. Aichi Biodiversity Targets²¹² have not been achieved, although certain progress has been made towards objectives 11 and 12, and at some level on Target 1. No biodiversity monitoring system is in place to provide quality data on the status of biodiversity in the economy as there is no institution tasked with monitoring the state of biodiversity. The entities lack the capacity to establish the monitoring systems stipulated in their respective laws on nature protection.

Although several bodies regulate biodiversity in BiH,²¹³ human and financial resources (mostly government funded) are not adequate to execute their main responsibilities. Vertical and horizontal co-ordination appears non-existent, and capacity building activities are not being conducted.

In the framework document of the Strategic Plan for Rural Development of Bosnia and Herzegovina (2018-2021), the forestry sector is listed only through general data on the area and structure of forests in total and in each entity, without specific measures and plans for the development of forests and their important role in rural development.

The Forestry Strategy for RS (2011-2021) is in line with the entity's forest management plans and includes preventive and reactive measures for forest fires; fire protection is included in the forest management plans and specific plans for fire protection. According to the Information on Forest Management in the FBiH in 2019 and forest management plans for 2020, and considering that there is no Law on Forests or related regulatory instruments, the current legislation in the FBiH relates, among other things, to fire protection.²¹⁴ A forest inventory system for Bosnia and Herzegovina has been compiled but not officially published. The

Research and Development Project Centre in Banja Luka compiles annual reports on the health of forests. The Forest and Hunting Inspection of the RS oversees the monitoring and enforcement framework to combat illegal logging, and carries out control measures for both public and privately owned forests based on forest management plans. In the FBiH, the Inspection Service and forestry offices at the cantonal level are responsible for monitoring and combating illegal logging. The FBiH Forestry Inspection (FFI) performs all inspection services regarding the implementation of activities related to the Law on Inspection. Local stakeholders report the relatively small number of FFI staff in Sarajevo and the lack of co-ordination with the Cantonal Forestry Inspection.

There are no data on the range of penalties for illegal activities in the timber trade in both entities, and the levels of detection, reporting and sanctioning for illegal logging are reported to be low (European Commission and UNEP-WCMC, 2020^[184]).

The land-use legal and policy framework has remained almost unchanged since the last CO assessment in the RS, with the exception of the adoption of the Amendment of Law on Agricultural Land in 2019, which introduced and defined the term “soil and land degradation” and outlined the methods of soil protection. Four municipalities in the RS are in process of drafting local strategic document for land use planning.

On the policy side, the Council of Ministers adopted an Action Programme to Combat Land Degradation and Mitigate the Effects of Drought in BiH (APCLDMED) in 2017. During the land degradation neutrality (LDN) target setting process (2016-2018), the main land degradation drivers were identified in the RS, and LDN targets with associated measures were created until 2030. Although no implementation reports have been produced, some evidence of effective policy implementation has been recorded under the APCLDMED. These mostly relate to the development and adoption of an LDN report for the RS in 2019, the preparation of the Drought Management Plan for the RS at the time of drafting, the implementation of measures to protect the land and remediate degraded land (the hot spot regions of Bijeljina, Gradiška, Trebinje), as well as awareness-raising activities and enhancing the role of education in combating land degradation and the effects of drought.

Institutions responsible for land-use management in the RS include the Ministry of Agriculture, Forestry and Water Management, the Ministry of Spatial Planning, Civil Engineering and Ecology, and the Republic Administration for Geodetic and Property-Legal Affairs. In the FBiH, the leading institution in this area is the Ministry of Agriculture, Water Management and Forestry. All of these institutions in RS and the FBiH have qualified staff, but financial resources are lacking. So far, horizontal and vertical co-ordination have had an ad hoc and case-by-case nature. There has been limited capacity building and training activities for the responsible bodies. Regarding land-use indicators, very little data are collected in BiH, and when collected are mostly ad hoc on a project basis.

Sub-dimension 13.3: Environmental quality of life

Poor **air quality** is one of the major concerns regarding environmental quality of life in BiH. This becomes an even greater issue in the context of the COVID-19 pandemic given that exposure to ambient and indoor air pollution increases the risk of cardiovascular, respiratory and developmental diseases, as well as premature death, thus making individuals even more vulnerable to the virus (OECD, 2020^[185]). BiH has one of the highest concentrations of air pollution in Europe, with mean annual exposure to particulate matter (PM_{2.5}) of 30 µg/m³, which is triple the World Health Organization recommended highest levels (10 µg/m³), and higher than the averages in the EU (13.1 µg/m³), the OECD (12.5 µg/m³) and the WB region (25.77 µg/m³) (OECD, 2020^[186]), (World Bank, 2020^[187]). Power generation, heating, industry and transport are the main sources of air pollution in BiH (UNECE, 2018^[181]).

The air quality framework remains underdeveloped in the FBiH. In RS, air quality management is regulated by the Law on Air Protection and relevant by-laws, and is almost fully aligned with EU directives.²¹⁵ Although there has been little change in the legislative framework since the last assessment, the policy

framework has been modified. In particular, the Swedish Environmental Protection Agency's IMPAQ Programme²¹⁶ (2017-2021) is being conducted to build capacities of the key government institutions in BiH to manage air quality, improve air quality data collection, and consequently enhance air quality throughout the economy. The project is run by a steering committee that includes relevant institutions in BiH, with MoFTER as the co-ordinating ministry. Monitoring of the IMPAQ programme is set to be conducted at the state level twice a year through steering committee meetings.

The entities are exclusively responsible for the adoption and implementation of regulations in the field of air protection. Several institutions at the entity and cantonal level are responsible for air quality management, but the lack of financial resources and institutional capacity impedes effective management in this area, although training courses have been conducted to build capacity. Horizontal co-ordination is ensured through the inter-entity body and the main vertical co-ordination tool is the Environment Partnership Programme for Accession (EPPA) Air Quality Working Group.²¹⁷

Air pollution monitoring in Bosnia and Herzegovina is operated at the entity level, the cantonal level, by public health institutes and by companies. In the FBiH and RS, hydrometeorological institutes are responsible for the verification of air quality data and reporting. Although the air monitoring system has improved over the last ten years, it is still insufficient for a well-functioning economy-wide air monitoring regime. Monitoring is not co-ordinated and is undertaken according to different methodologies in both entities,²¹⁸ which results in a lack of air quality data available for the entire economy. This is aggravated by the low number of monitored locations (ten), which mainly cover urban areas (UNECE, 2018^[181]).

When limit values and the alarm threshold are exceeded in RS, the competent authority informs the public and takes the necessary ad hoc measures. Immediate action is also undertaken in the FBiH. As stipulated in cantonal intervention plans, cantonal authorities conduct ad hoc measures depending on the type of air pollutant exceeded – PM, SO_x, nitrogen oxide (NO_x), etc. Information on air quality is promptly made available via the websites of the hydrometeorological institutes of FBiH and RS, and distributed via radio and television.

Around 88% of the BiH population has access to a piped **water supply**, and around of one-third of the population in each entity is covered by **the sewerage system** (33% in the FBiH and 36% in RS in 2015) (UNECE, 2018^[181]). The main issues regarding water supply and sanitation relate to outdated infrastructure that causes significant water losses (usually more than 50% or even 70% in exceptional cases), infrastructure made up of hazardous material such as asbestos, which requires specific attention in rehabilitation works, and the overall lack of wastewater treatment plants (WWTPs) (in 2015 only 3% of the population in the FBiH and 5% in RS were connected to a WWTP, with no WWTP in the Brčko District) (Eurostat, 2018^[188]).

No major changes have been recorded regarding legislative and policy frameworks in this area since the last CO assessment, and it remains relatively undeveloped.

The main sources of investment in infrastructure are the state budget in the RS. Current water service fees do not seem sufficient to cover operational and maintenance costs and necessary investments to renew and enhance the water supply assets. Prices set by local government units and applied by the Public Utilities Cooperation (PUC) are based on social criteria, with little opportunity for the PUC to ensure the reimbursement of service costs through its operating revenue, and thus the viability of the business. The state does not have defined criteria for determining investments, which means that investments in water supply infrastructure are generally ad hoc. In the FBiH, water supply and sanitation infrastructure is funded by local budgets, cantonal budgets, donations, loans by international financial institutions, etc. The water supply and sanitation service is funded by water tariffs and local budgets.

Regarding investments in the updated water infrastructure, the Water and Sanitation Infrastructure Project (WATSAN) has been implemented in the FBiH and the RS. Overall objectives of the WATSAN project (to be finalised by the end of 2021) relate to improving the current living conditions of the population, securing adequate hygienic conditions in the area of water supply and sanitation, and implementation of

environmental protection measures in line with the obligations of EU accession and harmonisation with EU legislation, particularly the Water Framework Directive, the Drinking Water Directive and the Urban Waste Water Directive. Very little has been done to decrease water losses in the system, although this issue has been recognised by the government. Some additional investments in wastewater treatment plants were planned at the time of drafting, but did not consider contaminants of emerging concern (e.g. micro plastics).

Industrial waste management legislative and policy frameworks have not changed since the last assessment – the same policies apply to municipal and industrial waste management in RS (Waste Management Strategy 2017-2026 and a Waste Management Plan 2019-2029). There are no similar strategies in the FBiH (as mentioned the draft Environmental Protection Strategy 2020-2030 should cover these aspects).

In the FBiH, the Ministry of Environment and Tourism and the Environment Protection Fund regulate waste management, but they both lack the financial resources to effectively conduct their role. In RS, several institutions regulate this area.²¹⁹ Co-ordination and capacity building activities are largely lacking in both entities, although some indirect activities in this regard have been recorded as part of the EU's EPPA programme.

In RS there is a system of prior regulations and/or specific authorisation for the storage and handling of substances endangering or potentially endangering waters, in accordance with the Law on Chemicals and the Law on Biocides. There is also an official register of chemicals on the market – all imported chemicals need to be registered in accordance with the laws and regulations related to the management of chemicals. There are classification, packaging and labelling rules for chemicals (for both substances and mixtures), and the Ministry of Health and Social Welfare of the RS keeps the register of chemicals where all "new" chemical substances are identified and noted.

The Pollutant Release and Transfer Register (PRTR) system has been established in both the FBiH and RS but is still not fully operational. In particular, the obligation to report to the economy-wide PRTR, enabling public access to and integration of collected data, and the transmission of data to EU institutions are still lacking. Regarding managing and controlling industrial risks and accidents, BiH is not aligned with the EU directive on the control of major-accident hazards involving dangerous substances (Seveso III) (European Commission, 2020^[39]). There are no hazardous waste disposal facilities and hazardous waste is exported for final treatment.

Regarding soil protection and provisions for the identification and management of contaminated sites, there is no policy and legislative basis for soil protection in RS and the FBiH, and no soil monitoring system in BiH.

The way forward for environment policy

Although there have been some improvements since the last assessment cycle, further efforts are needed in several areas, mostly regarding implementation. The priorities are as follows:

- **Improve the wastewater system** by:
 - Replacing the outdated water and sanitation infrastructure, especially those made from toxic materials such as asbestos. Although there have been some advances in this regard, such as through the WATSAN project, efforts need to be stepped up as BiH is one of the WB economies facing the greatest level of water losses (up to 70%).
 - Increase the number of wastewater treatment plants. Despite some newly constructed WWTPs, most wastewater in BiH ends up in the rivers untreated, resulting in high pollution levels. In particular, a very small number of the population are connected to WWTPs as there are so few in BiH. New investment in WWTPs is therefore needed, preferably financed from the domestic budget and water tariffs and complemented by donor funds.

- Apply the water-user and polluter-pays principles for all water users and dischargers, paying attention to the vulnerable social groups in the economy, and ensure regular maintenance of the existing water supply and sanitation network.
- **Enhance air quality by reducing emissions from the transport sector, industry and domestic heating.** As highlighted above, these three sectors represent the main sources of air pollution in Bosnia and Herzegovina. The per capita mortality rate in BiH attributed to household and ambient air pollution is 79.8 per 100 000 inhabitants, which is one of the highest rates in Europe (World Bank, 2016^[189]). More effort is therefore needed, such as the following:
 - Investment in the reconstruction and insulation of residential buildings and private houses to improve their energy efficiency. Effective financial mechanisms, for example through subsidised loans from the banking system to improve domestic heating systems (moving from the use of firewood or coal, which is currently much cheaper than other sources) and overall energy efficiency. Seeking financial support from the international donor community is recommended.
 - Measures to prevent air emissions from industry, such as those described in the EU Best Available Technique Reference Documents (BREFs) (Box 21.16) need to be more regularly included in the environmental permits for industrial facilities in Bosnia and Herzegovina.
 - Introduction of economic incentives to promote a shift to cleaner and newer vehicles, such as the "feebate" system for new cars introduced in France in 2008, which imposes a tax on the buyer if the CO₂ emissions of the vehicle exceed a certain threshold and allocates bonuses if they are below a certain level. Supporting local governments in improving their public transport system, in particular by promoting the use of clean and energy efficient transport modes. Encouraging the use of other transportation means, such as bicycles for shorter distances, followed by the construction of an appropriate cycling infrastructure (Manea et al., 2019^[190]).

Box 21.16. EU Best Available Technique Reference Documents (BREFs)

The BREFs are a series of reference documents covering, as far as practicable, the industrial activities listed in Annex 1 of the EU's integrated pollution prevention and control (IPPC) directive. The BREFs provide descriptions of a range of industrial processes and, for example, their respective operating conditions and emission rates. Member States are required to consider these documents when determining the best available techniques for industrial activities generally or in specific cases. They also serve as a good basis for potential candidates.

The BREFs were developed to exchange information between industrial sectors and NGOs in different Member States and the European Integrated Pollution Prevention and Control Bureau.

The documents cover:

- Common Waste Gas Treatment in the Chemical Sector
- Emissions from Storage
- Ferrous Metals Processing Industry
- Industrial Cooling Systems
- Large Combustion Plants
- Refining of Mineral Oil and Gas
- Waste Incineration and Treatment

Source: (EEA, n.d.^[191]), *EU Best Available Techniques reference documents (BREFs)*, <https://www.eea.europa.eu/themes/air/links/guidance-and-tools/eu-best-available-technology-reference>.

Agriculture policy (Dimension 14)

Introduction

Bosnia and Herzegovina's performance has been stable in the area of agriculture between 2018 and 2020 (Figure 21.1), with the economy achieving a score of 2.0 for the latest CO assessment. Some progress has been made; however, Bosnia and Herzegovina still scores low compared to other WB6 economies, falling below the WB6 region averages in all sub-dimensions, particularly the sub-dimension on agro-food system capacity (Table 21.25).

The rural infrastructure policy in Bosnia and Herzegovina has recently been updated, but budget allocations and utilisation remain limited. BiH's new Rural Development Strategy for 2018-2021 prioritises irrigation infrastructure, and the World Bank project supporting irrigation development has significantly increased the capacity of irrigation infrastructure.

However, BiH has made little progress in harmonising regulations on agricultural registers, the parcel identification system, the common market organisation and the accreditation of a payment agency, in line with the EU's Common Agricultural Policy (CAP) and other policies.

Finally, while BiH has made progress in harmonising its sanitary and phytosanitary (SPS) procedures with EU regulations, implementation of legislation on SPS measures is limited and varies between economic sectors.

Table 21.25. Bosnia and Herzegovina's scores for agriculture policy

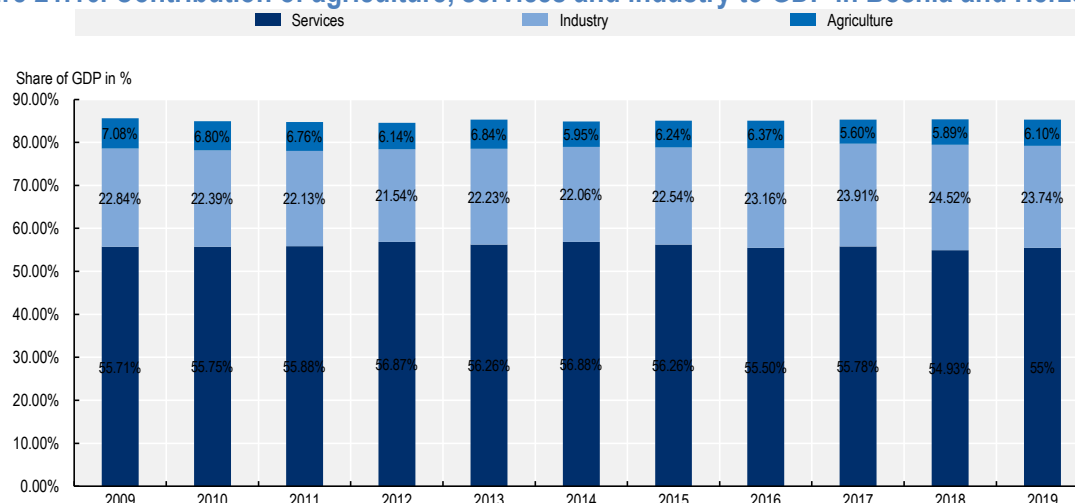
Dimension	Sub-dimensions	Score	WB6 average
Agriculture policy dimension	Sub-dimension 14.1: Agro-food system capacity	1.5	2.8
	Sub-dimension 14.2: Agro-food system regulation	2.3	2.9
	Sub-dimension 14.3: Agriculture support system	2.1	2.7
	Sub-dimension 14.4: Agricultural innovation system	2.0	2.6
Bosnia and Herzegovina's overall score		2.0	2.7

State of play and key developments

The territory of Bosnia and Herzegovina measures 51 209 km² (5 120 900 hectares, ha), 50.4% of which is agriculture land and 48.3% forest land. Total arable land is 2.2 million ha, (MoFTER, 2018^[192]) or 62% of all agricultural land and 30.95% of total land. Although the largest part of agricultural land, in particular arable land, is privately owned, its distribution among around 350 000 rural households makes the land highly fragmented, which negatively impacts agricultural productivity.

The structure of sowing areas has remained unchanged for years, dominated by cereals with a share of 58%, fodder crops at 26%, vegetables at 14% and industrial crops at 2%. Fruit production in BiH is represented by the production of plums, apples and pears, with a strong expansion in the production of raspberries and strawberries in recent years. Bosnia and Herzegovina's dominant portion of meadows and pastures allows for high cattle breeding, which is currently at a moderate level but with a solid basis for further development.

More than half of the total population (3.5 million) live rurally. In 2018, 15.4% of households listed agriculture and fishery as their main field of activity (Figure 21.16). Agriculture is an important pillar of the economy of Bosnia and Herzegovina, both in terms of its contribution to GDP and overall employment. While the contribution of agriculture to GDP in 2020 was 6.1%, 18% of BiH's workforce were employed in this sector, making it the third-most important employment sector, after services and industry.

Figure 21.16. Contribution of agriculture, services and industry to GDP in Bosnia and Herzegovina

Source: (Agency for Statistics of Bosnia and Herzegovina, 2020^[193]), *Agriculture statistics*, <http://www.bhas.gov.ba/Calendar/Category/23>.

As displayed in Table 21.26, Agriculture represents 2% of total exports and 3.8% of imports in BiH. However, agriculture exports have been decreasing over the last four years, and agricultural imports have begun to decrease more recently due to increased substitution with domestic production.

Table 21.26. Value of exports and imports of the agriculture, forestry and fisheries sector (2016-19)

	Exports				Imports			
	2016	2017	2018	2019	2016	2017	2018	2019
Total (million EUR)	4.815	5.652	6.084	5.876	8.262	9.298	9.854	9.969
Agriculture, forestry and fisheries (million EUR)	1.42	1.46	1.29	1.18	3.89	4.21	3.82	3.85
Percentage share of agriculture, forestry and fisheries	2.96%	2.59%	2.13%	2.02%	4.72%	4.53%	3.88%	3.86%

Source: (Agency for Statistics of Bosnia and Herzegovina, 2020^[193]), *Agriculture statistics*, <http://www.bhas.gov.ba/Calendar/Category/23>.

The potential of agricultural production in BiH is reflected in favourable agro-climatic conditions, preserved agricultural land and a large number of autochthonous varieties. However, agricultural production in BiH still faces low productivity, unfavourable structure and farm sizes, insufficient and poor technological equipment, and high dependence on imports of agriculture inputs, equipment and agricultural mechanisation.

Sub-dimension 14.1: Agro-food system capacity

Rural infrastructure policy and strategies in Bosnia and Herzegovina have been updated since the last CO assessment and provide comprehensive priorities; however, implementation is uneven across the entities. MoFTER is responsible for the co-ordination of agricultural policy creation at the state level. Its jurisdiction is to define the framework of policies in co-operation with the competent institutions of the entities and the Brčko District. The ministries of the entities and the Brčko District are responsible for the management and implementation of policies, programmes and measures in their respective territories.

Rural infrastructure policy in BiH is primarily based on the Strategic Plan for Rural Development of Bosnia and Herzegovina (2018-2021), (MoFTER, 2018^[192]) which was prepared by MoFTER in close co-operation with relevant ministries from the entities in a participatory process that involved all relevant stakeholders. The strategic plan was drafted and then widely discussed in several public debates and through the online platform for consultations (e-consultation.gov.ba). A total of 133 representatives from the public administration, businesses and the civil sector participated in the public debates. In 2019,

MoFTER, in collaboration with relevant institutions at the entity level, began activities for implementation monitoring.

The strategic plan envisages support for road infrastructure, field roads, anti-hail protection, water supply, Internet, radio and television signal, electricity supply, and infrastructure for waste management.²²⁰ There is a provisional budget for the objectives at the state level, but implementation mechanisms are decided at the entity level.²²¹

The total amount dedicated to rural infrastructure was less than EUR 2 million, out of which EUR 1.28 million is allocated to RS. RS has supported the installation of an anti-hail security system, a priority measure of the strategy, at a cost of EUR 31 000, while the Brčko District spent EUR 63 000 on the same measure and an additional EUR 72 500 on the construction and repair of field roads. The Ministry of Agriculture of the FBiH has made no expenditure on rural infrastructure during this period.²²²

Since 2013, the network of roads in BiH has increased by 18.7% to 10 758 km in 2018, local roads have increased by 1 008 km to 4 787 km, and regional roads have increased 444 km to 5 173. Motorways account for 198 km of the road network. In 2019, 76.9% of households in urban areas had an Internet connection, while 68.3% of households in rural areas maintained a connection, a 4% increase from 2018 and a 7% increase from 2017 (Agency for Statistics of Bosnia and Herzegovina, 2019^[194]).

The potential of **irrigation infrastructure** in BiH is high, but the current system is limited, covering around 3 600 ha in FBiH and around 10 000 ha in RS. There are no monitoring and evaluation systems. Most investment in new irrigation systems and the rehabilitation of existing systems have been part of the Irrigation Development Project in Bosnia and Herzegovina 2013-2020 and funded by a World Bank loan of USD 40 million. The project supported new irrigation infrastructure investment, including the preparation of technical documentation and construction of an irrigation system in around 4 784 ha of land, as well as the preparation of technical documentation (preliminary or main designs) for new irrigation systems in around 20 000 ha of land. Support for the construction of irrigation and drainage infrastructure was also identified as a priority for development in the Strategic Plan for Rural Development.

According to a 2018 report on the Strategic Plan for Rural Development, the Ministry of Agriculture, Forestry and Water Economy of RS financed the procurement of 483 pumps, typhoons and pool tanks totalling around EUR 46 250. In the same period, the Brčko District's agriculture authority approved and provided small incentives for five applications. The FBiH Ministry of Agriculture, Water Economy and Forestry has not approved any applications regarding irrigation. Entities and the Brčko District should report to the BiH parliament annually as part of the framework report of the strategic plan, but there are currently no mechanisms for monitoring established at any entity level.

Agricultural education policies have been updated and enhanced, but the number of students enrolled in agriculture programmes has been slightly decreasing. The Constitution of BiH states that the education sector is regulated by entities, cantons and districts. RS has the Ministry of Education and Culture within its centralised government, but the FBiH has a decentralised government consisting of 10 cantons, each with its own ministry of education. The Brčko District has a centralised government with a single Department of Education. There is a Ministry of Education at the state level, but it primarily plays a co-ordination role over the 12 institutions responsible for education in BiH.

The agriculture education framework in BiH is based on the Strategy of Development of Science in BiH 2017-2020²²³ and the Strategic Plan for Rural Development.²²⁴ The actions foreseen by the plan are implemented in a very heterogeneous way in the different entities. As part of Measure 3 of the plan, which involves support for vocational training, knowledge development, and providing advice and information, the Ministry of Agriculture in RS approved five project applications for a total of EUR 260 000 in 2018, while FBiH and the Brčko District recorded no activity on the implementation of agriculture education that year.

Secondary education is represented by both general and vocational secondary education schools in BiH, with only vocational secondary education providing agriculture curricula. In FBiH, the number of students enrolled in the first year of agricultural secondary education slightly decreased from 973 (1.4% of the total

number of students) in 2018/19 to 951 (1.3% of the total number of students) in 2019/20. The number of students who completed education in the field of agriculture and livestock breeding also slightly decreased, from 403 students in 2018 to 368 students in 2019 (Bureau of Statistics FBiH, 2020^[195]). In RS, the numbers are higher but have also slightly decreased. The number of enrolled students in the field of agriculture, forestry and veterinary in secondary education decreased from 2 158 (5.6% of the total number of students) in 2018/19 to 1 948 (5.2% of the total number of students) in 2019/20 (Bureau of Statistics Republika Srpska, 2020^[196]).

Differences between the entities are less pronounced at the university level. Public university education in the area of agriculture is represented by eight faculties throughout the economy.²²⁵ In RS, 2 371 students enrolled in a first year course in the field of agriculture, forestry, fishery and veterinary at the university level in 2019/20 (Bureau of Statistics Republika Srpska, 2020^[196]). Meanwhile, 1 830 students enrolled in a course in the field of agriculture, forestry and fishery at the university level in FBiH in 2019/20, or 3.6% of the total number of enrolled students (Bureau of Statistics FBiH, 2020^[195]).

Sub-Dimension 14.2: Agro-food system regulation

Several **regulations on natural resources** in RS have been updated in the last two years, but land consolidation remains weak for all entities in Bosnia and Herzegovina. As the regulation of natural resources is the responsibility of the entities in BiH, both RS and the FBiH have specific laws in the area of natural resources management. The Law on Waters in RS was last amended in 2012 and regulates the protection, use and management of water, while the Law on Water in FBiH was adopted in 2006. Regulations in RS improved with amendments to the Law on Agriculture Land in 2019 regarding soil and land degradation and additional measures for soil protection. The Law on Agriculture Land in FBiH was adopted in June 2009. To reform agricultural policy in the FBiH, a mid-term strategy for development of the agricultural sector in the FBiH (2015-2019) was developed, and the FBiH government adopted one decree in 2019 (no. 1389/2019) and one in 2021 (no. 267/2021) to extend the implementation period of the strategy until the end of 2020 and 2021, respectively.

The Strategic Plan for Rural Development²²⁶ provides an in-depth interpretation of the state of land, climate and water in BiH. Regarding agro-ecology it identifies land degradation, waste management, agro-ecological policy, and protection of the biodiversity of animal and plant genetic resources as priorities for improvement. Water management in the FBiH is based on the FBiH Water Management Strategy 2010-2022, which defines the objectives for sustainable water management and the necessary activities to be implemented as part of the action plan. In 2020, RS improved its co-operation and co-ordination between the water management and agriculture departments and irrigation users through the establishment of a new irrigation department within the public agency, Vode Srpske.

While both entities have defined the land consolidation process and provided a legal framework for its implementation, land consolidation remains an unresolved issue in BiH. There has been little progress in this area, and capacity and budget support are limited. There is also a lack of knowledge and awareness among farmers.

Regulations on products in Bosnia and Herzegovina are generally in line with international standards, and the economy made progress in updating laws in 2019. Regulations on products fall under the auspices of the BiH Administration for Plant Health Protection (PHPO), a department of MoFTER. The PHPO is the central authority for plant health protection in BiH and for the exchange of information with official international authorities. The PHPO performs administrative and related technical tasks in line with the Law on Plant Health Protection and other substantive regulations that make up the legal framework. The PHPO co-operates, informs and exchanges information with official international plant protection authorities and organisations. Based on substantive regulations, phytosanitary competences are shared between the PHPO and the entities. The PHPO, in collaboration with competent inspection bodies of the entities, works on a co-ordinated multi-annual control programme to ensure compliance with maximum

residue levels of pesticides, and to assess consumer exposure to pesticide residue in and on food of plant and animal origin.

Regulations on products are based on the Law on Plant Health Protection, which was harmonised with the International Plant Protection Convention in 2015. Also relevant are the Law on Agricultural Seeds and Propagating Material, the Law on Protection of New Plant Varieties, the Law on Mineral Fertilisers, and the Law on Phyto-pharmaceutical Products. Regulations on pesticides are defined by Rulebook on the Maximum Level of Pesticides Residues in and on Food and Feed of Plant and Animal, last updated in 2019. The rulebook determines the maximum residue level of pesticides in and on food and feed for animals of plant and animal origin for insurance purposes, in accordance with general principles prescribed by the Law on Food and regulations at the entity level that refer to pesticide residue.

The Law on Mineral Fertilisers regulates conditions for the composition, quality and marking of mineral fertilisers placed in the market; their use; and supervision of the implementation of this law and by-laws adopted based on this law, and other regulations adopted for the application of this law. The list of active substances permitted for use in plant protection products is updated continuously.

Sub-dimension 14.3: Agricultural support system

The agriculture policy framework has been updated recently at all entity levels; however, BiH has still not implemented mechanisms that would ensure its eligibility for EU Instrument for Pre-accession Assistance for Rural Development (IPARD) funding. The legislative framework for measures to support agriculture and rural development at the state level consist of the Law on Agriculture and the Law on Food and Rural Development of BiH. In RS, the framework is made up of the Law on Agriculture and the Law on the Provision and Directing of Funds for the Promotion of Agriculture and Rural Development, and in FBiH it is the Law on Agriculture and the Law on Financial Support in Agriculture and Rural Development.

The agriculture policy framework of Bosnia and Herzegovina at the state level is based on the Strategic Plan for Rural Development.²²⁷ At the entity level, the framework consists of the Mid-term Development Strategy of the Agricultural Sector in the FBiH (2015-2019) and the Strategic Plan for Development of Agriculture and Rural Areas in RS (2016-2020).

Harmonisation with the EU's CAP is a priority for all strategies related to agriculture policy at all levels in BiH. The Office for Harmonisation and Co-ordination of Payment Systems in Agriculture within MoFTER is in charge of the harmonisation of payment systems in agriculture and rural development in BiH, as well as the gradual harmonisation of the payment system with the EU system. The office is also responsible for developing a legal framework to establish and develop institutional structures for the implementation of EU funds.

Budgetary support for agriculture in BiH is implemented at the level of entities and cantons. In FBiH, support is implemented based on the adopted programme of funds expenditure with allocation criteria for incentives for agriculture. In RS, financial support for agriculture is carried out in accordance with the adopted plan allocation of resources to support agriculture, all of which are adopted annually. Funding for agricultural policy is provided by state and entity budgets, as well as through EU and international projects. Bosnia and Herzegovina is not yet eligible for IPARD funding as the mechanisms for implementation are still not ready. According to MoFTER data, in 2019 approximately 70 000 producers were supported by available measures at the state level.

Domestic producer support instruments in Bosnia and Herzegovina are well structured as part of rural development strategies in both entities; however, there are no monitoring and evaluation mechanisms. Domestic producer support instruments are implemented at the entity level. In RS, support responsibilities fall under the Ministry of Agriculture, Forestry and Water Management, which adopts the Rulebook on Conditions for Incentives for the Development of Agriculture and Rural Areas annually. Domestic support instruments are laid out in the Strategic Plan of the Development of Agriculture and Rural Areas of RS (2016-2020), which includes support for current production,²²⁸ capital investments,²²⁹ rural development

and systemic support.²³⁰ The agriculture support budget for 2020 was EUR 37.5 million, implemented by the Agricultural Payment Agency of RS.

The legislative framework for domestic support measures in agriculture and rural development in the FBiH are regulated and implemented through the Law on Agriculture and the Law on Subsidies in Agriculture and Rural Development. Cantonal sectoral ministries also provide support. In the FBiH, agricultural support measures are based on the principles of the Mid-Term Strategy for the Development of the Agricultural Sector (2015-2019). In 2019, the cantons supported agriculture with more than BAM 22 million (EUR 11.09 million), an increase of 10% from 2018. Cantonal support accounts for 24.9% of the total FBiH budget for agriculture. Compared to 2018, the share of cantonal support in agriculture support measures has increased by 2.7%.

The 2020 budget of the FBiH for the support of agriculture was EUR 43.5 million. The FBiH government, as part of the Public Investment Programme (2020-2022), runs the Rural Development Programme worth EUR 104.5 million. Farmers are also eligible for International Fund for Agricultural Development grant funds and EU funds of over EUR 10 million. Part of the funds are directed towards investments to increase the competitiveness of agricultural products and reduce the large trade deficits in the sector. The implementation of agriculture support programmes is relatively high in both entities; however, there are no consistent data within annual monitoring reports on the outcomes of the programmes, and impact assessments are not conducted regularly at either the entity or state level.

Agricultural trade policy of Bosnia and Herzegovina is aligned with EU customs tariff nomenclature, and tariff rates benefit from regular reports and analyses on agriculture trade development. Trade policy in BiH remains under the auspices of the Council of Ministers, which annually adopts a decision on the Determination of the Customs Tariff in accordance with the Law on Customs Tariffs. BiH is a member of CEFTA and has ratified the Stabilisation and Association Agreement (SAA) and the European Free Trade Agreement (EFTA). BiH also maintains a free trade agreement with the Republic of Turkey. Bosnia and Herzegovina does not have export subsidies, export credit support, export duties or export prohibitions for agricultural commodities (crops and livestock). The customs tariff nomenclature of goods is aligned with the harmonised system and the combined nomenclature used by the EU.

Goods imported into Bosnia and Herzegovina and placed in free circulation are subject to payment of VAT at the rate of 17%. There are import quotas for agriculture products under the trade agreement between the EU and BiH, notably for cattle, swine, sheep, live animals and meat. Customs duties on all commodities imported into BiH are paid according to the value at rates of 0%, 5%, 10% and 15%. These rates apply to commodities originating from economies that have concluded an agreement with a “most favoured nation” clause with BiH, or from economies that apply the same clause on commodities originating in BiH. Upon accession of BiH to the WTO, most-favoured nation status will be granted to all WTO members, some alterations to tariff protection for agricultural products in BiH will then be expected, subject to negotiations.

Regulations on customs tariffs are adopted based on an analysis of the previous situation to make implementation as enforceable as possible. Although there is no exact assessment, transparency is guaranteed based on publicly available regulations and procedures, which are published on the MoFTER website. Annual reports are prepared, including the level of implementation of strategies, action plans and legislation. No impact assessments are conducted in the agriculture sector specifically, but various documents are regularly prepared that provide analysis, such as annual reports in the field of agriculture, food and rural development; analysis of the foreign trade of agricultural and food products of BiH; and analysis of the milk and dairy product market in BiH.

Agricultural tax policy in Bosnia and Herzegovina is relatively standardised across the entities; however, only a small number of agricultural products benefit from VAT exemptions. Tax policy falls under the remit of the Tax Authority of FBiH, the Tax Authority of RS and the Indirect Taxation Authority of BiH. Tax policy, including agricultural tax policy, is based on the Law on Value Added Tax, the Law on Tax Procedure and Tax Administration of RS, and the Law on Income Tax of FBiH, which is currently undergoing parliamentary approval.

Personal income tax in Bosnia and Herzegovina is 10%, with no exclusions for agriculture at the state or entity level. Social contributions depend on the entity.

Standard VAT in Bosnia and Herzegovina is 17%, but there is no VAT on the export of goods for agriculture in general. The exclusion of VAT for certain agricultural products depends on the entity and mostly cover machinery and the provision of agricultural inputs such as seeds and seedlings. Both entities can defer, which is done on annual basis by the governments of the respective entities based on analysis of the ministries of finance and agriculture.

The **sanitary and phytosanitary system** in Bosnia and Herzegovina is well organised with a clear division of responsibilities and strong alignment with EU regulations. The SPS system and measures are governed by the Law on Food and fall under the auspices of MoFTER and the Food Safety Agency of BiH (FSA), an independent administrative organisation established by the Decision on the Establishment of the Food Safety Agency of Bosnia and Herzegovina. The FSA provides scientific advice and scientific and technical assistance regarding the legislation and policies of BiH in all areas that have a direct or indirect impact on food and feed safety. It provides independent information on all issues within these areas and transmits risk information. The FSA collaborates with competent authorities to improve the effective connection between risk assessment, risk management and risk disclosure functions.

The FSA does not have its own inspection body, but inspections are carried out through the Veterinary Border Inspection and Inspections of the Veterinary Office of Bosnia and Herzegovina. The Veterinary Office is under the direct jurisdiction of MoFTER and works in accordance with the operative activities of entity veterinary services.

The FSA, in collaboration with competent inspection bodies, prepares a co-ordinated multi-annual control programme, funded by the state budget, to assess consumer exposure to pesticide residue in and on food of plant and animal origin. Food control laboratories in BiH are authorised by the entities to undertake their work, in accordance with EU regulation. The FSA, in co-operation with the competent bodies of the entities and the Brčko District, has initiated, prepared and proposed over 100 regulations adopted by the Council of Ministers of BiH since 2006.

The Plant Health Administration of Bosnia and Herzegovina is an administrative organisation within MoFTER responsible for phytosanitary measures. It was established by the Decision on Establishment of the Administration of Bosnia and Herzegovina for Plant Health Protection in 2014.

There is a strict division between legislative and executive authorities at all levels of governments, and no duplications of inspections. The system is well organised, and each institution in the system has designated contact points and officials responsible for the flow of information and the efficient handling of notices consistent with the assessed risks. The FSA generally proposes regulations in line with relevant EU legislation, prepares amendments according to EU legislation and aligns regulations through co-operation with the BiH Directorate for European Integration.

Sub-dimension 14.4: Agricultural innovation system

Bosnia and Herzegovina has enhanced its **agriculture research and innovation** legislation to some extent, but research and development remains limited. The government has increased its efforts to upgrade research and innovation policies and related activities through the preparation and adoption of the Strategy for the Development of Science and related action plan in 2010 for a five-year period. The strategy sets the basis for the future development of research in all areas. The programme was later extended to 2019 and its implementation is still under way. The government has also increased its use of funds under the EU Horizon 2020 Programme.

The Strategic Plan for Rural Development of Bosnia and Herzegovina (2018-2021) emphasises the need to increase institutional co-operation and improve partnerships between scientific research advisors and producers. The strategy calls for further support for the improvement of experimental educational and

development centres, the introduction of technological innovations in agriculture, the improvement of laboratories, and the preservation of indigenous breeds and strains of domestic animals.

The number of research projects and applications has increased in recent years in RS. In FBiH, there are limited data regarding research projects and applications, with two new laws regarding the funding of agro-innovation apparently in the preparation phase. These laws should define the use of funds in the field of innovation, scientific research and development.

Agriculture research and development remains an important area for further planning, support and organisation to provide expected results and improve the performance of the agriculture sector.

Agricultural extension services in BiH continue to lack administrative capacities and funding to improve advisory services, and impact assessments are still not conducted. Extension services in agriculture at the state level fall under the auspices of MoFTER, which is responsible for the co-ordination and guarantee of the quality of private and public rural development and agricultural advisory services. It is part of the support of the implementation of rural development and agricultural policies and programmes throughout BiH. Advisory services at the entity level are organised and implemented by all entities, benefitting predominantly small agricultural producers. The legislative framework for agricultural extension services is based on the Law on Agriculture and the Law on Agricultural Extension Services of FBiH. Both laws regulate the goals and approaches of agricultural extension activity, who can perform an extension activity, and how to organise extension services.

The Strategy for Rural Development of BiH emphasises the role and importance of improving the system for providing extension services in terms of strengthening human, material and technical capacities; improving the planning, programming and provision of advisory services; and improving breeding and selection work in animal husbandry.

Advisory services in BiH are free and mainly deal with agriculture production, processing and marketing (i.e. vegetables and fruit growing, animal husbandry, processing and quality of agro-food products, agro-economy). The BiH public agricultural extension service is strongly focused on production techniques, while farm management, markets and marketing, regional rural development and the promotion of producer organisations are only partially served.

Agricultural extension services in BiH are severely impacted by a lack of human resources, limited funding, a lack information sharing between advisory services and other stakeholders, and a lack of specialised research institutions. Private extension services are present on a small scale and only operate on a commercial basis by charging farmers for their services. Monitoring of implemented activities is undertaken through annual reports, but impact assessments for policies and programmes are not conducted. Currently, activities within the extension service are planned according to the needs of farmers, and the training of farmers is determined by the annual working plan of the extension service.

The way forward for agriculture policy

- **Increase investment and improve the implementation of rural infrastructure policy.** There is a continuous need to improve rural infrastructure and boost the use of current programmes and support schemes, especially in the FBiH.
- **Harmonise rural development programmes across the economy.** BiH needs to effectively implement the Strategic Plan for Rural Development (2018-2021) at all levels. The harmonisation of rural development programmes and support measures throughout the economy should be enhanced and the new strategic plan for 2021 should reflect the harmonised measures and approach to implementation.
- **Implement a common market organisation regulatory framework.** The finalisation of the registers of farms and agriculture cadastres needs to be implemented. Furthermore, statistics need to be more reliable and harmonised across entities.

- **Set up the institutional framework for IPARD funding.** BiH needs to make further efforts in the process of an integrated administration and control system as a prerequisite for IPARD funding, the land parcel identification system and the farm accountancy data network. Furthermore, strengthening administrative capacity at all levels of government, as well as the full functionality of the payment agency, should be a priority for further harmonisation with the CAP and the use of EU funds.
- **Speed up the process of the preparedness of domestic reference laboratories.** Further efforts to increase the accreditation of laboratory methods used in hygiene, veterinary and phytosanitary controls are needed. State reference laboratories would improve food and safety policy, thus increasing the competitiveness of the agriculture sector overall.

Tourism policy (Dimension 15)

Introduction

Table 21.27 shows Bosnia and Herzegovina's scores for the five sub-dimensions and compares them to the WB6 average. Bosnia and Herzegovina has a very complex tourism policy framework and responsibilities are highly fragmented between different administrative levels. In all five sub-dimensions, Bosnia and Herzegovina scores below the WB6 average, with the lowest scores in the region in the sub-dimensions of governance and co-operation, destination accessibility and tourism infrastructure (along with Kosovo), and tourism branding and marketing. Although limited, some progress has been made in the tourism policy framework since the 2018 CO assessment (Figure 21.1), mainly regarding the availability of a qualified workforce sub-dimension, driven solely by improvements in the VET framework for tourism. Moderate progress has been made in the destination accessibility and tourism infrastructure sub-dimension, driven by improvements regarding accommodation capacity and the quality of the tourism offer with the adoption of mandatory accommodation categorisation standards and the development of quality standards for other tourist products and destinations in Republika Srpska. Progress in all other sub-dimensions is relatively low.

Table 21.27. Bosnia and Herzegovina's scores for tourism policy

Dimension	Sub-dimension	Score	WB6 average
Tourism policy dimension	Sub-dimension 15.1: Governance and co-operation	1.3	2.3
	Sub-dimension 15.2: Destination accessibility and tourism infrastructure	1.5	2.2
	Sub-dimension 15.3: Availability of a qualified workforce	1.3	1.8
	Sub-dimension 15.4: Sustainable and competitive tourism	1.3	1.6
	Sub-dimension 15.5: Tourism branding and marketing	0.5	1.6
Bosnia and Herzegovina's overall score		1.2	2.0

State of play and key developments

The tourism industry in Bosnia and Herzegovina has been growing significantly over the last ten years, and BiH has the highest average annual growth of international tourist arrivals (14%) in the Western Balkan region. In 2019, the number of tourist arrivals reached 1.6 million (25.6% growth since 2017), and the number of tourist overnight stays was 3.4 million (25.9% growth since 2017). This is the result of increased foreign tourist visits (increase of nearly 30%) and foreign tourist overnight stays (increase of 26%) (Agency for Statistics of Bosnia and Herzegovina, 2020^[95]). In 2019, the direct and indirect contribution of tourism to GDP was 9.3% (USD 1.8 million), which is 6.85% higher than in 2017. Bosnia and Herzegovina reached the highest average receipt per arrival (USD 950) in the WB region in 2019. Tourism contributes 13% to total exports and directly creates 25 700 jobs (3.2% of total employment), contributing 9.6% to total employment (79 100 jobs) (WEF, 2019^[197]). Tourism is consequently becoming one of the most important sectors in the economy.

Although the tourism industry has significantly increased in recent years, BiH's share of international arrivals among the WB region was only 3.3% in 2019. According to the World Economic Forum's (WEF) Travel and Tourism Competitiveness Index 2019 (WEF, 2019^[197]), BiH has increased its ranking by eight places since 2017; however, it is the least competitive economy in the region, ranking 105th out of 140 economies in 2019. This indicates that the tourism policy framework in BiH is not competitive enough compared to its regional peers, and that the tourism sector faces several challenges that need to be addressed.

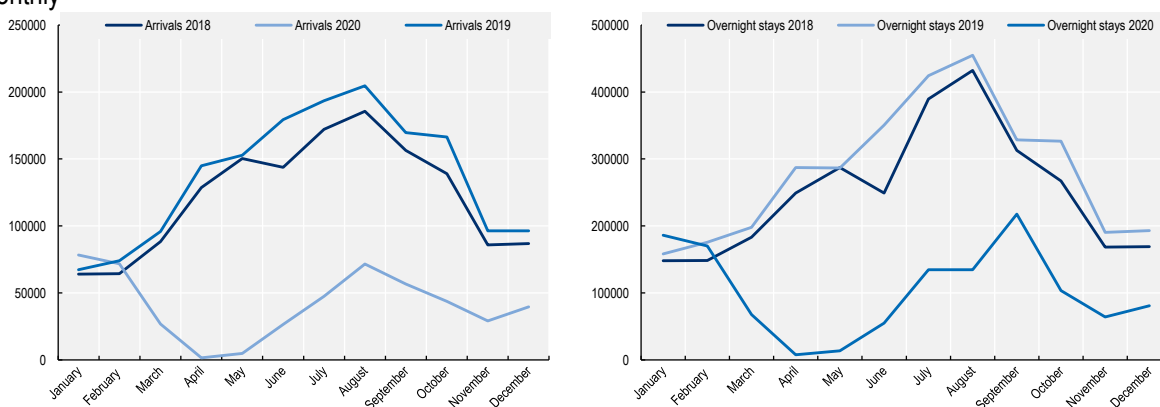
The main challenges in the tourism industry are the low visibility of BiH as a tourist destination internationally and the low quality of tourist products, services and infrastructure. Moreover, finding qualified workers is pressured by high seasonality (BiH ranks 105th on the WEF Index for the indicator

“ease of finding skilled workforce”), which affects the quality of tourist products and services (WEF, 2019^[197]). Nevertheless, BiH’s rich cultural and natural heritage is an opportunity to develop unique and authentic touristic products, thus increasing its competitiveness in the global market and bringing economic and social benefits to local populations. To lower seasonality one solution would be to disperse the tourist offer to rural areas and less known tourist destinations and prolong tourist stays in the destinations. In the short term, this will also help the tourism sector recover from the COVID-19 pandemic, adapt to new circumstances and attract visitors to BiH.

The COVID-19 pandemic stalled the development of the tourism industry in 2020 with the implementation of measures to limit the spread of the virus (Figure 21.17). Tourist arrival numbers were promising at the beginning of 2020 but started to drastically decrease from March in BiH and globally. The easing of restrictions and the lifting of lockdown led to slow signs of recovery in June 2020 that lasted until September 2020 when the second wave of the pandemic occurred. Accordingly, the consequences of the pandemic have been significant.

Figure 21.17. Tourist arrivals and overnight stays Bosnia and Herzegovina (2018-20)

Monthly



Source: (Agency for Statistics of Bosnia and Herzegovina, 2020^[95]), *Tourism statistics*, <http://www.bhas.ba/Calendar/Category/19>.

StatLink  <https://doi.org/10.1787/888934255627>

The share of foreign tourists decreased from 75% in 2019 to 44% in 2020 due to the pandemic. According to the Directorate of Civil Aviation of BiH, airports in BiH recorded a decline in passenger traffic of 71% between January and September 2020 (400 000 passengers compared to 1.3 million in the same period in 2019). Sarajevo Airport had 78% fewer passengers than the previous year, Mostar Airport had a 96% decrease, Banja Luka Airport had a 62% decrease and Tuzla Airport had a 59% decrease.

Bosnia and Herzegovina followed instructions from the UN World Tourism Organization (UNWTO) and entity governments took measures to support the tourism sector. Notably, in RS a compensation fund was established to pay minimum wages, taxes and contributions for workers in sectors affected by the pandemic. A plan to issue 50 000 tourist vouchers to stimulate domestic tourist consumption was also established. In the FBiH, a similar compensation fund was established, along with a specific allocation of BAM 2.5 million (~EUR 1.25 million) for the tourism sector.

In October 2020, guidelines and protocols for health care regarding COVID-19 in tourism in BiH were issued, and BiH received the “safe travel country” label from the World Tourism and Travel Council (Ministry of Environment and Tourism FBiH, 2020^[198]). The guidelines set out the principles to be followed in carrying out tourism activities during the COVID-19 pandemic, as well as protocols for tourism and hospitality businesses. The purpose of the guidelines is to protect tourists and the workforce, while respecting health regulations and measures to limit physical contact (Ministry of Environment and Tourism FBiH, 2020^[198]), and to reinforce the trust of tourists to travel to BiH.

In November 2020, the FBiH government allocated BAM 6 million (~EUR 3 million) to Sarajevo, Tuzla, Mostar and Bihać airports to support their liquidity and maintain the employment of airport workers following reduced activity as a consequence of the pandemic. In December 2020, the FBiH government allocated a BAM 30 million (~EUR 15 million) fund to organisations in the tourism and hospitality sectors. The assistance for businesses was intended for salaries and business expenses from 1 July to 31 December 2020 (Ministry of Environment and Tourism FBiH, 2020^[199]).

Sub-dimension 15.1: Governance and co-operation

In Bosnia and Herzegovina, the multi-layered constitutional and political system demands a specific **tourism governance structure and institutional set up**. At the state level, the Tourism Department within MoFTER is in charge of co-ordinating activities and harmonising plans with the entities' authorities and international institutions in charge of tourism. At the entity level, the FBiH Ministry of Environment and Tourism, the Ministry of Trade and Tourism of RS and the Brčko District's Department of Economic Development, Sports and Culture are responsible for the legislative framework, the adoption of tourism strategies and the development of tourism in general. In the FBiH, a draft Tourism Strategy for 2008-2018 was prepared but never adopted, and in RS a new Tourism Strategy is being prepared after the strategy adopted for the period 2010-2020 expired. The entities have adopted their own governance structure and institutional set up, which is different in each entity. The tourism governance framework in RS is similar to most commonly established governance frameworks in other economies,²³¹ whereas the governance structure and institutional set up in the FBiH is more complex, with tourism development management divided between the Ministry of Environment and Tourism and cantons' ministries responsible for tourism. Cantons have also adopted their own legislation and regulations as the FBiH Law on Tourism was cancelled in 2014 and a new one has not yet been adopted. The key challenge for the FBiH is to establish a legislative and regulatory framework at the entity level to improve the governance framework and harmonise tourism development at the local level.

In 2007, the Tourism Working Group was established by MoFTER to co-ordinate tourism activities among the entities and the Brčko District. Its main activities are to regulate the tourism sector in BiH in accordance with EU directives and standards, to improve the organisation and regulations in order to harmonise activities and establish a single economic space in BiH, and to establish an effective regulatory framework in the tourism sector by strengthening the competencies of existing institutions and identifying the competencies of tourism associations. Members of the working group are representatives of the ministries responsible for tourism in both entities and the Brčko District, and of the Foreign Trade Chamber of BiH. The complex governance structure and institutional set up require considerably more human and financial resources in comparison with other economies in the region.

Due to the complex governance structure, **partnership with stakeholders** at the state level is relatively weak. Except for the Foreign Trade Chamber of BiH, no other private stakeholders are involved in the established Tourism Working Group. The private sector is involved in different working groups in both entities and meetings are organised with the ministries; however, private sector stakeholders report that more active co-operation and dialogue is still needed, especially when preparing new legislation and regulations as no consultations with the private sector are currently required. There has been no monitoring or evaluation to assess the level of actual public-private co-operation at the destination level. However, recently implemented donor projects²³² have contributed to the improvement of public-private co-operation at the destination level by providing support for the development of tourism clusters. The experiences of these clusters are a good basis for building public private co-operation in the other main tourist destinations in the economy.

The vertical co-operation and co-ordination framework from the state to the local/destination level is relatively weak. Although the ministries of both entities co-operate with their sub-entities (the cantons in the FBiH and local tourist organisations in RS), there is no formal co-operation body. The tourism governance structure at the local level still needs to be improved, particularly as many municipalities lack

the financial resources and qualified staff to manage tourism development. Moreover, local stakeholders report that the private sector's readiness to co-operate at the local level and its understanding of the benefits of co-operation at the destination level are weak, which hinders the successful implementation of tourism policy measures.

BiH has established a **tourism data collection system** as a baseline for statistics on tourism. The Agency for Statistics of Bosnia and Herzegovina is responsible for the production and development of statistics on tourism in accordance with the Law on Statistics.²³³ Currently, the Agency for Statistics is producing data on accommodation statistics, and in 2019 it introduced a new survey on demand-side tourism. RS and the FBiH also have entity statistical institutions, namely the RS Institute of Statistics and the FBiH Institute for Statistics. However, since 2017 progress on improving tourism data collection has been limited. The key challenge is the lack of electronic data collection methods (e-questionnaires, web surveys) that would contribute to the higher reliability of collected tourism data. Positively, the development of Tourism Satellite Accounts (TSA) is planned as part of the IPA 2019 programme (European Commission, 2020^[200]) and will serve as a good start for the overall improvement of the tourism data collection system.

Sub-dimension 15.2: Destination accessibility and tourism infrastructure

Since 2017, BiH has not improved its **connectivity framework** as no further reductions of visa requirements nor any other measures to ease border crossings have been introduced.

There are **accommodation capacity and quality assurance frameworks** at both entity levels that foster availability and quality improvements of all types of accommodation, and certain policy measures have been implemented. These frameworks, which are in line with international standards, have facilitated investments in high-quality tourism accommodation facilities by ensuring the consistent quality of accommodation. The categorisation of accommodation is now mandatory for all types of accommodation, registers of accommodation facilities have been established in both entities and monitoring is conducted regularly. RS has quality standards for tourist destinations and municipalities in addition to accommodation quality standards. In 2019, in co-operation with Serbia and Montenegro, bike friendly standards for accommodation facilities and other tourist service providers were also developed. Despite this progress, the regular monitoring and evaluation of policy measures is still lacking, and would facilitate further investment in accommodation facilities.

In BiH, the **tourist information system** is established at the entity level. In both entities, information is provided via websites and mobile applications, road signage and in tourist information centres. Information is mainly available in English and local languages and is regularly updated. No major progress has been reported since 2017 in this field. RS has a well-established tourism information system, managed and co-ordinated by the Tourist Organisation of Republika Srpska and implemented by local tourist organisations. In the FBiH, tourist information is provided by the tourist boards of destinations and is not co-ordinated at the entity level. The absence of a tourist organisation at the FBiH level results in a lack of management and co-ordination of the tourism information system. Moreover, the absence of a tourist organisation at the state level hinders the creation of a comprehensive tourism information system and the visibility of BiH as a tourist destination in the global market.

Sub-dimension 15.3: Availability of a qualified workforce

BiH has a complex education system, with competences split at the entity level. In the FBiH, education is under the jurisdiction of the cantons. According to information provided by the authorities, no progress has been made since 2017 in the development of the **skills supply framework** nor in the **tourism VET and higher education framework**. Moreover, BiH worsened its position in the 2019 WEF Competitiveness Index: it went down six places in the “human resources and labour market” category (ranking 106th out of 140), with its worst rankings in the categories of “labour market” (134th), “ease of hiring foreign labour” (132nd), “ease of finding skilled employees” (130th), and “extent of staff training” (133rd) (WEF, 2019^[201]).

Improving the human resources development framework thus remains one of the main challenges for the development of tourism in the economy.

In 2020, there were 22 secondary/vocational schools in RS and 13 in FBiH with tourism and hospitality courses. Secondary/vocational schools (three- or four-year programmes) have been educating students in recent decades in the following professions: waiter, chef, hospitality technicians, culinary technicians and tourism technicians. All programmes involve mandatory practical training, which is organised in co-operation with the private sector. In 2018, curricula were updated with the development of new occupational qualification standards using donor support. However, private stakeholders reported that they are not actively involved in the modernisation of curricula, especially regarding subjects increasingly relevant to the tourism industry (such as ICT, digital marketing, foreign languages). Moreover, curricula are reported to be outdated and too general, which leads to the insufficient practical skills of secondary school graduates. Private stakeholders also noted that vocational schools are not perceived as prestigious and therefore do not attract the best students. This is evident in the decreasing number of students in VET programmes in RS (from 2 887 in 2016 to 2 537 in 2019). The lack of adequate equipment in VET schools also hinders the quality of the teaching process.

Bosnia and Herzegovina does not have a specific two-year long **higher education framework** dedicated to tourism. However, the study of tourism is included in higher education programmes at universities. At the university level, ten high schools or universities (eight in the FBiH and two in RS) provide tourism studies, hotel management, catering and tourism marketing courses. Nevertheless, Bosnia and Herzegovina should also consider establishing a two-year long higher education framework in tourism that is focused on training middle management staff in the tourism industry. These programmes should be more practice-oriented than programmes at universities, and include obligatory practical training.

Sub-dimension 15.4: Sustainable and competitive tourism

Although BiH is making efforts to include its rich cultural and natural heritage when developing tourism, a **natural and cultural heritage enhancement framework in tourism** is still in the early stage of development. Natural and cultural heritage is included in several strategic documents at the state and entity level, such as in the Strategy of Cultural Policy in Bosnia and Herzegovina (adopted in 2008), the Biodiversity Strategy and Action Plan for the period 2015-2020 (adopted in 2016) and the Tourism Development Strategy of RS 2011-2020. The Environmental Protection Strategy 2020-2030 of Bosnia and Herzegovina is currently being developed that will provide a long-term planning framework and allow for coherent environmental practices and actions across the economy. The enhancement of natural and cultural heritage in tourism should be included in the new tourism development strategies planned to be developed in the coming years.

There is no policy framework that includes clear measures for the **promotion of sustainable tourism and operations**. Although sustainable development in BiH has become an important objective that is strongly supported by the World Bank and the EU, the integration of the concept of sustainability in tourism strategies and policies is still absent. Consequently, sustainability assessment and monitoring have not yet been established. Given the lack of a strategic framework for sustainable development and assessment, sustainability in tourism arises from individual business initiatives, destinations and NGOs. Thus, the main pillars of sustainable tourism development in BiH are linkages between private, public and non-governmental actors in the tourism sector and their co-operation in implementing projects, particularly transnational projects. Nevertheless, both entities plan to include the promotion of sustainable tourism development in their new tourism development strategies, which are in preparation. There are also several donor projects that focus on the development of sustainable tourism development frameworks in BiH. For example the “Tailor-made model for a BiH ‘Green Scheme’” will support the sustainable development of tourism in the economy using the best practice example of Slovenia.²³⁴ The findings of this and other projects implemented in this field should be included in the new tourism development strategies, along with clear policy measures to facilitate the sustainable operations of public and private tourism actors.

BiH is developing a comprehensive **tourism investment and innovation policy framework**. Investments in tourism are included in the annual action plan for the promotion of FDI, managed by the Foreign Investment Promotion Agency of Bosnia and Herzegovina (FIPA). The promotion of tourism investment will also be included in the new FDI strategy. Both entities are implementing policy measures to facilitate investment in public and private tourist infrastructure, with EUR 1.25 million per year in FBiH and EUR 1.5 million in RS allocated as grants for tourism projects and investments. However, in both entities monitoring is implemented only at the level of supported projects, and the evaluation of implemented policy measures has not yet been carried out. Moreover, private sector stakeholders report a lack of transparency regarding local development strategies, local spatial plans and investment policy, and the lack of a clear strategy for investment in transport infrastructure to reach the destinations.

Sub-dimension 15.5: Tourism branding and marketing

Due to the current legislative arrangement of tourism, BiH does not have a **tourism branding and marketing strategy** at the economy level, which lessens the visibility of BiH as a tourist destination in the global market. In 2019, BiH went down four places in the WEF Competitiveness Index regarding “effectiveness of marketing and branding to attract tourists”, ranking 118th (WEF, 2019^[201]).

The development of tourism branding and marketing differs among the entities. In RS, the Tourist Organisation of Republika Srpska is responsible for tourism branding and marketing. There is a marketing strategy adopted and implemented in RS, and public-private co-operation is well established. The monitoring of the marketing strategy is implemented regularly and the strategy is adapted according to new circumstances in the market. The main challenge in RS is the introduction of an evaluation process of implemented marketing activities. In FBiH, there is no tourism organisation established at the entity level, with tourism marketing activities implemented by the tourist boards of the main tourist destinations. As there is no monitoring and evaluation of implemented marketing activities in place, a more detailed assessment is not possible.

The **digital tourism marketing framework** is in the early phase of development. In RS, digital marketing is included in the marketing strategy, and in FBiH digital marketing tools are used in the marketing activities of tourist destinations. The main weaknesses are the lack of a common approach to the development of a digital tourism marketing framework at the state level, the lack of financial resources, and the lack of capacity for using digital marketing tools among public officials and private tourism companies.

The way forward for tourism policy

To ensure the further successful development of tourism, policy makers should:

- **Ensure that new tourism development strategies clearly define a governance structure and institutional set up at the entity level.** Such strategies should include policy measures to strengthen public-private co-operation at the entity and tourist destination level, and define a timeframe and clear budget allocation for implementation. A monitoring and evaluation model should also be included (Box 21.17). When drafting new tourism development strategies, Bosnia and Herzegovina should aim to move away from further developing mass tourism and start developing new, high-quality and personalised tourist experiences around natural and cultural sites. Bookings should be available at short notice.
- **Further develop destination management, using best practice examples from the economy** (such as the tourism clusters of Unasana and Herzegovina). Focus on awareness raising and training private and public stakeholders on the benefits of co-operation at the destination level, as this has been recognised as a challenge for the successful development of destination management.
- **Develop a human resources development strategy in tourism,** or include human resources in the Tourism Strategy. The strategy should include a skills gap assessment, a programme for

strengthening the tourism educational system in close co-operation with tourism industry representatives, and policy actions to promote jobs and careers in tourism.

Box 21.17. Harnessing potential synergies through a national platform for tourism in Switzerland

In Switzerland, numerous political bodies at both national and regional levels, as well as various industry organisations, influence the delivery of tourism policy. Federal tourism policy and its levers are subsidiary to the work of the cantons, local authorities and tourism-related industries. Maintaining dialogue within the federal administration, between the cantons and with tourist actors and associations is fundamental to the development of the industry. Tourism Forum Switzerland (TFS) was established to provide a platform for dialogue and co-ordination and to allow co-operation across the sector. Broadly diversified and often temporary working groups consisting of representatives of the private sector, cantons, communes and the federal administration meet regularly to discuss current challenges and potential improvements.

At the forum's main event in November 2020, the results of the working groups were gathered and presented, and the priorities for the following year were discussed. Since 2012, the State Secretariat for Economic Affairs (SECO), which is responsible for the development and implementation of Switzerland's tourism policy, has organised one forum event each year. The topics have included "Re-positioning Switzerland in summer tourism", "Structural change as the key to success in Swiss Tourism" and "Tourism product development: basis for successful marketing".

Presentations from renowned national and international experts are combined with smaller group discussions. The integration of international know-how is essential for the success of the TFS. The findings and feedback generated by the TFS are evaluated and published and serve as an important basis for the continual development and improvement of Switzerland's tourism policy.

Source: (OECD, 2020^[2021]), *OECD Tourism Trends and Policies 2020*, <https://doi.org/10.1787/6b47b985-en>.

Anti-corruption policy (Dimension 16)

Introduction

Table 21.28 shows Bosnia and Herzegovina's scores for the anti-corruption policy dimension and compares them to the Western Balkans average. All scores of Bosnia and Herzegovina are below the WB6 average, but the scores for corruption risk assessment and anti-corruption public awareness and education reflect the strongest relative progress. Bosnia and Herzegovina has several elements of a legal framework for the prevention of corruption and has strengthened awareness-raising and education activities since the last assessment. However, the investigation and prosecution of high-level corruption remains limited, and there is evidence of insufficient capacity and independence of prosecutorial institutions.

Table 21.28. Bosnia and Herzegovina's scores for anti-corruption policy

Dimension	Sub-dimension	Score	WB6 average
Anti-corruption policy dimension	Sub-dimension 16.1: Anti-corruption policy framework	1.5	2.1
	Sub-dimension 16.2: Prevention of corruption	3.0	3.3
	Sub-dimension 16.3: Independence of the judiciary	n.a.	n.a.
	Sub-dimension 16.4: Business integrity and corporate liability	n.a.	n.a.
	Sub-dimension 16.5: Investigation and prosecution	2.0	2.8
Bosnia and Herzegovina's overall score		2.0	2.5

Note: For comparability with the previous assessment, the two new sub-dimensions (16.3 and 16.4) have not been scored but are discussed in the text below.

State of play and key developments

Since the previous assessment, Bosnia and Herzegovina has undertaken noteworthy initiatives in the fight against corruption (Box 21.18).

Box 21.18. Recent initiatives in the fight against corruption in Bosnia and Herzegovina

- **An Action Plan for the Prevention of Corruption in the Institutions in BiH during the COVID-19 pandemic**, developed by the Agency for the Prevention of Corruption and Coordination of the Fight against Corruption (APIK) in 2020. It contains five main measures, namely:
 - supervision and control of securing financial and material donations, incentives and assistance
 - supervision and control of the employment process in BiH institutions
 - monitoring and control of the public procurement process
 - reporting corruption and protecting whistle-blowers during the COVID-19 pandemic
 - coordination of anti-corruption activities during the COVID-19 pandemic.
- **The Council of Ministers** unanimously approved a draft proposal amending the **Law on Public Procurement** in February 2021, harmonising it with the EU *acquis*. The proposed law enables the publication of procurement plans, and of contractual implementation terms within the Public Procurement Portal, which makes public procurement more transparent and easier to monitor.
- APIK issues **awards during the international anti-corruption day** every year for the best artistic and literary work on anti-corruption topics prepared by primary and secondary school students in BiH. The topic of 2021 is “I am worth more than money.”

Source: (OECD, 2021^[203]), *The OECD and South East Europe: Fair Market Conditions for Competitiveness in the Adriatic Region*, <https://www.oecd.org/south-east-europe/programme/fair-market-conditions-adriatic.htm>; (APIK, 2021^[204]), *Agency for the Prevention of Corruption and Coordination of the Fight against Corruption*, <http://apik.ba/kontakt/default.aspx?id=51&langTag=en-US>.

Sub-dimension 16.1: Anti-corruption policy framework

Due to its complex constitutional structure, Bosnia and Herzegovina has several anti-corruption **policy planning documents**. At the state level, the expired Anti-Corruption Strategy for 2015-2019 and related action plan envisaged the highest strategic measures and set a broad framework for the harmonisation of strategies and action plans at other levels of government. The new strategy and action plan had been prepared but not adopted at the time of writing (APIK, 2020^[205]).

There are 13 strategies and 14 action plans at the levels of the state, entity, Brčko District and FBiH cantons. The anti-corruption policies of the state, the FBiH and RS do not have dedicated budgets. The state-level strategy assumes that for most activities additional funds are not required. According to the government, the Agency for Prevention of Corruption and Co-ordination of the Fight against Corruption (APC) has requested the approval of dedicated budget funding for anti-corruption policy in the new planning period 2020-2024.

The APC ensures the overall **co-ordination of anti-corruption policy**, provides explanations regarding the implementation of certain measures and opinions on whether measures planned by authorities are in line with the strategy and the principles of law, and proposes new activities or changes to implementation. It carries out annual reviews of implementation of the state-level strategy and action plan. Three monitoring reports have been published by the APC, with the fourth report prepared but not publicly available, according to the government. At the entity level there are no established bodies but instead co-ordination arrangements: the Anti-Corruption Team in the FBiH and the Commission for Implementation of the Anti-Corruption Strategy in RS.

The APC has encountered difficulties in enforcing the requirement for institutions to report on progress regarding **implementation** of the Anti-corruption Strategy (OECD, 2018^[47]). The third monitoring report (published in October 2018) notes continuing challenges of non-compliance with deadlines for submitting

information, discrepancies in data, and uneven quality of information. However, the APC also claims that it has been able to overcome these flaws with an adequate methodological and systematic approach (APIK, 2018^[206]). According to the government, 48% of action plan measures have been implemented, 43% have been partially implemented and 9% have not been implemented.

According to information provided by the Agency for the Prevention of Corruption and Co-ordination of the Fight against Corruption, in 2019 an external consultant (hired by the Organization for Security and Co-operation in Europe, OSCE) analysed progress made in the fight against corruption in Bosnia and Herzegovina to inform the drafting of a new anti-corruption strategy. The participatory engagement of non-governmental stakeholders took place in the preparation of the Anti-Corruption Strategy and Action Plan 2020-2024 of BiH and the Anti-Corruption Strategy and Action Plan 2018-2022 of RS. At the state level, an interdepartmental working group was set up to prepare these documents, with 27 public institutions of different levels involved, as well as the non-governmental sector and academia. However, published documents do not reflect how the proposals by stakeholders were handled, i.e., what was accepted, what was rejected and why. The Anti-Corruption Strategy and Action Plan 2020-2024 had also not been published on the website of the APC at the time of writing.

In April 2020, the APC disseminated a framework action plan for the prevention of corruption during the COVID-19 pandemic to governments and anti-corruption bodies at all levels and called upon all competent institutions to engage teams in developing individual action plans for anti-corruption action. In terms of implementation, according to the APC most institutions have focused on publishing information online, especially regarding the supervision and control of recruitment processes and public procurement.

Bosnia and Herzegovina has no legislation on **corruption risk assessment**. The law stipulates the responsibility of the APC to prescribe a uniform methodology and guidelines for making integrity plans and help all public institutions with their implementation, but institutions are not legally obliged to carry out the assessment. Anti-corruption action plans envisage the creation of a legal basis for the preparation and adoption of integrity plans, which have not been implemented. Several guiding documents envisage corruption risk assessment as one of the stages in the preparation of integrity plans, for example the handbook *Rules for the Elaboration and Implementation of Integrity Plans in the Institutions of Bosnia and Herzegovina* (APIK, 2018^[207]), guidance on integrity plans in judiciary institutions (VSTV BiH, 2016^[208]), and rules on the elaboration and implementation of integrity plans in RS (2015).

Evidence regarding the adoption of integrity plans is fragmented, and no comprehensive and up-to-date data are available regarding the extent and quality of the practice. As of mid-2018, 73 public institutions at the state level had adopted integrity plans (APIK, 2018^[206]). According to the 2019 report of the FBiH Anti-corruption Team, 78 institutions had adopted integrity plans, which is 91% of the targeted number (FBiH Anti-Corruption Team, 2020^[209]). According to the government, several institutions in RS have conducted ad hoc risk assessments, with one performed for the preparation of the Anti-Corruption Strategy 2018-2022.

Corruption proofing of legislation is not mandatory according to law. The Unified Rules for Legislative Drafting in the Institutions of Bosnia and Herzegovina prescribe the methodology for assessing the impact of regulations (including on corruption and conflict of interest). The rules are mandatory for state-level institutions and recommendatory for other levels of authority. They designate the APC as one of the control bodies whose opinion must be obtained for impact assessments. The methodology for assessing corruption risks in regulations has been published, sponsored by the Austrian Development Co-operation (Hoppe, 2017^[210]). According to the government, in 2019 the APC examined and gave opinions on seven regulations, but no information is available about any modifications based on the opinions. There is no evidence of the corruption proofing of legislation at the entity level.

Sub-dimension 16.2: Prevention of corruption

The APC has been Bosnia and Herzegovina's main **corruption prevention body** since 2013, when it was introduced as part of the law of the APC. However, it has limited direct powers. Its mandate includes developing the anti-corruption strategy and action plan and monitoring implementation, designing methodologies, co-ordinating the work of public institutions, monitoring the implementation of anti-corruption legislation and instances of conflict of interests, taking action upon receiving information on corruption-related acts, and developing educational programmes. The FBiH and RS do not have established prevention bodies; however, Sarajevo canton has a prevention body, the Office for Combatting Corruption and Quality Management.

In law, the APC has certain independence and accountability provisions. It reports to the Parliamentary Assembly (PA) of Bosnia and Herzegovina, which appoints the director of the APC and two deputies upon proposal of the Selection and Monitoring Committee of the Agency, following open competition. The director's term is five years with a possibility of another reappointment. The committee can submit a proposal to dismiss the director if there are grounds as stated in the law. The committee comprises nine members (three from each of the chambers of the PA, two from the academic community and one from civil society). The committee may not interfere in the daily work of the APC nor request information on individual cases. Meetings of the committee should be open to public.

In practice, the mandate of the committee expired in 2018, and no evidence is available regarding its renewed activity, except for information from September 2020 about the appointment to the committee of someone included in the US sanctions list for corruption (Transparency International BiH, 2020^[211]). According to the law, the committee should review reports on APC operations at least twice a year; however, the annual reports for 2018 and 2019 have not yet been considered and approved for publication. The director of the APC submits a budget proposal, but the APC does not have any guarantees of a certain level of funding. With 30 employees, the APC is one of the smallest prevention agencies in the region.²³⁵ Given that many prevention tasks are carried out at the entity level, the institutionalisation of prevention of corruption and safeguards against undue interference in the fulfilment of this function are limited in Bosnia and Herzegovina overall.

At the state level, the Law on Conflict of Interest in Governmental Institutions of Bosnia and Herzegovina has been the central act governing matters of **conflict of interest**. There are also equivalent laws in the FBiH (not implemented since 2013) and RS. The state-level law applies to elected officials, holders of executive functions and advisors, which is similar to the scope of the entity-level laws. In other respects, the laws differ and lead to a diversity of approaches. For example, the RS law defines a conflict of interest in terms of an actual or apparent conflict, while the state-level law does not cover an apparent conflict. Laws on civil service at the state and entity levels regulate conflicts of interest of civil servants. In January 2021, the House of Representatives (the lower house of the PA) adopted a new law on conflicts of interest, which has not been assessed in this analysis.

The law stipulates that the oversight institution at the state level is the Commission for Deciding on Conflicts of Interest (CDCI), which comprises three members from each of the chambers of the PA as well as the director and two deputy directors of the APC. The Republican Commission for Determining Conflicts of Interest in Public Bodies of RS is the oversight body in RS. The membership rules of the two commissions differ regarding political neutrality. At the state level, members of the PA sit on the commission, whereas in RS members may not engage in party political activities. However, in neither case safeguards for political independence appear particularly strong. Bosnia and Herzegovina has not implemented the Group of States Against Corruption (GRECO) recommendations to, among other things, harmonise "the legislation on conflicts of interest throughout the national territory" and ensure the independence and timeliness of the advisory, supervisory and enforcement regime regarding conflicts of interest (GRECO, 2018^[212]).

According to the law, the CDCI may initiate proceedings based on a credible, well-founded and non-anonymous application, or by virtue of the office held in cases where an individual has information on

a possible conflict of interest. In terms of sanctions, the CDCI may suspend payment of part of the net monthly salary, propose a dismissal from office and call for resignation. According to the government, the CDCI has imposed 10 sanctions (9 monetary). Sessions of the CDCI should be open to the public and decisions published on its website.²³⁶ The mandate of the CDCI expired in 2018 and it resumed activity only in mid-2020. Civil service agencies at the state level and in the FBiH have organised training on conflict of interest, but effective and stable oversight in this area is yet to be developed.

Regarding **asset and interest disclosure**, elected officials, executive office holders and advisors are required to submit financial reports to the CDCI within 30 days of the assumption of office, followed by annually and then within 30 days of the expiration of six months after the termination of duty. The CDCI decides the form and content of the financial report, which covers the personal data of officials and close relatives, information on public functions, current revenue and sources of income, assets, liabilities and data on other positions, and the positions of their close relatives but not of their assets and income. The CDCI checks but does not publish the accuracy of the content of the statements. In RS, officials submit financial reports to the Republican Commission for Determining Conflicts of Interest. In the FBiH, no general functional system of disclosure is in place, although the Sarajevo canton maintains an online public register of data on the property of public officials. Notwithstanding some good practice at the sub-entity level, there is generally little evidence of effective implementation of asset and interest disclosure.

The Election Law of Bosnia and Herzegovina obliges all candidates elected at all levels of authority to submit a signed asset declaration form to the Central Election Commission (CEC). Elected persons must also submit declarations after the termination of their tenure. The CEC makes the statements available to the public, with restrictions concerning personal information. The CEC is not legally competent to verify the accuracy of the data, and hence the system is conducive to failures in fully disclosing assets (CIN, 2020^[213]).

Bosnia and Herzegovina is yet to establish a comprehensive and fully functional framework of asset and interest disclosure in line with, among other things, the recommendations of GRECO regarding the publication and control of disclosure reports (GRECO, 2018^[212]).

At the state level, the Law on Whistle-blower Protection in the Institutions of Bosnia and Herzegovina (adopted in 2013) provides **protection for whistle-blowers**. The law applies only to the public sector at the state level. Whistle-blower reports and identities constitute an official secret. If the APC establishes that a detrimental action has been taken against the whistle-blower in relation to the reported case of corruption, it can issue an instruction to the director of the institution to remove the consequences of the detrimental action. If the director claims that the action would have been taken even without whistleblowing having taken place, they must prove this is the case. The law envisages internal reporting as the default option, with external reporting to investigation/prosecution authorities, the APC or the public subject to conditions, such as when the whistle-blower has reasons to believe that the recipient of the internal report is associated with the act of corruption. The law is short of providing many elements set out in EU Directive 2019/1937 on the protection of persons who report breaches of Union law, for example it is not applicable to the private sector; does not cover several categories of reporting persons who are not current employees of the institution, as well as persons connected with whistle-blowers; it imposes specific mandatory preconditions for external reporting; and it envisages a narrower set of forms of retaliation. The law does not envisage provisional protection before the decision on granting whistle-blower status and free legal assistance (according to the government, civil society organisations provide such assistance).

The Law on Protection of Persons Reporting Corruption of the Republika Srpska (adopted in 2017) is in several important ways more comprehensive than the state-level law. For example, it protects reporting persons in both the public and private sectors, envisages protection to persons connected with the whistle-blower, does not set mandatory preconditions for external reporting, envisages a broad set of forms of retaliation, and provides the right to free legal assistance. There is no whistle-blower protection law in the FBiH.

The APC and the Ministry of Justice are the oversight bodies for the implementation of the law at the state level. The APC has supported implementation by, among other things, developing unified regulations on internal reporting and whistle-blower protection, supervising and co-ordinating the adoption of the respective internal acts in public institutions, preparing an instruction for the implementation of the law, establishing a toll-free number for reporting persons, preparing promotional materials, and conducting training and lectures.

The government provided no up-to-date statistics on whistle-blower activity for this assessment, and it is therefore impossible to understand the effectiveness of implementation of the laws. According to the APC, there have been instances of denied whistle-blower status due to reporting persons not being employees of state institutions covered by the law, not having acted in good faith, or failing to have concrete evidence for the allegations. Anecdotal evidence suggests that a whistle-blower may be subject to sanctions in practice despite having received whistle-blower status (Rovcanin, 2020^[214]), but the overall extent of the challenges is uncertain.

The APC and certain other public bodies have actively engaged in **public awareness raising and education**. The APC gives awards for the art and literary works of school students on anti-corruption topics through an annual campaign. The best works have been included in a promotional film and printed in the APC's calendars. The authorities have also produced easily accessible information materials, with both the APC and the RS Ministry of Interior having published leaflets on reporting corruption.

The Civil Service Agency of Bosnia and Herzegovina (CSA) regularly organises training for civil servants on anti-corruption topics (funded from the CSA's own budget and other institutions and donors), and the RS Ministry of Justice has been organising training for public sector institutions. The APC has made online training available on its website. It has also analysed training and, based on the data and the needs of institutions, developed harmonised programmes for all public institutions in co-operation with state-level civil service agencies, the FBiH and RS. The APC has been co-ordinating a major programme of ethics and integrity in the education system across Bosnia and Herzegovina, and its website contains a collection of education materials.²³⁷ According to the FBiH, its authorities have not engaged in other anti-corruption campaigns or educational activities.

Sub-dimension 16.3: Independence of the judiciary

The judicial authority at all levels is governed in a partially centralised manner. The High Judicial and Prosecutorial Council appoints judges for life and relieves judges from duties based on grounds set out in the law on the HJPC. The appointment of judges is based on a competitive procedure. The Law on the HJPC (adopted in 2004) sets basic qualification requirements and criteria for determining the competences required for judicial office. According to rules of the HJPC, the competition procedure includes entrance exams and written tests, candidate interviews, the ranking of candidates, and proposals for appointment. Selection procedures differ for candidates whose appointment represents entry into the judiciary and for those already in the judiciary, for whom qualification is determined based on performance results for the past three years and interviews. The HJPC announces judicial vacancies in the Official Gazette and online as public calls, and posts appointment decisions. It also elects court presidents based on a public competition among judges appointed to the respective court. Appointment proceedings are reportedly fraught with flaws such as deviations from the rankings of candidates, insufficient transparency, insufficient motivation of appointment decisions, excessive weight of ethnic criteria, and the annulment by court of the criteria on performance appraisal for judges and prosecutors in May 2020 (European Commission, 2020^[39]).

Out of 15 members of the HJPC, 10 are judges and prosecutors elected by their colleagues. The House of Representatives of the PA, the Council of Ministers, the Judicial Commission of the Brčko District and bar chambers of the two entities each elect one member. The HJPC publishes detailed minutes of its meetings. The legal and institutional framework of judges' careers through the Law on the HJPC provides certain guarantees of judicial independence. However, the system is affected by the lack of an explicit

constitutional status of the HJPC, incompatibility of RS legislation, which envisages an entity-level HJPC, and certain other deficiencies of the Law on the HJPC. In 2018, the HJPC submitted an initiative to amend the law comprehensively with a view to implementing European Commission recommendations to improve appointment, performance appraisal, integrity, and disciplinary and other procedures (European Commission, 2019^[4]). The initiative has been discussed within the Ministry of Justice. According to information provided by authority representatives during consultations in September 2020, certain parts of the draft may be selected for speedier adoption, such as the introduction of a strengthened mechanism for the verification of financial reports of judges and prosecutors. Reforms of the HJPC are also needed regarding the recommendations of GRECO to, among other things, provide for separate judicial and prosecutorial sub-councils, avoid an over-concentration of powers, ensure that decisions of the HJPC are subject to appeal before a court, and develop an effective system for reviewing annual financial statements (GRECO, 2018^[212]).

The HJPC conducts disciplinary proceedings, imposes disciplinary measures on judges and publishes the decisions in an anonymised format. Procedural guarantees of due process for a judge in disciplinary proceedings include the right to be duly notified of the allegations and evidence and to respond, the right to a fair and public hearing, the right of defence with legal counsel of choice, and the right to appeal adverse decisions (although the right to judicial review applies only in cases of dismissals). Concerns have been raised regarding the excessive dominance of HJPC members in disciplinary commissions; obstacles to the disciplinary liability of members of the HJPC themselves and the perceived unwillingness to hold the former chairperson of the HJPC to account for alleged corruption in 2019; alleged inconsistencies in decisions, which reject disciplinary action or impose disciplinary measures; excessive discretion of the HJPC and the disciplinary commissions; lenient sanctioning policy made even less effective by the anonymisation of published decisions; and bias due to the fact that the HJPC has full access to records of the Office of the Disciplinary Prosecutor, which is also placed within the HJPC (Delegation of the European Union to Bosnia and Herzegovina and EUSR, 2019^[215]; Omerović, 2020^[216]; Transparency International BiH, 2020^[217]). Despite these concerns, by default the media and representatives of the public may be present at disciplinary hearings, which represents a high standard of transparency. The distribution of cases among judges is random and automatic in accordance with predefined parameters in all courts, although the possibility of reassignment without a specific justification exists at least in small courts (European Commission, 2020^[39]). There is no universal practice of publishing court decisions, but the HJPC publishes decisions selected either by the highest courts or in accordance with general criteria (war crime, corruption, organised crime cases, etc.). Some decisions are available at the websites of individual courts. Overall, it appears that the judiciary in Bosnia and Herzegovina adheres to at least certain minimum standards of transparency.

Sub-dimension 16.4: Business integrity and corporate liability

Bosnia and Herzegovina does not have a distinct policy for promoting **business integrity**. Company laws in the FBiH and RS do not explicitly envisage the responsibilities of boards of directors to include overseeing the management of corruption risks, apart from general fiduciary duties. The APC held several training courses on ethics and integrity in companies for private sector representatives in 2019, in co-operation with the Foreign Trade Chamber of Bosnia and Herzegovina.

According to the government, information on beneficial owners of legal entities in FBiH is not disclosed in a central register. The Law on Registration of Business Entities in RS requires the submission of data on beneficial owners to the court register of business entities. The definition of a beneficial owner (founder with a 20% or more share) is narrower than envisaged in EU anti-money laundering directives. Data from the Register of Business Entities are available to all interested parties without proving a legal interest, in accordance with regulations governing personal data protection. Moreover, identification of the beneficial owner (in accordance with a significantly broader definition) is one of the elements of customer due diligence under the Law on Prevention of Money Laundering and Financing of Terrorist Activities that should be carried out by both financial institutions and designated non-financial businesses and

professions. The government provided no evidence regarding the level of compliance with these requirements.

No designated institution such as a business ombudsman is responsible for receiving complaints from companies about corruption-related matters.

Bosnia and Herzegovina, the FBiH and RS each have a Criminal Code and Law on Criminal Procedure,²³⁸ which means that provisions regarding the **liability of legal persons** are multiple but generally similar. According to the Criminal Code of Bosnia and Herzegovina, for a criminal offence perpetrated in the name of, for account of or for the benefit of the legal person, the legal person shall be liable: 1) when the purpose of the criminal offence is arising from the conclusion, order or permission of its managerial or supervisory bodies; 2) when its managerial or supervisory bodies have influenced the perpetrator or enabled them to perpetrate the criminal offence; 3) when a legal person disposes of illegally obtained property gain or uses objects acquired in the criminal offence; or 4) when its managerial or supervisory bodies failed to carry out due supervision over the legality of work of the employees. Thus, for a legal person to be liable, apart from the case of illegally gained property/objects, managerial or supervisory bodies must be involved or must have failed to act.

The liability of legal persons is general (liability possible for any criminal offence) and autonomous (the legal person shall be liable for a criminal offence even when the physical person is not guilty of the perpetrated criminal offence). However, the physical perpetrator apparently has to be identified. Sanctions include fines, confiscation of property and dissolution of the legal person. Security measures include forfeiture, publication of judgement and a ban on performing a certain activity. Legal consequences following the conviction of a legal person include the prohibition of work based on a permit, authorisation or concession. The law does not allow due diligence (compliance) defence to exempt legal persons from liability or mitigate sanctions, nor does it allow the court to defer the application of sanctions on legal persons if they comply with organisational measures to prevent corruption as determined by the court.

The legal framework for corporate liability would benefit from guidance on anti-corruption compliance that managerial and supervisory bodies of legal persons should ensure. The effectiveness of the corporate liability framework for combatting corruption could not be assessed due to the absence of relevant statistics.

Sub-dimension 16.5: Investigation and prosecution

Little data are available on the **investigation and prosecution of high-level corruption**. In 2018, the HJPC adopted the definition of high-level corruption. According to the European Commission, the track record of convictions for high-level corruption is extremely limited in Bosnia and Herzegovina (final conviction of two persons in 2017 and no final conviction in 2018) (European Commission, 2019^[4]). According to data provided by the HJPC, a notable example in 2019 was the conviction of the former Minister of Agriculture, Water Management and Forestry of the FBiH who was sentenced to a prison term and subject to confiscation of illicit gain in the amount of EUR 333 000. In January to June 2020, prosecutors filed indictments in four cases of high-profile corruption, while courts reached verdicts in three cases (two convictions and one acquittal). Reportedly, only a minority of corruption investigations initiated by the State Investigation and Protection Agency (SIPA) in 2019 were finalised (European Commission, 2020^[39]).

Monitoring by the OSCE found that in 2017-18 two out of six defendants in high-level corruption cases were convicted, i.e., the conviction rate was 33%, and the sentences were imprisonment converted into fines (OSCE Mission to BiH, 2019^[218]). It is common to employ plea bargain agreements, and sanctions tend to be lenient. Moreover, it is reportedly technically impossible to retrieve statistical data on final convictions (European Commission, 2020^[39]). To strengthen the recovery of corruption proceeds, since 2018 the HJPC has imposed mandatory financial investigation in all corruption cases, but no data are available on the recovered amounts.

Among **specialised anti-corruption investigative bodies**, SIPA, which is within the Ministry of Security, is the only institutionally separate body tasked with combating several categories of serious crime, including corruption. Within SIPA's Criminal Investigation Department, there is the Section for Prevention and Detection of Financial Crime and Corruption. Investigators responsible for the prevention and detection of financial crime and corruption work within SIPA's regional offices. SIPA's Internal Control Department is responsible for, among other things, internal investigations into allegations of misconduct by SIPA employees and investigations of actions involving the use of force, corruption, and abuse of authority by police officials.

SIPA is the only specialised enforcement body that has certain special guarantees of independence. The law defines SIPA as an operationally independent administrative organisation. The Council of Ministers appoints the director and deputy director, upon proposal of the Minister of Security who selects the candidate from a list submitted by an independent board. The tenure of the director is four years, with the possibility of a second consecutive term. The Council of Ministers dismisses the director and deputy director under conditions and through procedures implemented by the independent board. For the appointment and dismissal of heads of internal units, the general procedures of the police apply. The director adopts the Rulebook of SIPA with the consent of the Council of Ministers. SIPA's budget is adopted in a standard procedure, and it does not have specific guarantees of a certain level of funding. The general rules of the police determine the salaries of SIPA staff. The director submits reports on the work of SIPA and the situation in the areas of competence to the Minister of Security of Bosnia and Herzegovina. Upon request, the director also submits reports to the PA, the Council of Ministers and the Presidency of Bosnia and Herzegovina.

In RS, several organisational units of the Ministry of Interior, such as the Department for Economic Crime and Corruption, are responsible for investigating corruption. The FBiH has not established specialised anti-corruption investigation units.

Bosnia and Herzegovina has no organisationally independent **specialised anti-corruption prosecutorial and judicial bodies**. Anti-corruption specialisation is ensured through internal sections and departments of the prosecutor's offices at the state level, in the FBiH (envisaged in law but not established in practice) and in RS. At the state level, corruption cases are assigned to prosecutors in the Section for Corruption within the Special Department for Organised Crime, Economic Crime and Corruption of the Public Prosecutor's Office. The Chief Prosecutor selects and appoints the head of the section, who has no fixed term in office. The Section for Corruption has four prosecutors and four legal associates (two legal advisors on financial investigation). In the FBiH and RS, laws on the suppression of corruption and organised crime define key elements of the specialised departments. The Special Department of the Prosecutor's Office of RS is competent for 36 categories of crime, including corruption-related offences, but in practice most corruption cases are low level (OSCE Mission to BiH, 2019^[218]).

In 2019, the European Commission reiterated the need to substantially enhance the capacity to investigate economic, financial and public procurement-related crime in terms of staff numbers, equipment, autonomy, specialisation and co-operation (European Commission, 2019^[4]). Data available for this analysis are too limited for a full assessment of the capacities. An independent assessment carried out in 2018 and 2019 found that indictments in corruption cases frequently contained no or unclear identification of one or more of the elements of the offence; the poor quality of indictments resulted in a low rate of convictions in corruption cases. There are also reportedly flaws concerning the process of gathering and presenting evidence (OSCE Mission to BiH, 2019^[218]).

The way forward for anti-corruption policy

To strengthen the anti-corruption policy framework and implementation, policy makers should:

- **Ensure effective and impartial implementation of rules and oversight in the areas of conflict of interest and asset disclosure.** According to the Western Balkan Recommendation on

Disclosure of Finances and Interests by Public Officials, declarations need to be subject to control by an oversight mechanism, which includes compliance with declaration obligations, the accuracy of submitted information, and the possibility of conflicts of interest or undeclared cash-flows (EIN, 2014^[219]). At the time of writing, Bosnia and Herzegovina remained largely non-compliant with this standard.

- **Develop and adopt new whistle-blower protection laws at the state level and in the FBiH in line with international standards.** BiH should take measures to encourage and support the sustained practice of whistle-blowing. The relevant EU directive envisages the protection of whistle-blowers in both public and private sectors and applies protection measures to whistle-blowers, facilitators of whistle-blowing, and physical and legal persons connected with the whistle-blowers. In line with the directive, state and entity levels in Bosnia and Herzegovina should provide the following support for whistle-blowers: comprehensive and independent information and advice that is easily accessible to the public and free of charge on procedures and remedies available, on protection against retaliation, and on the rights of the person concerned; effective assistance from competent authorities before any relevant authority involved in their protection against retaliation; legal aid, counselling or other legal assistance; and financial assistance and support measures, including psychological support, for reporting persons in the framework of legal proceedings. Bosnia and Herzegovina has made certain efforts in this area, but the degree of progress is highly uneven at the state level and in the entities.
- **Ensure the registration and disclosure of the beneficial ownership of legal entities in line with international standards.** This applies in both the FBiH and RS, where the authorities do not ensure disclosure in a central register. A register does exist in RS, but certain elements, such as the definition of a beneficial owner, are not fully in line with international standards. The EU Anti Money Laundering Directives envisages that beneficial ownership information is held in a central register and is accessible in all cases to competent authorities and financial intelligence units without any restriction, to obliged entities within the framework of customer due diligence, and to any member of the general public. It is also required that the information held in the central register of beneficial ownership information is adequate, accurate and current, and that states put in place mechanisms to this effect. Box 21.19 shows a good-practice example of collecting beneficial-ownership information from different sources.

Box 21.19. Databases containing information on beneficial ownership in Spain

A combination of different sources can ensure the comprehensiveness and enhanced reliability of data on beneficial ownership. Spain has three databases that hold information on beneficial ownership of companies, each based on information collected by different obliged entities (notaries, registrars and credit institutions). All are accessible on line to law enforcement agencies. The network of overlapping mechanisms secures the availability of beneficial ownership information of all commercial entities operating in Spain:

- The Single Notarial Computerised Index contains beneficial ownership information obtained by notaries through their customer due diligence.
- The Business Registry collects information on beneficial ownership as reported by the authorised representatives of companies. All companies, except those publicly listed, must annually submit a form that identifies their beneficial owners to the Business Registry.
- The Spanish financial intelligence unit, Sepblac, holds the Financial Ownership File. Credit institutions submit monthly reports about their opened or held accounts to Sepblac, which identifies the beneficial owners of the account holders.

Source: Abridged from (FATF, 2019^[220]), *Best Practices on Beneficial Ownership for Legal Persons*, <https://www.fatf-gafi.org/media/fatf/documents/Best-Practices-Beneficial-Ownership-Legal-Persons.pdf>.

- **Continue efforts towards amending the Law on the HJPC and other legislative acts to bring the judiciary in line with EU standards.** Judicial independence is a fundamental principle enshrined in international standards such as the European Convention on Human Rights, according to which “everyone is entitled to a fair and public hearing within a reasonable time by an independent and impartial tribunal established by law” (European Court of Human Rights, n.d.^[221]). In 2020, the European Commission emphasised the adoption of the new Law on the HJPC as a key priority to strengthen the HJPC as a guarantor of the independence of the judiciary (including changes regarding the composition of the HJPC; the election and disciplinary responsibility of its members; the appointment, promotion, performance appraisal, disciplinary responsibility, conflict of interests and integrity of judicial office holders; and a judicial remedy against all final decisions of the HJPC).
- **Strengthen capacity to investigate and prosecute high-level corruption** and consider setting up independent specialised anti-corruption prosecutorial bodies that focus on serious offences and are adequately protected from outside interference. The United Nations Convention against Corruption sets the standard that a body or bodies or persons specialised in combating corruption through law enforcement shall be granted the necessary independence, in accordance with the fundamental principles of the legal system of the State Party, to be able to carry out their functions effectively and without any undue influence (Article 36) (UN, 2004^[222]). This CO assessment did not evaluate in-depth the work of SIPA, the specialised organisational units of the Ministry of Interior of the RS, and internal sections and departments of the prosecutor’s offices, and therefore does not argue whether any undue influence on their activities has taken place. However, Bosnia and Herzegovina should consider introducing additional means to safeguard the independence of the institutions as appropriate to their status through the more public and competitive selection of management, strengthened protection against arbitrary dismissal, and guarantees of dedicated budget funding. The FBiH should set up the specialised bodies envisaged in law.

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Notes

¹ Please note that Dimension 5 (Competition policy) is excluded from the key findings section as it uses different scoring model (See the Scoring approach section for information on the assessment methodology).

² Staff from the Agency for Statistics of Bosnia and Herzegovina and entity statistical offices who co-ordinate the statistical data collection.

³ A person from the Ministry of Foreign Trade and Economic Relations who co-ordinates the state-level assessment in Bosnia and Herzegovina and from the Ministry of European Integration and International Co-operation of the Republika Srpska and Prime Minister's Office of the Federation of Bosnia and Herzegovina who each co-ordinate the assessment in their respective entities.

⁴ World Bank classification.

⁵ The Foreign Investment Law of the Federation of Bosnia and Herzegovina states that: "Foreign investment will not be nationalized, expropriated or subjected to similar measures consequences except in the public interest and in accordance with applicable laws and other regulations. Foreign investors are entitled to adequate, prompt and appropriate compensation, which they are free to use dispose of any damage resulting from nationalization, expropriation or other measures that have similar consequences." (Government of Bosnia and Herzegovina, n.d.^[293])

⁶ Law on Expropriation (Official Gazette of the FBiH, Nos. 70/07, 36/10 and 25/12); Law on Expropriation (Official Gazette of the Republika Srpska, Nos. 112/06, 37/07, 66/08, 110/08 and 79/15); Law on Expropriation (Official Gazette of the Brcko District of BiH, Nos. 26/04, 19/07, 2/08, 19/10 and 15/11).

⁷ Currently, the most active clusters in the Republika Srpska are the wood industry and auto services, as well as a cluster dedicated to research and technological development in the field of medicine and health sciences.

⁸ With the exception of passenger vehicles, and slot and gambling machines.

⁹ According to the Law on Administration of BiH (Official Gazette of BiH, No. 32/02, 102/09 and 72/17) and the Law on Ministries and Other Administrative Bodies in BiH (Official Gazette of BiH, No. 32/02).

¹⁰ Customs policy, technical regulations and standards, market surveillance, competition, state aid, intellectual property, agriculture, and energy and environmental protection.

¹¹ Mainly the obligations arising from the Agreement on Trade Facilitation of the World Trade Organization (WTO) and CEFTA's Additional Protocol 5.

¹² Rules of Procedure of the Government of Republika Srpska (Official Gazette of RS, no 123/18); Guideline for the Republic Administrative Bodies Conduct Regarding the Participation of the Public and Consultations in Developing the Law (Official Gazette of RS, no 123/08 and 73/12).

¹³ Those consultations include the active participation of stakeholders (private companies and civil society) in all phases during the enactment of law and bylaw acts and strategic documents related to trade policy.

¹⁴ Regulations on Consultations in Legislative Drafting (Official Gazette of BiH, no. 5/17).

¹⁵ According to the 2019 Annual Report on Public Consultations, the eConsultation website was used by 63 institutions, compared to 56 institutions in 2018. Moreover, in 2019, the institutions of BiH conducted a total of 539 consultations in the drafting of legal regulations and published 445 reports on the conducted consultations, which is also a significant increase in the ratio of 2018 when there were 281 total consultations conducted and 234 published reports on consultations http://www.mpr.gov.ba/web_dokumenti/default.aspx?id=10631&langTag=bs-BA.

¹⁶ Guidelines for the Republic administrative bodies regarding the participation of the public and consultations in developing the law (Official Gazette of RS, no 123/08 and 73/12)

¹⁷ According to the 2019 Annual Report on Public Consultations, 17 institutions were surveyed regarding the acceptance rate of comments during consultation processes. Two institutions stated that they accepted more than 80% of proposals and comments, one institution stated that it accepted 50-80% of proposals and comments, seven institutions accepted 20-50% of proposals and comments, and four institutions accepted below 20% of comments and suggestions.

¹⁸ Article 2 of the Regulations on Consultations in Legislative Drafting (Official Gazette of BiH, no. 5/17).

¹⁹ According to the 2019 Annual Report on Public Consultations, the response of users in the consultation process and the number of submitted proposals and comments were still small: 47 out of 56 surveyed institutions reported that the response rate in the consultation process was poor or unsatisfactory, and 10 institutions reported that the response was better in live consultations. Most institutions stated that they did not receive any suggestions or comments during the consultation processes.

²⁰ Since 2019, the FBiH parliament has adopted the majority of its laws under emergency procedure (89%). In the Republika Srpska, the National Assembly has adopted about a third (36%) of its laws under a fast-track procedure since the last reporting cycle. These procedures, in principle reserved for exceptional cases, have been taken without any form of public consultation.

²¹ The regulatory databases set up for the partial OECD STRI for the WB6 were created thanks to co-operation with the WTO and CEFTA, which is gratefully acknowledged. They are based on the WTO/World Bank I-TIP Services regulatory databases, updated in November 2020 and to which the OECD STRI methodology has been applied. For more information on the methodology see the Methodology and assessment process chapter.

²² OECD member states and partner economies: Brazil, the People's Republic of China, Costa Rica, India, Indonesia, Kazakhstan, Malaysia, Peru, the Russian Federation, South Africa and Thailand.

²³ The full set of OECD STRI indices and comparison tools, as well as policy simulators for OECD member and partner states that have undertaken the OECD STRI, are available on the dedicated website <https://www.oecd.org/trade/topics/services-trade>.

²⁴ The complete list of measures sector by sector is available on the OECD STRI website <http://www.oecd.org/trade/topics/services-trade>.

²⁵ In order to facilitate comparison with OECD member states that have undergone the Services Trade Restrictiveness Index exercise, the paragraphs below have been drafted in accordance with the

methodology of the STRI project publications. The OECD members' country notes and sector notes are available on the STRI web page: <https://www.oecd.org/trade/topics/services-trade/>.

²⁶ Official Gazette of RS, no 14/2.

²⁷ EU Directive (2000/31/EC).

²⁸ Basel III is a set of measures developed by the Basel Committee on Banking Supervision in response to the 2008/09 crisis. It has been agreed internationally and aims for a more resilient banking system. It underpins the regulatory and supervisory framework and strengthens banks' risk management.

²⁹ The term haircut is used to reference the percentage difference between an asset's market value and the amount that can be used as collateral for a loan.

³⁰ IFRS 9 is published by the International Accounting Standards Board's (IASB) in response to the financial crisis. It aims to improve the accounting and reporting of financial assets and liabilities. It contains three main topics: classification and measurement of financial instruments, impairment of financial assets, and hedge accounting.

³¹ Zenica- Dobož Canton (2019-21), 67 projects with an estimated value of BAM 381 million (~EUR190 million) (Federation of Bosnia and Herzegovina, n.d.^[296]); Tuzla Canton (2018-20), 44 projects with an estimated value of BAM 339 million (~EUR170 million) (Federation of Bosnia and Herzegovina, 2018^[294]); and Central Bosnia Canton (2018-20), 30 projects with an estimated value of BAM 95 million (~EUR 47 million) (Government of Central Bosnia Canton, 2018^[295]).

³² Some of the projects financed under the non-concession PPP model are the EFT Stanari Coal Plant and the Dobož to Vukosavlje motorway in 2012, Corridor 5c between Karuše and Poprikuše in 2013, the Haemodialysis Project in 2014 and the District Heating System project in Sokolac in 2016

³³ Applicable rates are either 5% for dividend income or 10% for other types of income (interest, royalties, etc). However, no withholding tax is levied on dividends paid to foreign entities holding more than 10% of a domestic entity's share.

³⁴ For a minimum of BAM 20 million (EUR 10.2 million) invested over five years.

³⁵ Provided the employment contract is granted on a full-time basis for a minimum of 12 months and the employee has not been already employed by the corporation or a related entity in the last 5 years.

³⁶ List of activities of public interest: public postal services, medical and health care services, social security services, education, services performed by registered religious organisations, services in the field of culture, and services of public radio and television bodies

³⁷ The current Annual Audit Plan uses 19 criteria.

³⁸ Four types of audit are carried out: comprehensive field audits, desk control, control of non-registered entities and special controls.

³⁹ This programme is organised around four pillars: entry in the taxpayer registry, tax return submission, accurate registration and payment obligation.

⁴⁰ This project is supported by the Dutch Ministry of Finance, the Centre of Excellence in Finance (CEF), the International Monetary Fund (IMF) and the Assistance Technique France (Adetef). The overall objective of the project is to contribute to the strengthening of beneficiary institutions' capacity in accordance with EU recommendations.

⁴¹ The OECD Database on General Competition Statistics (OECD CompStats) is a database with general statistics about competition agencies, including data on enforcement and information on advocacy initiatives. In 2020, it included data from competition agencies in 56 jurisdictions, including 37 OECD economies (36 OECD economies and the European Union): Argentina, Canada, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Mexico, Peru, United States (Americas); Australia, Brazil, Chinese Taipei, India, Indonesia, Japan, Korea, New Zealand (Asia-Pacific); Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, European Union, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Romania, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom (Europe); Egypt, Israel, Kazakhstan, Russian Federation, South Africa, Turkey, Ukraine (Other) (OECD, 2020^[297]).

⁴² The 27 SOEs under the purview of the RS Share Fund does not include enterprises undergoing bankruptcy or liquidation. It also excludes companies that "have not registered in accordance with the legislation", which refers to SOEs that have not been transformed into limited liability companies or joint-stock companies, as required by applicable legislation. According to RS authorities, 42 SOEs are undergoing bankruptcy or liquidation and 34 are not fully incorporated as companies. The authorities report that most enterprises in the latter category have not been conducting business activities for a number of years and should be liquidated in accordance with the Law on Registration of Business Entities.

⁴³ The central levels of government in Bosnia and Herzegovina (FBiH and RS) do not maintain centralised data on SOEs held by the subnational levels of government (cantons and municipalities). The figure of 128 SOEs held by subnational levels of government in FBiH is based on data gathered by the authorities for the purpose of the current assessment. Separately, an IMF team conducted an independent study of SOEs at all levels of government in Bosnia and Herzegovina, based on 2017 data, which concluded that approximately 550 enterprises are in state ownership at all levels of government (Parodi and Cegar, 2019^[78]).

⁴⁴ The figures presented in IMF (Parodi and Cegar, 2019^[78]) concern SOEs at all levels of government (FBiH, RS, 10 cantons and 145 municipalities). The 414 enterprises were those for which financial statements were publicly available.

⁴⁵ The sectoral classification used in the referenced IMF study has been modified to align with the sectoral classification used in the OECD's recurrent SOE data collection exercise (OECD, 2017^[79]). The "Electricity and gas sector" includes steam and air conditioning supply enterprises.

⁴⁶ Information on SOE board composition in RS is as reported by the authorities in the context of this assessment.

⁴⁷ This is based on information provided by the authorities in the context of this assessment. Separately, of the 181 SOEs held by all levels of government in FBiH, 19% (34 companies) have non-state minority shareholders.

⁴⁸ The FBiH Government is a minority shareholder in the following companies: Aluminij, Sarajevo Osiguranje, Energopetrol and ArcelorMittal Zenica.

⁴⁹ The World Bank is providing technical support in the context of the "BEST-SOE project" that focuses on "Support for Better, Effective, Sustainable and Transparent Public Enterprises in Bosnia and Herzegovina",

<http://documents1.worldbank.org/curated/en/223291604413419904/Concept-Project-Information-Document-PID-Bosnia-and-Herzegovina-Forest-Economy-Development-Project-BiH-FEDEP-P171513.docx>

⁵⁰ Figures on the number of privatisations in FBiH are based on data provided by FBiH authorities for assessment. The identification of the two SOEs privatised in 2016 is based on (US Department of State, 2019^[80]).

⁵¹ The OECD SOE Guidelines recommend that public procurement procedures applicable to general government are applied to SOE activities intended to fulfil a governmental purpose (OECD, 2015^[84]).

⁵² Prior to PISA 2018, the last time BiH had comparable results on student learning was in 2007 when it participated in the Trends In International Mathematics And Science Study (TIMSS).

⁵³ Internationally reported data for BiH is only available for 2019, while regional averages are only available for 2019.

⁵⁴ In 2018, the gross enrolment ratio in pre-primary education was on average around 53% in the Western Balkans and 98% in the EU (UIS, 2021^[88]).

⁵⁵ For the purpose of this profile, the instruction system refers to teaching and learning processes that take place in school education. It generally consists of curriculum, standards for schools and student learning, assessment and evaluation frameworks, and other elements that support instruction.

⁵⁶ The Strategy of Education Development for Pre-university Education 2016-2021.

⁵⁷ The PISA 2018 reading assessment in Bosnia and Herzegovina revealed that general/modular programmes had an average of 19% low performers, while vocational programmes had 61% (OECD, 2018^[87]).

⁵⁸ For five economies that could serve as peers for Bosnia and Herzegovina (Bulgaria, Croatia, Hungary, Romania and Slovenia) the average activity rate was 71.2%.

⁵⁹ Note that data for the entities do not specify the age group.

⁶⁰ Around EUR 27.5 million is dedicated to cover minimal salary, contributions and taxes for around 70 000 employees directly affected by COVID-19 in April, and possibly May (OECD, 2020^[298]).

⁶¹ Official Gazette of the Federation of Bosnia and Herzegovina, No. 26/16 and 89/18.

⁶² The Labour Law has been harmonised with the following: Directive 2003/88/EC of the European Parliament and of the Council of 4 November 2003 on certain forms of organisation of working time; Council Directive 92/85/EEC of 19 October 1992 on the introduction of measures to encouraging the improvement of safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding (tenth individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC); and Council Directive 2001/23/EC of 12 March 2001 on the approximation of the laws of the Member States relating to the protection of employees' rights in respect of transfers of undertakings, establishments or parts of undertakings or establishments.

⁶³ Official Gazette of SRBiH, No. 22/90. The new law came into force on 8 November 2020.

⁶⁴ Direct-executable Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work.

⁶⁵ It will consist of BiH government representatives, representatives of employers' associations, trade unions and prominent experts in occupational safety and health.

⁶⁶ Official Gazette Republika Srpska 01/16 and 66/18.

⁶⁷ Official Gazette Republika Srpska 1/08 and 13/10.

⁶⁸ Responses of government to OECD questionnaire.

⁶⁹ As laid down in the Law on Inspections in the Federation of Bosnia and Herzegovina (Official Gazette of the Federation of BiH, No. 73/14).

⁷⁰ Authorised healthcare institutions have the authority to conduct specific health care for workers and occupational medicine. Authorised organisations for performing professional work in the field of occupational safety have the authority to draft an act on risk assessment, conduct periodic inspections and tests in the field of occupational safety (means of work, harmfulness and microclimate in the work environment), and train workers for safe and healthy work. The worker, trade union, employer or employee council may submit a request to the labour inspector to conduct an inspection.

⁷¹ Official Gazette Republika Srpska 18/20.

⁷² In March 2021, the total number of employees within the RS administration for the inspection of jobs was 398, among whom 258 were inspectors and 32 labour inspectors.

⁷³ Information provided by BiH-RS. In 2019, labour inspectors executed 5 369 inspection controls (4 140 were regular planned controls and 1 229 were as part of an extraordinary process). There is no indication about the share of companies visited and controlled.

⁷⁴ Information provided by BiH-RS.

⁷⁵ Information provided by BiH-RS.

⁷⁶ The Ministry for Labour, War Veterans and Disabled persons protection, Economic and Social Council and other ministries have periodic meetings within working groups related to creation strategies, annual action plans for implementation strategies and draft laws

⁷⁷ The Law on Employee Councils (Official Gazette of the Federation of BiH, No. 38/04) provides for the possibility of forming an employee council at company level. The employer has the obligations to inform, consult and obtain prior consent when it comes to making certain decisions important for workers' rights. In case there is no employee council, the trade union undertakes its tasks. According to Article 22, the employer must inform the employee council at least every six months about issues that affect their interests in workplace relations, particularly those regarding the condition and results of operations, development plans and their impact on the economic and social position of employees, movements and changes in salaries, safety at work and measures to improve working conditions, and other issues important for the rights and interests of employees. Article 23 determines consultation rights on issues such as the adoption of work regulations; the intention of the employer to terminate the employment contract by more than 10% for economic, technical or organisational reasons; employment plan, relocation and dismissal; measures related to health and safety at work; significant changes or introduction of new technology; vacation plan; working hours; night work; fees for inventions and technical improvements; other decisions for which the collective agreement provides for consultation; employee councils in their adoption. See <http://www.advokat-prnjavorac.com>.

⁷⁸ The provision of Article 158 of the Law on Labour stipulates that it should be consulted in order to promote and harmonise economic and social policy, and encourage the conclusion and application of collective agreements. Each delegation (trade unions, employers and the federation) has seven members.

⁷⁹ Representative Trade Unions of Republika Srpska include the Alliance of Trade Unions of Republika Srpska and the Confederation of Trade Unions of Republika Srpska. The Union of Association of employers of Republika Srpska is the only employers' association.

⁸⁰ In addition to wage levels and principles of wage development, collective agreements fix issues such the organisation of working time, shift and night work, overtime, annual leave, years of work, reimbursements of costs for hot meal, anniversary award, working conditions at the work place, and rights and obligations of trade union representatives. The latter are usually fixed by law in EU economies.

⁸¹ Official Gazette of RS, no 26/01.

⁸² One third of employees, as well as trade unions (representing at least 20% of the workforce), have to agree.

⁸³ Official Gazette of RS, no. 110/10 and 91/17.

⁸⁴ Through participation in working groups the council provides its opinion on work and employment, the economic reforms of Republika Srpska, and on law proposals and the budget.

⁸⁵ Wave 3 of the Skills Toward Employment and Productivity (STEP) survey (World Bank, 2018^[299]).

⁸⁶ Note: "Non-routine" jobs refer to managers, professionals and higher-level technicians whose job descriptions usually contain non-routine cognitive and socio-emotional tasks. This corresponds to Type A occupations in STEP methodology. "Routine jobs" refer to all other occupations, which are Type B occupations in STEP methodology. This methodology was slightly adapted.

⁸⁷ Information, Counselling and Training Centres (CISO) were established in 2011 within seven branch offices of Employment Institute of Republika Srpska (EIRS). These centres provide professional information services for pupils. During the 2018/19 school year, professional information and orientation services were provided for 2 813 pupils in 141 high school graduation classes. Data were taken from the reports of schools that carried out this activity. In 2018/19 this measure was provided for 8 129 pupils in primary and secondary schools (information provided by BiH-RS).

⁸⁸ Information provided by BiH-RS.

⁸⁹ The main strategic objectives are: 1) improving adult education legislation in the context of lifelong learning and harmonising with the EU reference framework; 2) establishing effective ways of participating with relevant social partners in the adult learning process in the context of lifelong learning; 3) developing programmes and institutional capacity and improving the accessibility of adult education in the context of lifelong learning; and 4) ensuring and improving the quality of adult education in the context of lifelong learning (Official Gazette of BiH, No. 96/14).

⁹⁰ Information provided by BiH.

⁹¹ Official Gazette of BiH, No. 39/14.

⁹² Official Gazette of BiH, No. 96/14.

⁹³ It was expected that the government would provide its comments by the end of June 2020. At the time of writing there has been no advancements.

⁹⁴ Official Gazette of RS, 59/09 and 1/12.

⁹⁵ Including craft occupations for shoe production, agricultural occupations, care occupations, mining occupations and hospitality sector occupations.

⁹⁶ In line with the EU-agreed definition, a person (15-64) is at risk of in-work poverty if they are in employment and live in a household that is at risk of poverty. A household is at risk of in-work poverty if its equivalised disposable income is below 60% of the national median. However, the authors of this study counted as employed all individuals aged 18-64 who had declared themselves to be working, rather than those who had worked more than half of the income reference year as required by the EU methodology.

⁹⁷ According to the law, the government of the FBiH at the proposal of the Federal Ministry of Finance in co-operation with the Federal Institute for Development Programming, and with prior consultation with the Economic and Social Council, should fix the level of the minimum wage. At the time of writing, the above-mentioned FBiH act had not yet been adopted.

⁹⁸ Ministry of Human Rights and Refugees of Bosnia and Herzegovina, Gender Equality Agency of Bosnia and Herzegovina, Gender Action Plan of Bosnia and Herzegovina (GAP) (Agency for Gender Equality of Bosnia and Herzegovina, 2018^[326]). It includes the following planned measures:

- Identification of priority laws, strategies, action plans and programmes with the aim of introducing international and domestic standards for gender equality.
- Conducting gender analyses of strategies, policies, programmes and projects in the field of labour market, employment and access to economic resources to identify shortcomings, strengths, real needs and opportunities regarding gender equality.
- Regular collection, analysis and publication of gender-disaggregated data on women's and men's participation in the labour market and economic life, including participation in decision-making positions, career advancement, income, wages, indefinite/fixed-term work, business contract terms and access to credit.
- Development and implementation of programmes of measures and activities to eliminate gender discrimination in the field of labour, employment and access to economic resources, including strengthening institutional capacity to apply international and domestic standards in this area, introduction of gender responsive budgets, and establishment of appropriate institutional mechanisms for gender equality to co-ordinate the implementation of these measures.
- Support for research and programmes to increase women's participation in the labour force and reduce unemployment, the development of women's entrepreneurship, as well as representation in agricultural production and the informal sector, and the economic and social empowerment of women.
- Support for research and programmes aimed at improving social protection that address the specific position of women in the labour market and in social and economic life, for example: casual work, career breaks and lower average wages.
- Support for research and programmes related to the advancement of women in the field of rural development, as well as the integration of gender issues into programmes related to sustainable development and environmental protection.
- Organising training programmes for women to help them seek, select and obtain adequate employment, including retraining and self-employment, and starting and developing entrepreneurship.
- Improving measures to reconcile business and private life, including maternity and paternity protection, improving the provisions on paid maternity leave, paid parental leave for both parents, as well as special measures that make it easier for employees to reconcile professional and family obligations.
- Conducting promotional activities, information campaigns and campaigns to raise public awareness of the right of women and men to have equal access to employment, the labour market and economic resources in the field of environmental protection and sustainable development.

- Monitoring progress and reporting on the representation of women and men in the field of labour, employment and access to economic resources, as well as in the field of women's entrepreneurship.

Responsibility holders for the implementation of these measures are legislative and executive institutions and bodies at the state and entity level, cantonal bodies and bodies of local self-government units, in accordance with the sectorial competencies prescribed by applicable legal regulations. Corresponding budgets are adopted budgets of responsible institutions at all levels of authority, with the possibility to combine it with the use of IPA and other donors' funds.

⁹⁹ 325 women participate in this programme. Information provided by FBiH.

¹⁰⁰ In families with small children, women perform on average 33.89 hours a week more housework than men (almost another full-time job).

¹⁰¹ Horizontal co-ordination for the implementation of Gender Action Plan of BiH 2018-2022 in RS is provided through Co-ordination Committee, appointed by the Government of Republika Srpska. The Co-ordination Board of Republika Srpska (CBRS) is led by the Gender Centre and its members are appointed representatives of all ministries in the government. The CBRS has a rulebook and regular meetings (every quarter), proposes annual operational plan for gender equality and annual reports in Republika Srpska within the implementation of GAP BiH 2018-2022, and follows implementation. One of the priority areas is labour, employment and access to economic resources.

Vertical institutional co-ordination is provided through the Management Board: Agency for Gender Equality of BiH, Gender Centre of Federation BiH and Gender Centre of Republika Srpska. The Management Board meets periodically and follows the implementation of the GAP BiH, proposes strategic activities, proposes annual plans and reports, and develops co-operation with international organisations interested in supporting the implementation of GAP BiH.

¹⁰² Conclusion No. 04/1-012-2-2716/16.

¹⁰³ The Gender Centre celebrates International Girls in ICT Day in Republika Srpska every April to stimulate the interest, visibility and participation of girls and women in education and professional careers involving innovation, technical, technological and ICT. Various promotional campaigns and events are organised across a week. On the initiative of Gender Centre, primary and secondary schools in RS organise school children and youth education institutions, institutions, companies, faculties and research centres. The Gender Centre has also developed a close partnership with the ICT company LANACO Banja Luka, which every year helps celebrate this day by offering different courses for girls. These courses are certified at the global level and give students the opportunity to enter the labour market in a job related to ICT. This type of co-operation enables the economic empowerment of women, as well as further training in one of the highest paid professions. This model of co-operation has proved to be useful and significant not only in the form of promotional activities, but also in terms of concrete actions for the direct involvement of women in the labour market. The Gender Centre's campaign is recognised internationally by the International Telecommunication Union (ITU), with the Gender Centre and Republika Srpska included in the calendar and map of all economies in the world that organise activities to celebrate the day. A 2016 government report foresees implementing programmes to stimulate young women and girls to choose education in technical and mathematical areas that provide better employment and contribute to development (Gender Centre, 2019^[300]).

¹⁰⁴ Information provided by BiH-RS.

¹⁰⁵ The main objective is to strengthen the competitiveness of business entities led by women entrepreneurs and improve the accessibility and attractiveness of entrepreneurship and business for women. Financial resources for the realisation of activities from the Action Plan 2018-2022 amount to BAM 4.5 million, most

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of which relates to loan support from the Investment and Development Bank of Republika Srpska, while the remaining funds are from the government and local budgets, as well as international projects and programmes. The Investment and Development Bank of Republika Srpska will work to further reduce the basic interest rate to encourage women's entrepreneurship and help women improve their businesses and to become stronger economically.

¹⁰⁶ Based on the recommendations from the implementation of the first Action Plan for Improving the Position of Rural Women in Republika Srpska, the RS government adopted the second Action Plan for 2019-2020. For the initial action plan, measures developed were special temporary measures for rural women within the framework of the Strategic Plan for Rural Development 2009-2015. The action plan was a targeted public policy based on field indicators. It encompassed various measures in the field of economic empowerment, education, training, improvement of quality of life and access to basic services, protection from violence, social strengthening of the role of rural women, and women's participation in decision making

¹⁰⁷ EIRS has allocated BAM 1.73 million (around 9.5% of the 2019 ALMP budget) for employment and self-employment of these target groups within the project Supporting Employment and Self-employment of target categories in the Economy of Republika Srpska in 2018. Some 396 women from rural areas participated in the programme, and most of the budget was spent (more than 80%). Female victims of war torture were also included as a target group for ALMPs (Information provided by BiH-RS).

¹⁰⁸ Official Gazette of the Federation of BiH, No. 55/00, 41/01, 22/05 and 9/08.

¹⁰⁹ Official Gazette of the Federation of BiH, No. 74/18.

¹¹⁰ Federal Employment Agency responsibilities:

a) monitor and propose measures to improve the employment and social security of unemployed persons; b) monitor and ensure the implementation of the established policy and measures in the field of labour and employment on the territory of the FBiH and inform the competent bodies thereof; c) manage funds for ensuring material security during unemployment, in accordance with this law; d) monitor and co-ordinate the work of employment services in the implementation of established policies and measures in the field of employment and social security of unemployed persons within the competence of the Federation; e) monitor and propose measures to improve the employment of disabled persons and their professional rehabilitation, and ensure the fulfilment of conditions for their employment in co-operation with employment services; f) provide assistance in the implementation of vocational guidance, training and retraining programmes for the unemployed and their re-employment in appropriate jobs; g) consolidate and keep summary records in the field of labour and employment of interest to the FBiH and propose measures and necessary resources for the development and functioning of a single information system in this field; h) monitor the implementation of international agreements and agreements in the field of labour and employment related to the FBiH; i) represent employment services in relations with bodies and services of Bosnia and Herzegovina, the FBiH and RS; j) approve the employment of foreign citizens and stateless persons at the proposal of the Employment Service, in accordance with the Law on Employment of Foreigners (Official Gazette of the Federation of BiH, No. 8/99); k) monitor and take measures to create conditions for the return of citizens of the FBiH from temporary work abroad and their employment; l) perform other tasks determined by the law, the statute and acts of the Federal Bureau and the ILO Conventions and Recommendations related to the field of labour, employment and social policy; m) submit to the Parliament of the Federation of Bosnia and Herzegovina an annual report on its work and n) submit the consolidated annual financial plans of the Federal Bureau and Employment Services to the federal ministry responsible for labour affairs, in accordance with the Law on Budgets of the Federation of Bosnia and Herzegovina;

Cantonal employment services responsibilities:

a) employment mediation; b) collecting and submitting data on unemployed persons to the Federal Bureau; c) information on employment opportunities; d) co-operation with educational institutions in order to harmonise educational programmes with the staffing needs of employers; e) implementation of programmes of professional orientation, training and retraining of unemployed persons and their re-employment in appropriate jobs; f) determining the rights of persons in case of unemployment; g) issuing work permits to foreign citizens and stateless persons; h) adoption and implementation of programmes of measures for faster employment of certain categories of unemployed persons whose employment is difficult; i) other activities determined by this and other laws.

Information provided by FbiH.

¹¹¹ Information on the vocational profile, employment status within the 60 days before registering, social and health characteristics, and motivation for work is collected. Those unemployed are classified into three groups, according to their degree of employability: 1) easily or directly employable persons (employable within the next 9 months according to counsellor's judgement); 2) medium or conditionally employable persons (assessed to be employable within the next 18 months); 3) hard-to-employ persons (assessed to be not employable within the next 18 months, have skills which are not in demand, have health problems and have a low job-search motivation).

¹¹² Information provided by FBiH.

¹¹³ According to administrative data provided by FBiH. The budget spent for ALMPs amounted to roughly BAM 27.6 million in 2019.

¹¹⁴ The percentage is in fact lower, as the number of participants are cumulated over the year. In Q2 2019, 76% of unemployed were long-term unemployed.

¹¹⁵ Official Gazette of RS, No. 90/16.

¹¹⁶ The legal framework is formed by the Law on Mediation in Employment and Unemployment benefits (RS Official Gazette, No. 30/10, 102/12) and the Law on changes and amendments to the Law on Mediation in Employment and Unemployment benefits (RS Official Gazette, No. 94/19); regulations on conditions, criteria, and manner of implementation of active employment policy measures (RS Official Gazette, No. 94/19); and regulations on active job search (RS Official Gazette, No. 94/19). The EIRS consists of 1 central office, 7 branch offices and 59 bureaus. It employs 334 employees, of whom 83 are counsellors serving 87 000 registered unemployed and 3 485 registered vacancies.

¹¹⁷ Information provided by RS.

¹¹⁸ In France and Germany for example, the caseload of for hard-to-place jobseekers is around 70 jobseekers per employment counsellor. The caseload may vary in these economies between 100 and 350, depending on how much jobseekers need individual guidance and how autonomous they are to use self-help guidance tools (OECD, 2015^[301]; Manoudi et al., 2014^[302]; Pôle emploi, n.d.^[303]).

¹¹⁹ Easily or directly employable, conditionally employable and difficult-to-employ persons.

¹²⁰ Information provided by BiH-RS.

¹²¹ Labour market analysis was undertaken by the bureaus located in the local communities. Local councils proposed a plan for secondary school enrolment in accordance with the needs of the economy at the local level. Representatives of employment bureaus took active participation in these activities. In January 2019, the ILO project ended, leaving 9 local partnerships in 15 local communities in RS still running. The objective is to continue co-operation with the key labour market actors through conferences, meetings and advisory bodies in local communities.

¹²² In 2019, the EIRS participated in the EU4Business Entrepreneurship Development project, implemented

by the ILO. The aim of the project was to promote the establishment and development of micro, small, medium and newly registered companies by designing mechanisms to provide financial and non-financial (technical/professional) assistance to end users (new and existing entrepreneurs from the target categories of unemployed) and further entrepreneurship development. Within the EU4Business project, training was organised for project partners from PES on the topic "How to start and improve business".

¹²³ During 2019, significant co-operation regarding improving the work of the bureaus through the implementation of the reform package was achieved with the "Youth Employment Project - YEP" (Phase III) supported by the Swiss Embassy and implemented by the German company GOPA. The emphasis was on the implementation and development of the methodology for monitoring and evaluating individual employment plans, increasing customer satisfaction with services, expanding the network of job search clubs, creating a basis for developing social entrepreneurship, and strengthening partnerships in the labour market.

¹²⁴ Answers of the government to the OECD questionnaire.

¹²⁵ The Law on Amendments to the Law on Mediation in Employment and Rights During Unemployment. Official Gazette of RS, No. 94/19.

¹²⁶ Information provided by BiH-RS.

¹²⁷ Official Gazette of the Federation of BiH, No. 26/16 and 89/18.

¹²⁸ Official Gazette of the Federation of BiH, No. 92/16.

¹²⁹ Official Gazette of RS No. 60/15 and 5/16, amendments refer to Article 10.

¹³⁰ Official Gazette of the RS, No. 52/2019. The law entered into force on July 1, 2019.

¹³¹ In Slovenia, in 2018 the most requested occupations were welders, masons and cooks. The public call for the employment of healthcare workers in Germany is permanently open, and in 2018 the necessary activities were undertaken in BiH in accordance with the announced call. The employment office received 94 applications from medical workers during 2018. In the same year, 149 healthcare professionals from RS received work permits as carers in Germany, according to the procedure for employment with known employer. In 2019 the number was 57.

¹³² See European Commission, Peer review on "Employer service delivery", 26-28 October 2020 (online), The Peer Review was hosted by the Dutch PES (UWV WERKbedrijf) and focused on PES employer services design and delivery regarding employment of disabled jobseekers. Report available at: <https://ec.europa.eu/social/main.jsp?catId=1070&langId=en&newsId=9528&furtherNews=yes>.

¹³³ Horizon 2020 is the biggest EU framework programme for research and innovation. It provides funding for multi-national collaboration projects as well as for individual researchers, and supports SMEs with a special funding instrument (<https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>; <https://www.euneighbours.eu/en/east/stay-informed/projects/horizon-2020>).

¹³⁴ European Cooperation in Science and Technology (COST) is an EU-funded, intergovernmental framework that currently gathers 38 Members and 1 Cooperating Member. It is a funding organisation for the creation of research networks (COST Actions), which offer an open space for collaboration among scientists across economies. COST funding is intended for collaboration activities and complements national research funds (<https://www.cost.eu/who-we-are/about-cost/>).

¹³⁵ Eureka is the largest intergovernmental network for co-operation in R&D and innovation in the world. It is present in over 45 economies, where it provides access to public funding, promotes collaboration and

innovation or offers advice through various programmes (such as EUREKA Clusters, Globalstars, InvestHorizon) (<https://www.eurekanetwork.org/>).

¹³⁶ EURAXESS – Researchers in Motion is a pan-European initiative delivering information and support services to professional researchers, backed by the EU, member states and associated economies. It supports researcher mobility and career development and enhances scientific collaboration (<https://euraxess.ec.europa.eu/>).

¹³⁷ EU distinction between competitive areas ("black" areas) where no state aid is necessary, and unprofitable or under-served areas ("white" and "grey" areas) where state aid may be justified if certain conditions are met. This distinction is then adapted to the situation of next generation access (NGA) networks (whose deployment is still at an early stage) by requiring EU Member States to take into account not only existing NGA infrastructures, but also concrete investment plans by telecom operators to deploy such networks in the near future (European Commission, 2013^[304]).

¹³⁸ BiH Agency for Statistics (<http://www.bhas.gov.ba>).

¹³⁹ National Summary Data Page (<https://cbbh.ba/Content/Read/1133>).

¹⁴⁰ The extension of Annex VI. Memorandum for the establishment of the Public Administration Reform Fund is not yet approved as the government of RS has not adopted the document, in contrast to the Council of Ministers of BiH, the Government of the FBiH and the Government of the Brčko District. Given the possible closure of the fund, donors (Sweden and Denmark) have requested the return of their funds (approx. BAM 5.2 million) due to the perceived lack of commitment in the PAR demonstrated by BiH authorities (Public Administration Reform Coordinator's Office, 2020^[305]).

¹⁴¹ The importance of interoperability is also underlined in the European Interoperability Framework (EIF) network, which was adopted by the European Commission in 2017. The EIF makes 47 concrete recommendations for how public administrations can improve their interoperability activities, establish cross-organisational relationships, streamline processes supporting end-to-end digital services, and ensure that both existing and new legislation do not compromise interoperability efforts (European Commission, 2017^[306]).

¹⁴² Law on Electronic Signature of BiH, Official Gazette of BiH, 91/06; Law on Amendments to the Law on Identity Card of BiH Citizens, Official Gazette of BiH, 18/12; Decision on the basics of the use of electronic signatures and the provision of verification services, Official Gazette of BiH, no. 21/09; Decision on electronic commerce and e-government in the Council of Ministers of BiH, Official Gazette of BiH, no. 7/10; Law on Electronic Business and Legal Traffic, Official Gazette of BiH, no. 88/07; Law on Electronic Document, Official Gazette of BiH, no. 58/14; Law on Protection of Personal Data, Official Gazette of BiH, no. 49/06, 76/11 and 89/11; Law on Electronic Document of FBiH, Official Gazette FBiH, 15/13; Law on Electronic Signature of the Republika Srpska, Official Gazette of RS, no. 106/15; Law on Electronic Commerce of the Republika Srpska, Official Gazette of the Republika Srpska, no. 59/09, 33/16; Law on Electronic Document of the Republika Srpska, Official Gazette of the Republika Srpska, no. 106/15; Law on Information Security, Official Gazette of the Republika Srpska, no. 70/11.

¹⁴³ The eConsultations portal was created by the Ministry of Justice with support from the project "Capacity Building of Government Institutions for Participation in Dialogue with Civil Society" (CBGI), funded by the European Union. Some 64 state-level institutions are registered in the portal and have started to publish their draft legal acts for public consultation (<https://ekonsultacije.gov.ba/>).

¹⁴⁴ The Law on Registration of Business Entities in RS defines that the process of a one-stop shop system for the registration of business entities from 1 December 2013 is performed at the counters of the RS Agency for IT and Financial Services and at 11 locations of business units.

¹⁴⁵ RS Chamber of Commerce webinars: Electronic sales (e-commerce), IT tools for remote work, electronic books of incoming and outgoing invoices (KUF and KIF), and the impact of social networks on business (<https://komorars.ba/>).

¹⁴⁶ In accordance with the BiH Constitution there are 12 responsible institutions for education in BiH (the Ministry of Education and Culture of RS, ten cantonal ministries of education in FBiH and the Department for Education of the Brčko District). The Federal Ministry of Education and Science has only a co-ordination role. At the state level, the Ministry of Civil Affairs co-ordinates activities within all education institutions, performing harmonisation of plans of entity bodies and defining strategies at the international level, including for education. At the state level, the Agency for Development of Higher Education and Quality Assurance, the Centre for Information and Recognition of Qualifications in Higher Education, and the Agency for Preschool, Primary and Secondary Education have been established.

¹⁴⁷ Under the auspices of the Adult Education Project (2010-2016), the German GIZ, the Swiss Development Cooperation and the USAID-Sida FIRMA Project, in collaboration with the Federal Employment Agency, the Labour and Employment Agency, the RS Institute for Adult Education and the SPEKTAR Agency, created a registry of adult education providers (<http://www.obuke.ba/>).

¹⁴⁸ ITkarijera.ba is a portal that offers comprehensive information on the IT sector of BiH to help young people become part of one of the most promising sectors in BiH (<https://itkarijera.ba/>).

¹⁴⁹ Public procurement portal, managed by the Public Procurement Agency of BiH (<http://www.ejn.gov.ba>).

¹⁵⁰ The Digital inclusion of marginalised women project by Amica Educa focuses on reducing existing gender inequalities in BiH society by involving women in the process of lifelong learning and active participation in the highly computerized society. Some 48 women were involved in the activities of the project (<https://www.amicaeduca.com/digital-inclusion-of-marginalized-women.php>).

¹⁵¹ Digital Transformation Support Programme for MSMEs. Programme implemented by the Development Agency of Serbia in co-operation with the Centre for Digital Transformation and co-funded by the GIZ (<https://ras.gov.rs/javni-poziv-za-ucescu-u-programu-podrske-digitalnoj-transformaciji-mmssp>).

¹⁵² The FTS considered the following: the Development Strategy for Railways in the RS (2009-2015); the Road Traffic Safety Strategy in RS, including implementation plan (2014-2018) (the new implementation plan for 2019-2022 has been developed but the FTS has not been updated so far); the three-year plans of FBiH ministries and institutions; a study on the market and transport demand for river navigation; and various studies for intermodal transport in Bosnia and Herzegovina, including legislation and spatial plans in force and other available sectorial studies and reports.

¹⁵³ Railway transport: interoperability, market access, passengers' rights and obligations. Road transport: road charging infrastructure, annual vehicle taxes.

¹⁵⁴ A single project pipeline (SPP) is a list of projects developed based on a strategic tool for project planning that aims to avoid an ad hoc approach to planning preparation and implementation of investment projects. The SPP helps to prioritise projects, enables the systematic and timely planning of resources, provides a reliable basis for defining the proper sequencing of the priority axis and actions per sectors, and helps link investment planning and programme budgeting.

¹⁵⁵ Annual Programme of the Government of the RS, http://vladars.net/sr-SP-Cyrl/Vlada/Premijer/Documents/Ekspoze_171218.pdf.

¹⁵⁶ European Commission, Instrument for Pre-Accession Assistance, IPA Cross-border Co-operation Programmes, https://ec.europa.eu/regional_policy/en/funding/ipa/cross-border/.

¹⁵⁷ The Law on Public Procurement, <https://www.paragraf.ba/propisi/bih/zakon-o-javnim-nabavkama.html>.

¹⁵⁸ Projects of state importance, state secrets, projects funded by international financial institutions or donor institution/country, etc.

¹⁵⁹ An appropriate definition of “asset management” for the roads sector was proposed by the OECD in 2001: “A systematic process of maintaining, upgrading and operating assets, combining engineering principles with sound business practice and economic rationale, and providing tools to facilitate a more organized and flexible approach to making the decisions necessary to achieve the public’s expectations” (OECD, 2001^[307]).

¹⁶⁰ The rulebook laying down framework for the creation of the Single European Sky was adopted in 2020 (Official Gazette No 40/20); Rulebook on Search and Rescue services in the event of an aircraft accident in Bosnia and Herzegovina (Official Gazette of BiH, No 52/19); Rulebook on air traffic flow management (Official Gazette of BiH, No 20/19); Rulebook on approval of exemptions and derogations from the application of by-laws enacted by the Bosnia and Herzegovina Directorate of Civil Aviation (Official Gazette of BiH, No 88/18); Rulebook on the procedure for avoidance of mid-flight collision (Official Gazette of BiH, No 79/18); Rulebook on harmonisation of Bosnia and Herzegovina with International Civil Aviation Organization requirements (Official Gazette of BiH, No 65/18); Rulebook on flight approval (Official Gazette of BiH, No 53/18); Rulebook on NOTAM office of Bosnia and Herzegovina (NOF) (Official Gazette of BiH No 9/18); Rulebook on oversight in civil aviation (Official Gazette of BiH, No 22/16, 55/18 and 5/19)

¹⁶¹ The Functional Airspace Block Central Europe is a joint initiative of seven states and air navigation service providers from Central Europe: Austria, Bosnia and Herzegovina, Croatia, Czech Republic, Hungary, Slovakia and Slovenia (<https://www.fab-ce.eu/>).

¹⁶² An air traffic management plan must define the operational air traffic management concept, strategic airspace management, tactical airspace management, air traffic service, air traffic flow management, flight operation, functional integration, crisis management, search and rescue, and regional air navigation plans and supplementary procedures.

¹⁶³ Law on railways of Republika Srpska (Official Gazette of RS, 19/17, 28/17, 100/17); Regulation (EC) No 1371/2007 of the European Parliament and of the Council of 23 October 2007 on rail passengers’ rights and obligations (OJ EU L 315, 3.12.2007, p. 14).

¹⁶⁴ Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area (Text with EEA relevance): <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32012L0034>.

¹⁶⁵ Modal shift from road, standards for energy efficiency, standards for noise emission, reduction of greenhouse gas emissions, vehicle labelling for emissions and fuel efficiency, introduction of carbon footprint calculators, eco-driving and speed limits, intelligent transportation system applications, co-modality in transport, urban mobility solutions, etc.

¹⁶⁶ Modal shift through FTS, measures related to the reduction of emissions to stimulate new and more ecologic vehicles through FTS, improvement of transport infrastructure and promotion of bio-fuels and other renewable fuels through the Strategy for Environmental Protection of the FBiH, etc.

¹⁶⁷ As per the Combined Transport Directive 92/106EC, amended by the Directive 2013/22/EU: “combined transport” means the transport of goods between Member States where the lorry, trailer, semi-trailer, with or without tractor unit, swap body or container of 20 feet or more uses the road on the initial or final leg of the journey and, on the other leg, rail or inland waterway or maritime services where this section exceeds 100 km as the crow flies and make the initial or final road transport leg of the journey” (EUR-Lex, 1992_[350]).

¹⁶⁸ Competence and quality of logistic services (e.g. transport, operations, customs, brokers).

¹⁶⁹ Quality of trade and transport related infrastructure (e.g. ports, railways, road, information technologies).

¹⁷⁰ A one-stop shop is a business or office where multiple services are offered; i.e. customers can get all they need in just "one stop." The term originated in the United States in the late 1920s or early 1930s to describe a business model offering customers the convenience of having multiple needs met in one location, instead of having to "drive all over town" to attain related services at different stores. One-stop shop is a way of facilitating trade.

¹⁷¹ Periodical and regular measurements to monitor infrastructure asset conditions, assessment of the value of assets and costs for non-maintained assets, adoption of asset management strategies, consistent approach in the identification of the mix and timing of asset operation and construction strategies, etc.

¹⁷² For more information on the Second Energy Package and the different Energy Packages within the EU, please see https://www.europarl.europa.eu/factsheets/en/sheet/45/internal-energy-market_in particular Section A. Liberalisation of gas and electricity markets.

¹⁷³ The Energy Community is an international organisation that works to integrate the European Union and neighbouring energy markets into a pan-national energy market. For more information please see <https://www.energy-community.org/aboutus/whoweare.html>.

¹⁷⁴ More precisely, the monitoring of the regulatory authorities is performed by an independent auditor based on international good practices and standards. The reports are released for public consumption. The latest report for SERC can be viewed at: <https://www.derk.ba/DocumentsPDFs/Skraceni-revidirani-fin-izvj-DERK-a-za-2019.pdf>.

¹⁷⁵ For a more detailed exposition of the issue of losses in the transmission and distribution of electricity please see (CEER, 2020_[166]).

¹⁷⁶ Framework Energy Strategy of Bosnia and Herzegovina until 2035.

¹⁷⁷ Republika Srpska: Energy Development Strategy of Republika Srpska until 2035, adopted in 2018. Federation of Bosnia and Herzegovina: Framework Energy Strategy of the Federation of BiH until the year 2035.

¹⁷⁸ Document named STRESS TEST has been made in case of the possible scenario of the interruption of natural gas supply. (Official gazette of FBiH, No. 25/20). Government of FBiH adopted the report on Stress Test for possible disruption of natural gas supply in the FBiH and based on the adopted a finding (Official gazette of FBiH, No. 69/14).

¹⁷⁹ Regulation on security of supply and delivery of natural gas ('Official Gazette of RS', No. 17/11), complied with the guidelines of EU Directive 67/2004/EC.

¹⁸⁰ Oil indexation was once the dominant pricing format for natural gas in Europe. This largely reflected the fact that natural gas spot markets were not liquid enough at the time to provide good price signals. Moreover, when natural gas was competing with oil for power generation and heating, oil indexation was a good approach to ensure that natural gas was competitive with the main alternative fuel. Oil indexation is often also justified by natural gas being produced as a by-product from oil exploration or because natural gas competes with oil for capital investment. However, in the current market situation, oil indexation means that price of natural gas price does not reflect the supply and demand realities, which are largely now disconnected from oil, both in terms of alternative demand and production. Furthermore, Europe has a variety of liquid natural gas spot markets that offer good pricing and indexation points, especially considering the interconnected natural gas markets, including those based on the European natural gas pipeline network. Extensive literature discusses the benefit and drawbacks of the oil indexation of natural gas pricing, examples include (Dubreuil, Gergely Molnar and Jeon, 2020^[351]), (European Commission, 2015^[352])—with regard to legality of oil indexation, (Melling, A.J. (2010), Natural gas pricing and its future-Europe as the battleground, 2010^[353]) (IEA, 2020^[355]) --for the current split in pricing approach in Europe, see (Stern, 2007^[354])

¹⁸¹ It should be noted that deficiencies such as the lack of a harmonised legislative framework for natural gas limits its potential.

¹⁸² Although there is an active Energy Community *acquis* infringement case, which stipulates that environmental impact assessments for the construction of a thermal power plant did not conform with *acquis* requirements. See <https://www.energy-community.org/legal/cases/2015/case0115BH.html>.

¹⁸³ The EU Emission Trading Scheme is a construct for the internalisation of externalities relating to the emission of greenhouse gasses of certain economic activities. For further information please see https://ec.europa.eu/clima/policies/ets_en.

¹⁸⁴ For more information on greenhouse gas pricing in Bosnia and Herzegovina and the Western Balkan economies please see (Energy Community, 2021^[308]).

¹⁸⁵ The National Renewable Energy Action plan (NREAP) was adopted at the 50th session of the Council of Ministers of Bosnia and Herzegovina held on 30 March 2016. It is based on the adopted Action plans of the Federation of BiH and Republika Srpska.

¹⁸⁶ Guarantee of Origin (GO) is a tracking instrument defined in Article 15 of the European Directive 2009/28/EC on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC. GO are certificates used to identify and certify that specific consumed electricity was sourced from renewable energy. A certificate is issued per MWh generated from renewable energy to the generator and then transferred to and cancelled by a consumer or supplier who would like to certify that their consumed energy comes from renewable energy. For more information on GO and their use and implementation, see (Association of Issuing Bodies, 2020^[356]) or (Umweltbundesamt, 2021^[357]).

¹⁸⁷ There is no energy efficiency law at the state level, but there are laws in the two entities and the Brcko District.

¹⁸⁸ In particular Directive 2012/27/EU on Energy Efficiency; Directive 2010/31/EU on the Energy Performance of Buildings; Directive 2010/30/EU on Indication by Labelling and Standard Product Information of the Consumption of Energy and Other Resources by Energy Related Products; and Regulation 2017/1369/EU Setting a Framework for Energy Labelling and Repealing Directive 2010/30/EU.

¹⁸⁹ A day-ahead market is an organised market space in which interested parties can buy and/or sell energy for the next day in the form of putting in bids/offers that are algorithmically matched.

¹⁹⁰ The Regulation on Wholesale Energy Market Integrity and Transparency (REMIT) aims to establish a fair and transparent playing field for all stakeholders involved in the trading of energy through establishing a common transparency requirement. As such, REMIT prohibits insider trading and market manipulation. For more information please see <https://acer.europa.eu/en/remit>.

¹⁹¹ Network Codes were established under Article 6 of EU Regulation 714/2009 and are secondary acts, in many cases of a technical nature, that aim to overcome legislative gaps and barriers to a non-discriminated, open internal EU energy market by establishing uniform regulation. In essence they overcome barriers and friction in order to promote competition. In some sense, they represent lessons learned over time that aim to perfect the legislative framework for the EU internal energy market and represent EU best practices and standards.

¹⁹² Balancing markets are an integral part of any energy market. Most markets are settled in advance of physical delivery, as in an organised market forecasted supply is matched with forecasted demand (i.e. the market is cleared). However, to maintain the actual system stability at the moment of delivery, it is essential that the same amount of actual energy is fed into the system as is taken out. To this end, the balancing market is used in as close to real time as possible to correct for any mismatch between what is actually generated and fed into the system and what is taken out of the system for consumption. It is essential that all generators, including renewable energy generators, are “imbalance responsible” as this means that they are liable for any mismatch between their forecasted and generated/delivered electricity. If they were not imbalance responsible, other entities or the consumer would need to cover the cost arising from the imbalance caused by the generator, which would also disincentive the generator to be precise with their forecast. For more detailed explanations of balancing market and design options please see (Van der Veen and Hakvort, 2016^[360]), (Pinson, 2020^[361]), (Bundesnetzagentur, 2020^[362]), and (50hertz, 2020^[363]) and (ACER, 2020a^[364]) for an overview of the relevant EU legislation for electricity balancing.

¹⁹³ According to information presented by the government: “In electricity tariffs for universal service there is cross subsidising between households and commercial customers in favour of households. Regulators seek to correct tariff values for universal service in order to eliminate cross subsidising. Cross subsidies are being reduced.”

¹⁹⁴ This support is currently central to an ongoing case at the Energy Community (Energy Community Case ECS-10/18: Bosnia Herzegovina/State aid). For more information, please see <https://www.energy-community.org/legal/cases/2018/case1018BH.html>.

¹⁹⁵ The Energy Strategy of Bosnia and Herzegovina until 2035 was approved in 2018 and the Energy Development Strategy of RS until 2035 was adopted in 2018.

¹⁹⁶ Main measures implemented relate to climate change adaptation measures, especially as regards early warning systems and flood risk management, awareness-raising activities and capacity building for state- and entity-level authorities responsible for various aspects of climate change policies.

¹⁹⁷ Ministry of Spatial Planning, Construction and Ecology RS; Ministry of Agriculture, Forestry and Water Management RS; Ministry of Agriculture, Water Management and Forestry FBiH; Ministry of Environment and Tourism FBiH; Department of Agriculture, Forestry and Water Management; Department for Spatial Planning, Proprietary and Legal Affairs Brčko District.

¹⁹⁸ Such an adapted agroforestry scheme for flood risk management was designed and piloted in the Srbac

municipality. Trees were planted along a 5 400 metre stretch of riparian area, with the total area covered being approximately 1 325 hectares of agricultural land.

¹⁹⁹ In particular, 20 non-structural measures were realised in 11 municipalities in the Vrbas River Basin from August 2017 to November 2019. Interventions included regulation of torrential streams, cleaning of riverbeds, strengthening of embankments, bolstering riverbank protection with stone embankments and gabion systems, constructing stormwater drainage systems and reinforcing riverbanks with vegetation, including under an agroforestry management system. The total value of implemented projects is estimated at more than USD 2 million. In addition to the transfer of modern technologies in flood risk management and improvements in legislative and institutional framework, the project contributed to better preparedness to floods and increased awareness of over 200 000 citizens in 11 municipalities in the Vrbas River Basin.

²⁰⁰ A Flood Forecasting Early Warning System established for the Vrbas River Basin and a signed protocol on warning information exchange between key institutions is expected to have significant effects on the advancement of flood risk management in the RS and BiH, which could ultimately lead to the reduction of losses and damage for more than 200 000 citizens situated in the Vrbas River Basin. This system might be extended to the entire BiH; however, no concrete steps were planned at the time of drafting.

²⁰¹ **Short-term objectives (2019-2024):** increase the percentage of separately collected waste for recycling from municipal waste through primary selection to reach 10% of the total amount of collected municipal waste, i.e. 25% of paper and cardboard, plastic, glass and metal from the total amount of collected waste; achieve a share of 2% of treated municipal waste by 2024 by increasing the coverage of organised waste collection services and building infrastructure for the separate collection of municipal waste components. **Long-term objectives (2024-2029):** increase the coverage of the population with organised waste collection and disposal services on an annual basis (the goal of 100% by 2029 is set); complete the construction of all regional landfills, transfer stations, and extra facilities for treatment or recycling of special and hazardous types of waste; continue the separate collection of recycling waste from municipal waste (paper and cardboard packaging, plastic and glass packaging, and metal packaging) to achieve the goal of 15% of the total amount of collected municipal waste, or about 37% of paper and cardboard, plastic, glass and metals from the total amount of waste material produced and collected; rehabilitate the remaining areas of contaminated land ("black spots") in accordance with the prepared remediation plans and create the space for treatment or disposal of hazardous waste by amending the Spatial Plan of the RS.

²⁰² According to the Law on Amendments of the Law on Waste Management (Official Gazette of RS 70/20), the system of management of special waste streams (e.g. waste tyres, batteries and accumulators, vehicles, waste electric and electronic products, oils and lubricants) has been established and the key principles of extended producer responsibility have been legally introduced.

²⁰³ The operator of the packaging waste management system has set up "green islands" in the following municipalities: Prijedor, Trebinje, Laktasi, Kozarska Dubica, Mrkonjic Grad, Ribnik, Prnjavor, Banja Luka and in the area of Olympic Center "Jahorina". Through these activities, containers for the separate collection of waste for recycling through green islands in public areas have been installed. However, separate collection remains in its infancy, and most packaging waste comes from companies in the system, rather than citizens.

²⁰⁴ Educational promotional videos, education through primary and secondary school activities, distribution of advertising material, sending info-material with utility bills, and similar.

²⁰⁵ This measure relates to the preparation of the necessary study documentation for the remediation and closure of municipal landfills in the municipalities of Pelagićevo, Čelinac, Srbac, Kotor Varoš, Bratunac, Šekovići, Vlasenica, Doboj and Trebinje.

²⁰⁶ This measure consists of the preparation of the necessary study and project documentation for the construction of a joint landfill in the municipality of Prijedor (regional landfill) covering local governments: Kozarska Dubica, Kostajnica, Krupa na Uni, Novi Grad, Ostra Luka and Prijedor.

²⁰⁷ Since the introduction of the Extended Producer Responsibility scheme in 2012, 35% of total packaging waste and 35% of total electric and electronic waste had been recycled in the FBiH, and the set targets have been reached.

²⁰⁸ The Centers for Civic Initiatives conducted a campaign “Mapping of illegal landfills – Contribution to soil remediation”. According to the results of this campaign, which were presented in mid-2019, about 1 300 illegal landfills were recorded throughout the FBiH.

²⁰⁹ In addition to this strategy there is the Sava River Basin Management Plan of the RS (2018-2021) and the Trebišnjica River Basin Management Plan of the RS (2018-2021).

²¹⁰ The River Basin Management Plans (RBMPs) for the Sava River Basin and the Watershed of Adriatic Sea in the FBiH (2016-2021) complement the aforementioned strategic documents.

²¹¹ The Ministry of Agriculture, Forestry and Water Management of the RS and the public institution Waters of Srpska are responsible for water management in the RS. At the state level MoFTER is in charge of international co-operation, co-ordination of entity level institutions, harmonisation of River Basin Management Plans and harmonisation of Flood Risk Management Plans. The Food Safety Agency of Bosnia and Herzegovina defines conditions to ensure the health protection of people from the negative effects of drinking polluted water. In the FBiH there is the Federal Ministry of Agriculture, Water Management and Forestry; the Federal Ministry of Environment and Tourism; Sava River Watershed Agency Sarajevo; the Agency for Watershed of the Adriatic Sea Mostar; the Federal Hydro Meteorological Institute; federal water inspection; cantonal ministries for water management; cantonal ministries of environment; cantonal inspections and local authorities (cities and municipalities).

²¹² At the tenth meeting of the Conference of the Parties to Convention on Biological Diversity, held in October 2010, in Nagoya, Aichi Prefecture, Japan, a revised and updated Strategic Plan for Biodiversity was adopted, including the Aichi Biodiversity Targets, for the 2011-2020 period. This Plan provided an overarching framework on biodiversity, not only for the biodiversity-related conventions, but for the entire United Nations system and all other partners engaged in biodiversity management and policy development. Parties agreed to translate this overarching international framework into revised and updated biodiversity strategies and action plans within two years, which are intended to define the current status of biodiversity, the threats leading to its degradation, and the strategies and priority actions to ensure its conservation and sustainable use within the framework of the socio-economic development of the economy. There are 20 Aichi biodiversity targets grouped around 5 strategic goals: 1) address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society; 2) reduce the direct pressures on biodiversity and promote sustainable use; 3) improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity; 4) enhance the benefits to all from biodiversity and ecosystem services; and 5) enhance implementation through participatory planning, knowledge management and capacity building (Convention on Biological Diversity, 2020^[283]).

Aichi Target 11 states: “By 2020, at least 17% of terrestrial and inland water, and 10% of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.” (Convention on Biological Diversity, 2020^[283]).

²¹³ In the RS, the Ministry for Spatial Planning, Construction and Ecology is responsible for activities in the area of nature protection. Activities in the area of nature protection within the competence of local self-government units are performed by bodies of local self-government units and by departments responsible for protection of the environment of local self-government unit. Expert activities in the area of protection of nature and natural resources are performed by Institute for Protection of Cultural, Historical and Natural Heritage of the RS. In the FBiH, the Federal Ministry of Environment and Tourism, Federal Ministry of Agriculture, Water Management and Forestry, Federal Forest Administration and all ministries at the cantonal level dealing with environment are responsible bodies. The Institute for Nature Protection has not been established yet, and there is no professional institution that assists and directs the processes of nature protection.

²¹⁴ Relevant documents are the Law on Protection and Rescue of People and Material Goods from Natural or other Disasters (Official Gazette of the FBiH, No. 39/03 and 22/06); Assessment of the Vulnerability of the FBiH to Natural or Other Disasters (Official Gazette of the FBiH, No. 41/05); Plan for Protection and Rescue of the Federation of BiH from Natural or Other Disasters (Official Gazette of the FBiH, No. 40/08); Law on Fire Protection and Firefighting (Official Gazette of the FBiH, No. 64/09).

²¹⁵ Air protection and air quality management in the RS is regulated by the Law on Air Protection (Official Gazette of RS No. 124/11 and 46/17) and subordinate legislation. Regulations in the field of air protection in the RS are almost fully harmonised (about 94%) with two EU directives: 2008/50/EC and 2004/107/EC. Alignment with the requirements of the directives relating to emissions from large combustion plants was carried out during 2017 in accordance with Annex II of the Energy Community Treaty.

²¹⁶ Improving Air Quality and Air Quality Management in Bosnia and Herzegovina (IMPAQ). The following targets have been set as part of the IMPAQ programme: 1) data hosting infrastructure and capacity; 2) reference laboratory infrastructure and capacity; 3) source apportionment study in six major cities (three in each entity); 4) cost-effective and scalable air quality improvement activities; 5) information campaigns regarding air quality and public health; and 6) implementation of legislation via inspectors.

²¹⁷ Main tasks of this working group are: 1) strengthening of capacities for the improvement of air quality monitoring, air quality management and reporting, air quality assessment methodologies and development of air quality improvement plans according to the Air Quality Directive; 2) assistance on capacity building related to emissions inventories, projections, reporting, and reduction strategies according to the National Emission Ceilings Directive (NEC), and facilitation of the ratification of the Gothenburg Protocol; 3) strengthening of capacities for monitoring sulphur emissions in maritime transport and enforcing EU and International Maritime Organisation (IMO) requirements on sulphur; and 4) assistance on capacity building related to managing permits in accordance with BAT and BAT conclusions developed under the Industrial Emissions Directive (IED), setting emission limit values for pollutant emissions and monitoring requirements in accordance with the principles and provisions of the IED.

²¹⁸ the Hydrometeorological Institute of the Federation of Bosnia and Herzegovina uses the CORINAIR methodology, while the Hydrometeorological Institute of Republika Srpska uses the IPCC methodology

²¹⁹ These are the same bodies that are in charge of municipal waste management: Ministry of Physical Planning, Civil Engineering and Ecology, which is a focal point for the UNFCCC and the ministry responsible for environmental protection/in charge of the overall waste management; Ministry of Health and Social Welfare, which is in charge of addressing medical waste and ionised radiation; Environmental Fund of the RS, which is in charge of collecting data on waste; RS Statistical Service, which is in charge of waste data collection and processing; local governments and utility companies in charge of waste shipment; regional sanitary landfills in charge of communal waste management; and local system operators of packaging waste.

²²⁰ Measure 4: Support for rural infrastructure development and the improvement of availability of services to the rural population was enacted to improve the availability of rural services and the general living conditions in rural areas. The increasing levels of migration of the rural population towards urban areas and abroad in search of new employment opportunities are recognised as indirect consequences of underdeveloped physical rural infrastructure and limited availability of public services in rural areas.

²²¹ Funding is provided to support infrastructure investment needed for the development of rural areas, including facilities for agriculture related activities (e.g. green markets in the communities, buy-out centres, venues for exhibition and fairs); local roads important for local economic development; access to agricultural and forest land; electrical energy supply, waste and water management; local access to IT; venues for educational, sport and other activities of the local population; and rural services of common interest for groups of villages (IT centres, training centre, fire protection units).

²²² Report for the implementation of the Strategic Plan for Rural Development of Bosnia and Herzegovina (2018-2021). The Ministry of Agriculture of the FBiH managed to include the Rural Development Programme of the FBiH in the Public Investment Programme of the FBiH 2018-2020, which created the preconditions for securing credit funds for financing projects under rural development measures in the FBiH. The Federal Ministry of Finance should initiate the procedure of external borrowing with the government of the FBiH, after which the loan agreement could be accepted by the FBiH parliament.

²²³ The Strategy of Development of Science defines the priorities in the development of agriculture sciences as including: 1) biorational use, fertility increase, remediation and soil protection; 2) raising the productivity of agricultural production and processing, ensuring the quality and safety of food; 3) creation of new high-yielding and quality varieties/hybrids/breeds; 4) development of new technologies in agricultural and forestry production; and 5) research that supports rural development, which supports innovation in agriculture and the creation of additional income on farms and rural communities (use of agricultural waste – renewable energy, new insulation materials, compost, etc.).

²²⁴ Measure 3: Support for vocational training, knowledge development and providing advice and information to help farmers, forest holders and SME's to improve the sustainable management, economic and environmental performance of their holdings and/or businesses.

²²⁵ Faculty of Agriculture and Food Sciences at the University of Sarajevo; Faculty of Biotechnology at the University of Tuzla; Faculty of Agriculture at the University of Banja Luka; Faculty of Agriculture in East Sarajevo; Faculty of Agriculture and Food Technology in East Sarajevo; Faculty of Agriculture and Food Technology at the University of Mostar; Agro-Mediterranean Faculty at the University of "Džemal Bijedić" of Mostar; Faculty of Biotechnology at the University of Bihac.

²²⁶ The strategy foresees: 1) promotion and strengthening of good agricultural practices; 2) equalisation of business conditions in areas with natural constraints and preservation of valuable landscapes; 3) strengthening the water management system in agriculture; 4) strengthening awareness of climate change, its consequences and methods for mitigating or protecting the sector from such changes; 5) promoting the use of renewable energy sources and using waste from agriculture; 6) revitalisation and preservation of pasture areas; 7) establishing and strengthening the mechanisms of sustainable land management.

²²⁷ The plan defines seven main strategic goals for the development of agriculture and rural areas in BiH for 2018-2021, including: 1) ensuring income stability and harmonising business conditions with the region; 2) strengthening competitiveness of agriculture, forestry and rural areas; 3) increasing the level of investment and improving the transfer of knowledge and promotion of innovation; 4) improving the marketability of agri-food products by increasing value-added activities, improving quality and safety standards and strengthening linkages within value chains; 5) sustainable management of natural resources and climate change adaptation; 6) improving quality of life in rural areas through new income generating sources and the improvement of physical infrastructure, social inclusion and accessibility of public services; and 7) improving institutional systems and capacities and harmonisation of the legal framework in agriculture and rural development at all governmental levels with the aim of gradual approximation to the EU CAP.

²²⁸ Support for current production encourages primary livestock and crop production through the allocation

of incentives for produced/sold fruits, vegetables, herbs, seeds and planting material; for organic production and sowing and planting; and through encouraging plant health programmes.

²²⁹ Long-term development measures and incentive funds for capital investments include support for capital investments, procurement of agricultural machinery, investments in livestock and crop production, irrigation and support for processing capacities. These measures include agricultural and non-agricultural activities in rural areas, enabling increased employment opportunities for the rural population, improved access of the rural population to the market and public services, reduction of population outflow, preservation of cultural and historical heritage, sustainable use of natural resources, and preservation of the environment and biodiversity.

²³⁰ Systemic support measures include market intervention measures, emergency assistance related to repairing damage from natural disasters, the purchase of market surpluses, and market regulation through purchasers or processors of food products.

²³¹ The ministry responsible for tourism manages overall tourism development, and the tourist organisation is responsible for the promotion of tourism and marketing in the global market.

²³² The tourist cluster of Unasava seems to be a good practice case of public-private co-operation at the destination level. The cluster was developed with the support of the Swedish International Development and Co-operation Agency, or Sida and implemented by the World Wide Fund for Nature. More information available at: <https://www.unasana.ba/en/turisticki-klaster-una/>. The tourist cluster of Herzegovina, which is also established as a public-private organisation for the promotion of tourism, is another example of good practice. More information available at: <http://www.tkh.ba/?lang=en>.

²³³ Official Gazette of Bosnia and Herzegovina, No. 26/04 and 42/04.

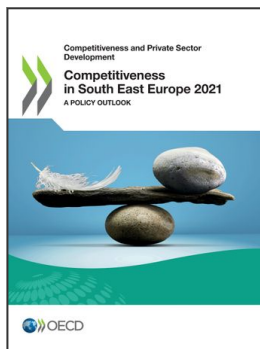
²³⁴ The project is a part of the EU4Business initiative under IPA 2016 Support in the Sector of Competitiveness and Innovation. It is co-financed by the EU and the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) as the lead organisation. The UNDP and ILO are co-delegates under the Co-Delegation Agreement with the EU.

²³⁵ For comparison see (SELDI, 2019^[286]).

²³⁶ Website of the Commission for Deciding on Conflicts of Interest: <https://www.coi.ba/>.

²³⁷ Website of the Agency for Prevention of Corruption and Co-ordination of the Fight against Corruption: <http://www.apik.ba/obuka/materijal-za-ucenje/Default.aspx?langTag=bs-BA>.

²³⁸ The Brčko District also has own Criminal Code and Law on Criminal Procedure



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