

# TORINO PROCESS SYSTEM MONITORING REPORT: BOSNIA AND HERZEGOVINA (2023)



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This monitoring report was prepared by a team led by Mihaylo Milovanovitch, Senior Human Capital Development Expert and Coordinator for System Change and Lifelong Learning at the ETF. The report follows a proprietary monitoring methodology developed by the same team and is based on evidence collected, processed, analysed, and verified by the ETF and by national stakeholders in Bosnia and Herzegovina under the overall coordination of Ms Aida Džaferović, as the national Torino Process coordinator for Bosnia and Herzegovina and with contributions by Ms. Vesna Puratić as national Torino Process expert for Bosnia and Herzegovina.

## KEY TAKEAWAYS

- **Scope of system performance monitoring:** The Torino Process monitoring covers three major areas of commitment to lifelong learners: access to learning (Area A), quality of learning (Area B), and system organisation (Area C). These areas are divided into eight monitoring dimensions: access and participation in Area A; quality, relevance, excellence, and innovation in Area B; and system management/administration and resources in Area C.
- **Access and attractiveness:** VET in Bosnia and Herzegovina struggles with accessibility and attractiveness, especially the CVET subsystem. Working-age learners rarely enrol in CVET unless mandatory for their jobs, which indicates a need for solutions to increase the appeal and accessibility of CVET and lifelong learning more broadly. Despite the barriers to access, Bosnia and Herzegovina performs well in supporting those enrolled in VET programmes, reducing dropout rates, and facilitating transitions between consecutive tracks of education and training. However, the system needs more flexibility to allow learners to switch between parallel pathways in VET and general education if they wish to do so.
- **Quality and relevance:** VET faces challenges in delivering quality education, particularly to youth. Adult, while more likely to possess key competencies than the young learners, still lag behind their peers in other countries, as they tend to lack key skills needed in the job market. Work-based learning in IVET and CVET programmes is a policy priority, and the provision of career guidance is at a satisfactory level, yet at the time of monitoring these achievements did not readily translate into better employability of graduates. Nonetheless, Bosnia and Herzegovina demonstrates reasonable adaptability to strategic challenges like sustainability and digitalisation, and flexibility in response to immediate challenges and labour market developments.
- **Excellence and innovation:** Bosnia and Herzegovina has committed to achieving highest standards in various VET domains, but at the time of monitoring, this was yielding mixed results. Efforts to promote highest quality of teaching methods, professional development of teachers, and programme content were having an average impact, while actions to promote excellence in governance and provider management were more successful. The system's ability to promote inclusivity, though, could use improvement, just like its openness and capacity for innovation in support of access and participation in lifelong learning.
- **System management and organisation:** The VET system of Bosnia and Herzegovina displays a mix of strengths and weaknesses in terms of organisational efficiency and performance. The country shows a decent capability to generate, manage, and use administrative and big data, but this remains the weakest spot of system performance, like in other countries. Engagement from the private sector and external stakeholders in VET-related decision-making processes is moderate and quality assurance practices could also be improved. Despite strong professional capacity in leadership positions, the management of human resources requires more effective strategies. Financial resources for VET are substantial, yet the adequacy of material resources for learning and training remains modest, suggesting issues with strategic allocation.
- **Quality and reliability of monitoring evidence:** The monitoring results of Bosnia and Herzegovina are more internationally comparable than those of other countries, on average, and they are also less susceptible to bias in international comparison. Bosnia and Herzegovina, however, tends to self-assess the performance of its VET system somewhat more critically than other countries, on average.

# 1. INTRODUCTION

## 1.1 Focus and scope of monitoring

This report summarises the results of monitoring VET system performance in Bosnia and Herzegovina, initiated in the context of the Torino Process in 2022 and completed in 2023.<sup>1</sup> “Performance” describes the extent to which the VET system delivers against a targeted selection of national and international obligations (commitments) to learners and other stakeholders in support of learning through life (lifelong learning - LLL). “VET system”<sup>2</sup> refers to the network of institutions, people, policies, practices, resources, and methodologies in a country and the way in which they are organised to provide individuals of any age with the practical skills, knowledge, and competencies needed for specific occupations, trades, or professions.

The focus of monitoring is on the contribution of initial and continuing VET (IVET and CVET) to the learning activities of youth and adults in any learning setting (formal and non-formal), undertaken to improve their knowledge, skills, competences, and qualifications for personal, social and/or professional reasons. The purpose of the Torino Process monitoring exercise is to provide decision-makers, practitioners, and stakeholders with a reliable basis for informed decisions about policy improvement, resource allocation, strategy design, and follow-up analysis in support of lifelong learning.

The monitoring framework which underpins this report covers three major areas of commitment to lifelong learners: access to learning (Area A), quality of learning (Area B), and system organisation (Area C). These areas are divided into eight monitoring dimensions: access and participation in Area A; quality, relevance, excellence, and innovation in Area B; and system management/administration and resources in Area C. Within these areas and their dimensions, the Torino Process tracks a total of 30 system deliverables (outcomes)<sup>3</sup> - the extent to which they are being delivered and how equitably they are distributed to thirteen groups of learners according to age, gender, socio-economic background, labour market and migration status, and typical learning setting.

The monitoring provides information in the form of a system performance index (SPI) for each of these outcomes and learner groups, to a total of 82 indices per country.<sup>4</sup> The SPIs can range from 0 to 100, where 100 indicates maximum or best performance. The indices describe VET system performance in formal and non-formal learning settings for youth and adults, females and males, disadvantaged learners, long-term unemployed jobseekers, economically inactive populations, and first-generation migrants.

This report showcases a selection of key monitoring results based on those indices, as follows: overall performance by broad monitoring dimension (Section 2.1), performance by specific area and system deliverable (Section 2.2 and subsections), and performance in support of specific groups of learners (Section 2.3). The report also provides an international average score<sup>5</sup> for these results for reference purposes, and, where relevant, it showcases some of the disaggregated data used to

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<sup>1</sup> The Torino Process is a multiannual review of vocational education and training (VET) in countries in East and South-East Europe (including Turkey), Central Asia, and the South and East Mediterranean region, which the ETF is carrying out in partnership with countries in these regions on a regular basis since 2010. For more information see <https://www.etf.europa.eu/en/what-we-do/torino-process-policy-analysis-and-progress-monitoring>

<sup>2</sup> This report may use “VET”, “VET system”, and “system” interchangeably.

<sup>3</sup> Further in the report “outcomes” and “deliverables” are used interchangeably.

<sup>4</sup> In rare cases where evidence is missing, the number of SPIs for a country can be lower.

<sup>5</sup> “International average” refers to the average for countries participating in the Torino Process. At the time of preparation of this monitoring report, the evidence collection for some countries was still ongoing. As additional countries complete the monitoring exercise, the international averages shown in this report may change.

calculate the system performance indices. Links to the full dataset for Bosnia and Herzegovina and the Torino Process monitoring framework and methodology can be found in this document's third and final section.

## 1.2 Comparability and reliability of monitoring data

The evidence for this monitoring report was collected and analysed in several steps from September 2022 until April 2023. After an initial round of collecting internationally comparable indicators for each of the system outcomes and learner groups covered by the monitoring framework, the ETF compiled a supplementary questionnaire for national authorities and stakeholders in Bosnia and Herzegovina to gather information about outcomes and groups of learners for which such indicators were missing. The responses to the questionnaire were quantified and integrated with the rest of the monitoring data into a repository of mixed evidence, which was then used to calculate the system performance indices presented in this report.

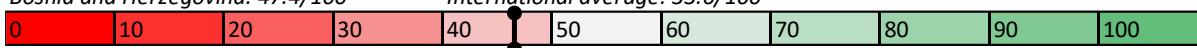
In addition to messages about system performance, the monitoring delivers information also about the international comparability of results of each country, the extent to which these results may be susceptible to bias, and how self-critical a country is when it reports about its policy and system performance for external monitoring purposes. This is possible because the monitoring methodology foresees keeping accurate records about the availability, origin and type of evidence used to calculate the 82 performance indices and corresponding results for each country, including Bosnia and Herzegovina.

**FIGURE 1. COMPARABILITY AND CONSISTENCY OF MONITORING RESULTS: BOSNIA AND HERZEGOVINA (2023)**

**International comparability of performance results (0=least comparable, 100=fully comparable)**

*Bosnia and Herzegovina: 47.4/100*

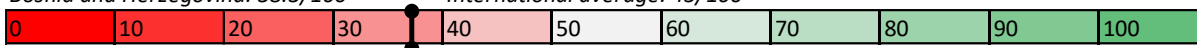
*International average: 33.6/100*



**Risk of bias regarding system performance (0=highest risk, 100=lowest risk)**

*Bosnia and Herzegovina: 38.3/100*

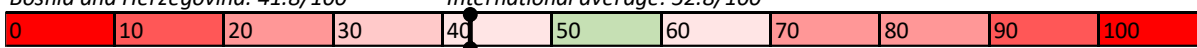
*International average: 45/100*



**Tendency to be self-critical regarding system performance (most critical=0, neutral=50, least critical=100)**

*Bosnia and Herzegovina: 41.8/100*

*International average: 52.8/100*



The monitoring results of Bosnia and Herzegovina are more internationally comparable than those of other countries. On a scale from 0 (least internationally comparable) to 100 (fully internationally comparable), the overall comparability of monitoring results for Bosnia and Herzegovina is 47 out of 100. Bosnia and Herzegovina has lower risk of bias than the international average as well, but it also tends to self-assess the performance of its VET system performance somewhat more critically than other countries, on average.

## 2. MONITORING RESULTS: BOSNIA AND HERZEGOVINA

### 2.1 Policy and system performance in 2023: overall results

The Torino Process monitoring draws on multiple, often disparate, information sources and data. To facilitate a quick, efficient, and focused communication of key messages despite the diversity of information collected, the reporting of monitoring results aggregates the evidence in ways which facilitate a quick overview of system performance without sacrificing too much detail.

The eight monitoring dimensions mentioned in the previous section are the top layer of reporting in this respect. They capture VET system performance in various domains, the selection of which is aligned with national and international country commitments and reform and development priorities concerning learning. These eight dimensions are described as follows:

**TABLE 1. DIMENSIONS OF POLICY AND SYSTEM PERFORMANCE MONITORING THROUGH THE TORINO PROCESS**

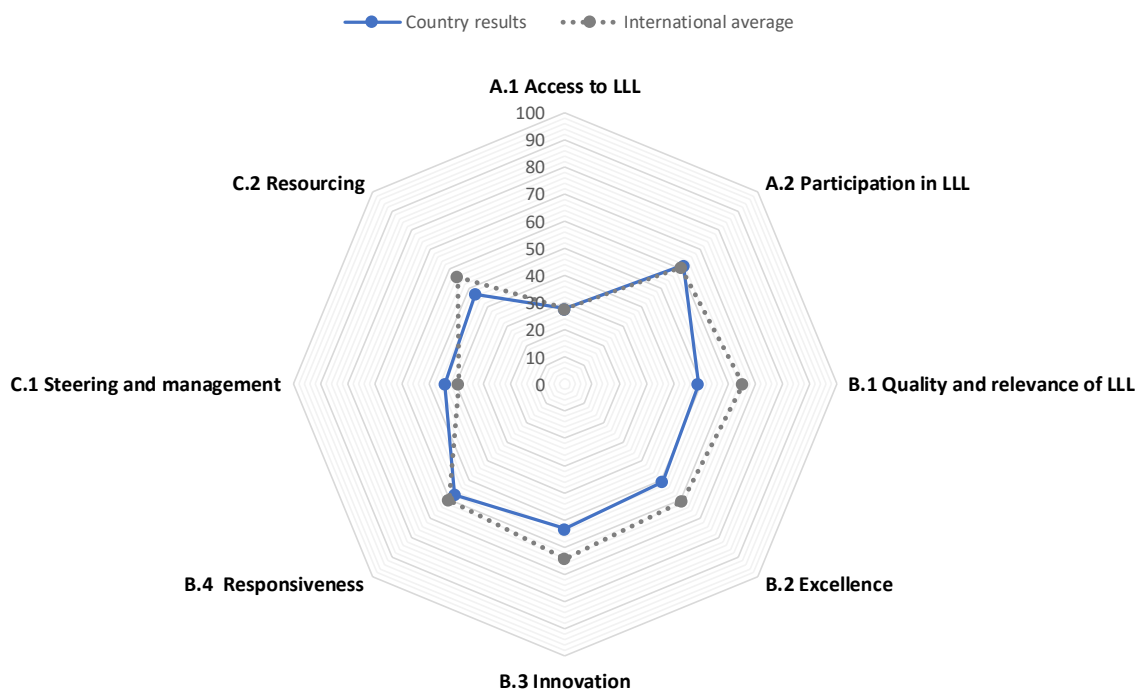
No.	Dimension	Description
1	<b>Access to learning</b>	This dimension captures the degree to which initial VET (IVET), continuing VET (CVET), and other adult learning opportunities to which VET could contribute, are accessible and attractive for learners irrespective of who they are and why they wish to engage in learning.
2	<b>Participation in learning</b>	This dimension captures the likelihood of VET learners to survive and thrive in the education and training system by looking at its vertical and horizontal permeability, that is whether learners can switch between general and vocational pathways and between formal and non-formal learning, as well as whether they complete their learning.
3	<b>Quality and relevance</b>	This dimension captures the extent to which learners in IVET and CVET are provided with basic skills and key competences, whether their learning has exposure to, and is relevant for, employment, and also whether they are provided with adequate career guidance.
4	<b>Excellence</b>	This dimension captures the presence of system-wide policies and measures to promote highest quality practices and results in teaching and training, content design and provision, governance and VET provider management, and equity and social inclusion.
5	<b>Innovation</b>	This dimension captures the presence of innovative practices and priorities on system level in the areas of access to learning, support for successful completion of learning, and quality of learning and training outcomes.
6	<b>VET system responsiveness</b>	This dimension captures the extent to which curricula for youth and adults consider themes of significance for sustainability, climate change awareness, and digitalisation, as well as whether the IVET and CVET systems are responsive to labour market needs, demographic changes, and socio-economic developments.
7	<b>Steering and management</b>	This dimension captures the availability of evidence for informed decision-making, the degree to which governance of VET is participatory, the presence and transparency of quality assurance arrangements, the quality and capacity of staff in leadership positions, and the degree of internationalisation of IVET and CVET.
8	<b>Resourcing</b>	This dimension captures the adequacy and efficiency of human and financial resources in IVET and CVET, and the extent to which the material base for learning and training is adequate, that is – conducive to effective teaching, training, and learning.

This section of the report delves into the analysis of VET system performance in Bosnia and Herzegovina across these eight monitoring dimensions. The results on that level of aggregation reveal an array of strengths and challenges, reflecting the complex landscape of vocational education and training in the country.

Bosnia and Herzegovina's VET system presents a mixed performance in the areas of access to and participation in learning (Dimensions A.1 and A.2). Access to learning (Dimension A.1) refers to how available and appealing initial VET (IVET), continuing VET (CVET), and other adult learning opportunities are to potential learners. This dimension is about whether people can easily start VET courses and find them attractive enough to consider enrolling. In Bosnia and Herzegovina, the performance score for this dimension is 28, indicating that access and attractiveness are the weakest domains of policy and system performance in the country, rendering VET a less enticing option for prospective learners compared to other educational avenues.

In contrast, participation in learning (Dimension A.2) focuses on whether individuals who have commenced a VET programme can complete it successfully and offers flexibility in switching between different learning pathways and educational types. With an SPI of 62, Bosnia and Herzegovina performs significantly better in this monitoring dimension, highlighting that while the country excels in retaining learners once they've enrolled, potential barriers may exist at the VET system's entry level, limiting access for a broader spectrum of learners.

**FIGURE 2. INDEX OF SYSTEM PERFORMANCE BY MONITORING DIMENSION, BOSNIA AND HERZEGOVINA AND INTERNATIONAL AVERAGE (2023)**



Theoretical<sup>6</sup> index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

Bosnia and Herzegovina encounters challenges in ensuring the quality and relevance of learning (Dimension B.1). This suggests the need for policy enhancements that would ensure learners acquire a well-rounded set of basic skills and competencies, making them suitable for the evolving employment

<sup>6</sup> The Torino Process makes a distinction between theoretical index range and index range used for reporting purposes. For reporting purposes, rare instances of extreme values on the low end (SPI < 10) and on the high end (SPI > 90) of the index scale are truncated at the upper (10) and lower (90) decile end. This means that the reporting does not discriminate SPI values below 10 and above 90.



landscape and providing them with adequate career guidance. VET in Bosnia and Herzegovina is performing moderately also in the domains of excellence (Dimension B.2), innovation (Dimension B.3), and responsiveness to external developments (Dimension B.4). Decision-makers and practitioners appear committed to the identification and promotion of high-quality practices and results in teaching, training, and content provision, which suggests a degree of openness to the pursuit of excellence.

The VET system also manages to be innovative and responsive to developments like digitalisation and climate change awareness, but there is room for growth, especially in the domains of excellence and innovation where Bosnia and Herzegovina performs lower than other countries, on average. Further integration of innovative practices and increased attention to system-wide policies that promote excellence could boost the overall quality of learning and make the VET system more responsive to external changes and labour market needs.

Judging by the results in the domain of steering and management of VET (Dimension C.1), Bosnia and Herzegovina may be in a somewhat better position than other countries to adapt its VET to external developments and emerging needs. The performance of the VET system in steering and management is marginally better than that of other countries in the Torino Process sample. Nevertheless, given the weaker performance of all countries in this dimension of monitoring, the results for Bosnia and Herzegovina reflect a shared need to strengthen evidence-based decision-making, participatory governance, quality assurance, leadership capacity, and internationalisation within VET.

On the flip side, Bosnia and Herzegovina trails behind the international average in the efficiency of allocation and use of financial resources (Dimension C.2). This suggests that the VET in the country grapples with substantial issues in resource allocation, management, and utilization, which, in turn, impacts the overall effectiveness and quality of VET delivery. The situation calls for improvement in resource management strategies to ensure that resources, both human and material, are optimally utilized and the efficiency of the VET system is maximised.

## **2.2 Policy and system performance in specific areas of monitoring and against specific outcomes**

In the eight monitoring dimensions presented above, VET performance in Bosnia and Herzegovina is driven by 30 policy and system outcomes. Through these outcomes, the IVET and CVET subsystems work to meet the needs and expectations of stakeholders, particularly youth and adult learners. This section of the monitoring report presents findings about system performance on the level of these deliverables.

To facilitate reading and the navigation of content, the section groups the presentation of the 30 outcomes by the three major areas of commitment to learners, which were introduced in the first section of this report: access to learning (Area A), quality of learning (Area B), and system organisation (Area C). Reporting in Area B, the largest by the number of outcomes, is divided into B (1) and B (2).

### **2.2.1 Area A. Opportunities for lifelong learning: access and participation**

In Area A (Access and participation in opportunities for LLL), the Torino Process tracks the first two monitoring dimensions presented in Section 2.1 – access/attractiveness and participation, with six system outcomes. These outcomes include access to IVET, CVET, and other opportunities for lifelong learning, the vertical and horizontal permeability of the VET system, as well as the prospects of learners in IVET and CVET to graduate and - where relevant – progress to subsequent levels of education and training. The outcomes included under Area A are defined as follows:

**TABLE 2. POLICY AND SYSTEM OUTCOMES INCLUDED UNDER MONITORING AREA A: ACCESS AND PARTICIPATION**

Code	Deliverable (outcome)	Description
A.1.1	<b>Access and attractiveness: initial VET</b>	This outcome captures the degree to which initial VET is an attractive educational choice in comparison with other learning alternatives, and whether that choice is accessible to various target groups of learners.
A.1.2	<b>Access and attractiveness: continuing VET</b>	This outcome captures the degree to which continuing VET is an attractive choice in comparison with other skills development alternatives, as well as whether that choice is accessible to various target groups
A.1.3	<b>Access to other opportunities for LLL</b>	This outcome captures access to other opportunities for lifelong learning not covered by outcomes A.1.1 and A.1.2 and VET, such as active labour market policies (ALMPs)
A.2.1	<b>Flexible pathways: vertical permeability</b>	This outcome strives to capture the vertical permeability of the education and training system vis-à-vis initial and continuing VET, understood as possibility for transition between consecutive tracks of education and training (general and vocational).
A.2.2	<b>Flexible pathways: horizontal permeability</b>	This outcome strives to capture the horizontal permeability of the education and training system vis-à-vis initial and continuing VET, understood as the possibility for transition between parallel tracks of education and training (general and vocational), and between formal and non-formal learning settings
A.2.3	<b>Progression and graduation of learners</b>	This outcome refers to the degree of success (graduation, progression) of learners in VET, for instance in comparison with other education and training alternatives

The previous section of this report identified access and attractiveness as two relatively weaker dimensions in Bosnia and Herzegovina's Vocational Education and Training (VET) system. A closer look at the specific outcomes within these dimensions, depicted in Figure 3, offers a nuanced perspective on this issue.

Indeed, there are marked differences in accessibility and attractiveness between Initial VET (IVET) and Continuing VET (CVET) subsystems (Outcomes A.1.1 and A.1.2). In accordance with the VET laws and the laws of craft in the Federation of BiH, Republika Srpska, and Brcko District BiH, CVET programs are accessible in both public and private institutions for various vocations. However, learners in the working age typically do not enter these programs unless required for their jobs,<sup>7</sup> mirroring the global trend where IVET is generally more appealing and accessible to learners. Yet, despite being legally accessible, both VET subsystems show lacklustre performance in terms of enabling and promoting learner access, which suggests that there is significant scope for improvement. In sum, access and attractiveness are two of the more challenging performance areas for VET in Bosnia and Herzegovina.

The challenge of accessing adult education in Bosnia and Herzegovina is not limited to VET programmes. It is a systemic issue impacting various adult learning pathways and extending to adult learning opportunities beyond VET, such as those provided in the context of active labour market policies (Outcome A.1.3). Data from the Eurostat Adult Education Survey confirms that participation of adults aged between 25-64 in some form of formal education is low, and in some forms of non-formal education, it is higher.<sup>8</sup> Although there are various lifelong learning programmes offering opportunities to upgrade specific knowledge and skills for professional development or labour market entry, the cost of these programs, typically borne by the learners, often contributes to low participation.<sup>9</sup>

Despite these challenges, learners who do opt to enrol in a VET programme can expect to be well supported, with a low risk of failure and dropout (Outcome A.2.3). Compared to many other countries, Bosnia and Herzegovina performs exceptionally well in this regard. In the same vein, when considering

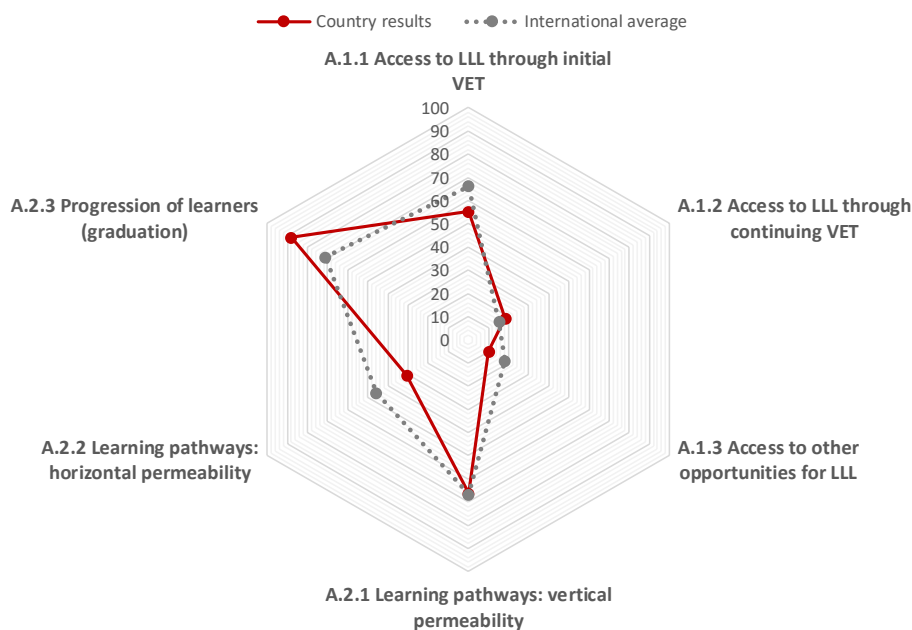
<sup>7</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Hercegovina.

<sup>8</sup> Ibid. Survey year: 2017.

<sup>9</sup> Ibid.

vertical permeability or the transition between consecutive tracks of education and training (Outcome A.2.1), the country's VET system also offers robust support. Learners wishing to advance their education to a higher level or transition to another educational pathway upon graduation will find comparable opportunities to those available in most countries participating in the Torino Process.

**FIGURE 3. PROMOTING ACCESS AND PARTICIPATION IN OPPORTUNITIES FOR LLL  
- INDEX OF SYSTEM PERFORMANCE, BOSNIA AND HERZEGOVINA AND  
INTERNATIONAL AVERAGE (2023)**



Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

However, a challenge arises in horizontal permeability, namely the ability to transition between parallel tracks of education and training (Outcome A.2.2). A relatively low SPI score of 31 indicates that learners may encounter difficulties when attempting to switch learning settings or transfer their skills to other contexts. Improving the flexibility and adaptability of the VET system in this regard could contribute to enhancing educational and career prospects for learners. According to information provided by authorities, a robust system for validating prior learning would be crucial for ensuring satisfactory permeability in VET. Therefore, the education system must become more flexible to provide learners with ample opportunities to switch between VET pathways.<sup>10</sup>

### 2.2.2 Area B (1). Lifelong learning outcomes: quality and relevance

In the first part of Area B (Quality and relevance of LLL outcomes), the Torino Process follows two of the dimensions presented in Section 2.1, namely quality/relevance and responsiveness of VET, with a total of eight policy and system outcomes. These outcomes cover the quality of learning of youth and adults in VET in terms of key skills and competences, the exposure of learners in VET to the world of work, the employability of graduates from IVET and CVET, the availability of career guidance for them, as well as the relevance of learning and training content in VET. Under relevance, the monitoring records the responsiveness of the VET programme offering to demographic, labour market, and socio-

<sup>10</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

economic developments, as well as the inclusion in VET curricula of themes about the green and digital transition. The outcomes included under Area B (1) are defined as follows:

**TABLE 3. POLICY AND SYSTEM OUTCOMES INCLUDED UNDER MONITORING AREA B (1): QUALITY AND RELEVANCE**

Code	Deliverable (outcome)	Description
B.1.1	<b>Key competences for LLL, quality of learning outcomes</b>	This outcome captures the extent to which the education and training system succeeds in the provision of basic skills and key competences for learners in formal education (including IVET), as defined in regular international surveys and international assessments
B.1.2	<b>Adult skills and competences</b>	This outcome captures the extent to which adults in working age dispose of basic skills and key competences, as captured by regular international surveys.
B.1.3	<b>Links between learning and the world of work</b>	This outcome reflects the pragmatic relevance of IVET and CVET programmes through the lens of participation in work-based learning (WBL) and the share of programmes with outcomes/objectives that include a WBL component
B.1.4	<b>Employability of learners</b>	This outcome refers to the labour market relevance of opportunities for LLL as captured through evidence of labour market outcomes of graduates from IVET, CVET, and other forms of LLL with a VET component
B.1.5	<b>Opportunities for career guidance</b>	This outcome strives to capture the timely availability of up-to-date information about professions and education programmes, which information allows prospective and current students in VET to take informed decisions concerning their education and employment paths
B.4.1	<b>Relevance of learning content: green transition</b>	This outcome captures the extent to which curricula for youth and adults consider themes of significance for sustainability and climate change awareness, including “green skills” for sustainable economies
B.4.2	<b>Relevance of learning content: digital transition</b>	This outcome tracks the extent to which curricula for youth and adults incorporate themes concerning digitalisation, and the extent to which learners are provided with basic digital skills as a result
B.4.3	<b>Responsiveness of programme offering</b>	This outcome captures the degree and speed of responsiveness of initial and continuing VET systems to the needs of the labour market and to other changes concerning demography and socio-economic developments

Quality and relevance stand as vital aspects of Vocational Education and Training (VET) in any country. However, Bosnia and Herzegovina's VET system faces hurdles in delivering quality to both young and adult learners (Outcome B.1.1). The issue is acknowledged by national authorities and reflected in international assessments, which show that students in VET do not acquire adequate levels of basic literacy and numeracy.<sup>11</sup> Furthermore, according to official information the learning achievement of students in VET in terms of key competences tends to stagnate from year to year instead of increasing, as it does in general education. This situation is particularly concerning for 3-year VET programmes, where students have the lowest score in essential subjects such as reading and math, with 85% of them being functionally illiterate in these subjects.

Adult learners in Bosnia and Herzegovina tend to possess basic skills and key competences more frequently than younger learners (Outcome B.1.2). However, these competencies are less developed when compared to the average working-age adult in other countries. Employers in the country often indicate that foreign language skills, digital and IT skills, soft skills, and other basic social skills are insufficient.<sup>12</sup> This insufficiency indicates the necessity for enhancing adult education and training initiatives, particularly as these skills have not been met adequately in initial training. Furthermore, the

<sup>11</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina and OECD Programme for International Student Assessment (PISA) 2018 database.

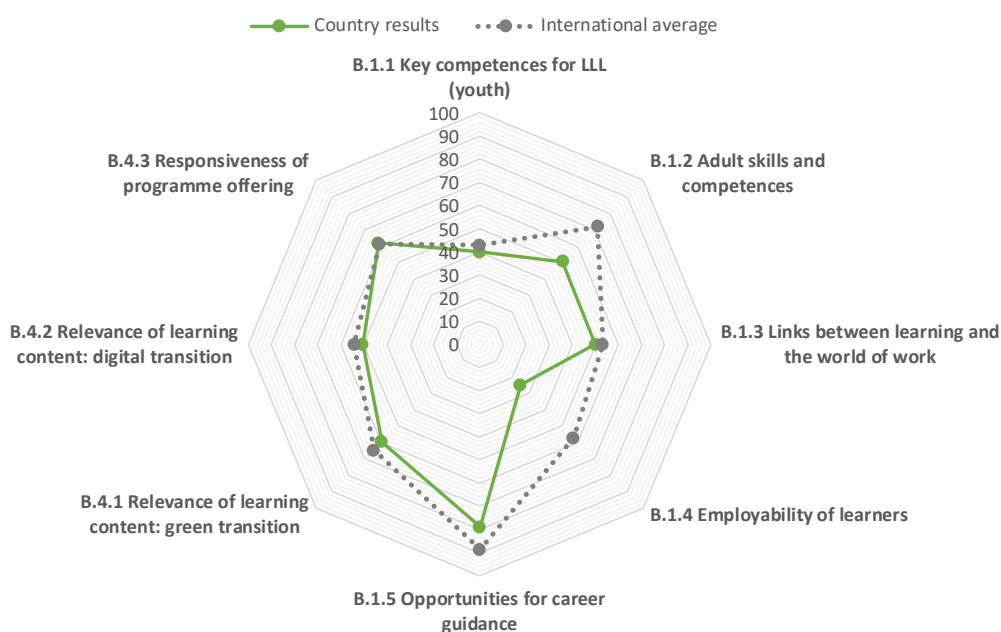
<sup>12</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

lack of a regular, comprehensive monitoring system for adult education in the country makes proficiency evaluation a challenge for practitioners and decision-makers.<sup>13</sup>

Quite in line with the average results regarding quality, the degree to which IVET and CVET programmes in Bosnia and Herzegovina provide exposure to the world of work (Outcome B.1.3) is average as well. While work-based learning, a vital part of program implementation, has seen an uneven development across the country, a good example of its implementation is in Gorazde canton, where a formal agreement between schools and companies ensures teaching consistent with labour market needs. Other promising developments include the increase in hours of practical training in IVET subjects, which is expected to heighten the attractiveness of VET to prospective learners.<sup>14</sup>

And yet, the monitoring results suggest that decent performance against this outcome may not be enough to translate learning into successful outcomes in the labour market for VET graduates. Bosnia and Herzegovina significantly lags behind the international average in terms of the employability of its VET learners (Outcome B.1.4). This observation is reinforced by data that shows long-term unemployment is relatively common even for those who have completed one of the pragmatically oriented, 3-year IVET programmes on offer.<sup>15</sup>

**FIGURE 4. SUPPORTING QUALITY AND RELEVANCE OF LLL - INDEX OF SYSTEM PERFORMANCE, BOSNIA AND HERZEGOVINA AND INTERNATIONAL AVERAGE (2023)**



*Theoretical index range: min/low performance=0, max/high performance=100*

Source: Torino Process monitoring database

Despite the challenges related to employability, Bosnia and Herzegovina puts considerable emphasis on the provision of career guidance as a way to equip learners with the necessary knowledge to navigate their professional journeys effectively (Outcome B.1.5). Compared to its performance in

<sup>13</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

<sup>14</sup> Ibid.

<sup>15</sup> Ibid.

other domains of monitoring, the VET system does well in offering up-to-date information about professions and education programmes, enabling prospective and current students in VET to make informed decisions regarding their education and employment paths. Still, employability encompasses various aspects beyond career guidance alone and so, while good career guidance is valuable, more needs to be done to ensure that learning experiences translate into tangible career prospects for VET graduates in Bosnia and Herzegovina.

National authorities in Bosnia and Herzegovina report that considerable efforts are already in place to improve the degree to which learners are provided with quality training of relevance and equipped with the skills needed for employment. The country is taking steps to improve the practical component of VET education, for instance through the introduction of external evaluation in technical and VET schools in Tuzla Canton and the implementation of experimental curricula with increased practical work hours in Republika Srpska. Furthermore, the government is placing emphasis on collaboration with industry partners, evident in coordination efforts with the Chamber of Commerce, Chamber of Crafts, and Employers Association.<sup>16</sup>

In the context of relevance, the Torino Process monitoring looks into the degree to which VET systems are adaptable to longer-term strategic challenges on one hand, and responsive to immediate, short-term developments on the other. Both aspects are crucial for a VET system to stay relevant and effectively equip learners with the necessary competences.

VET in Bosnia and Herzegovina shows a reasonable level of relevance in its learning content for sustainability and climate change awareness (Outcome B.4.1). Despite being slightly below the average for other countries, Bosnia and Herzegovina is making progress in integrating green skills into its curricula, indicating a degree of adaptability to this strategic challenge. Regarding digitalisation (Outcome B.4.2), the country falls a bit short of the international average, suggesting the need for a more robust integration of digital skills into curricula to better align with the evolving digital economy.

When considering immediate, short-term developments, the monitoring framework gauges the VET system's capacity to respond to current labour market needs and broader socio-economic changes. Bosnia and Herzegovina's SPI score for the responsiveness of its programme offering (Outcome B.4.3) is 62, marginally exceeding the international average of 61. This suggests a level of flexibility in the country's initial and continuing VET offerings, demonstrating readiness to address both strategic and immediate challenges. The finding reflects the country's efforts in responding to immediate, short-term developments such as the Covid-19 pandemic, which necessitated adjustments to VET offerings and career counselling services.<sup>17</sup>

### 2.2.3 Area B (2). Lifelong learning outcomes: excellence and innovation

In the second part of Area B (Excellence and innovation in support of lifelong learning), the Torino Process monitors two performance dimensions – excellence and innovation, which accommodate a total of eight system outcomes. These outcomes include excellence in pedagogy, learning content, governance, and inclusion into learning, as well as systemic innovation supporting access, participation, quality, and relevance of learning and training. The outcomes included under Area B (2) are defined as follows:

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<sup>16</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

<sup>17</sup> Ibid.



**TABLE 4. POLICY AND SYSTEM OUTCOMES INCLUDED UNDER MONITORING AREA B (2): EXCELLENCE AND INNOVATION**

Code	Deliverable (outcome)	Description
B.2.1	<b>Excellence in pedagogy and professional development</b>	This outcome captures the extent to which excellence in teaching and training is an acknowledged policy priority, as well as the extent to which its implementation is bearing fruit across the education and training system, including in the domain of professional development of teachers
B.2.2	<b>Excellence in programme content and implementation</b>	This outcome captures the results of efforts to promote excellence in the content and implementation of VET programmes, with a specific focus on bringing them closer to the world of work (i.e. through work-based learning), on prioritising greening in curricula and teaching, as well as on promoting excellence in learning.
B.2.3	<b>Excellence in governance and provider management</b>	This outcome captures the results of efforts to promote excellence in the domains of financing, leadership, and governance, as well as the extent to which these examples are systemic or not
B.2.4	<b>Excellence in social inclusion and equity</b>	This outcome captures the results of efforts to promote excellence in the domain of equity and social inclusion in education and training, as well as the extent to which these examples are systemic or not
B.3.1	<b>Systemic innovation: access to opportunities for LLL</b>	This outcome captures the presence of innovative practices and policy solutions in the domain of access to opportunities for lifelong learning.
B.3.2	<b>Systemic innovation: participation and graduation</b>	This outcome captures the presence of innovative practices and policy solutions in the provision of support for participation in (and graduation from) opportunities for lifelong learning, and the extent to which they are systemic (or not)
B.3.3	<b>Systemic innovation: quality of learning and training outcomes</b>	This outcome captures the presence of innovative practices and policy solutions for raising the quality of learning and training in terms of the knowledge, skills, and abilities acquired by learners
B.3.4	<b>Systemic innovation: relevance of learning and training</b>	This outcome captures the presence of innovative practices and policy solutions for raising the labour market relevance of knowledge, skills, and abilities acquired by learners

Within the framework of the Torino Process, the term “excellence” refers to the aspiration towards highest quality practices and outcomes in different core domains of VET policy and delivery. “Innovation”, conversely, focuses on the presence of ground-breaking practices and policy solutions that act as a benchmark for the system’s adaptability, creativity, and forward-thinking approach in response to the evolving needs of learners and labour markets.

VET performance in the excellence domain is assessed across four outcomes: pedagogy and professional development, programme content and implementation, governance and provider management, and social inclusion and equity.

Bosnia and Herzegovina acknowledges the importance of excellence in pedagogy and professional development (Outcome B.2.1) for VET. However, with an SPI of 50, the performance in this domain is moderate. Policies aimed at enhancing teaching and training quality are in place – for instance, the strategic document “Improvement of Quality and Relevance of VET in BiH in the light of Riga Conclusions for the period 2021-2030” promoted actions in support of initial and professional development of teachers and mentors in vocational schools. Also, as noted by national authorities, the pandemic-driven shift towards online teaching and the embrace of student-centred learning strategies shows promise, as does the continual enhancement of teacher skills and competences through various EU and donor projects.<sup>18</sup>

And yet, the monitoring results suggest that aspired outcomes like improved teaching methods, enhanced teacher competence, and enriched professional development opportunities have not fully

<sup>18</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

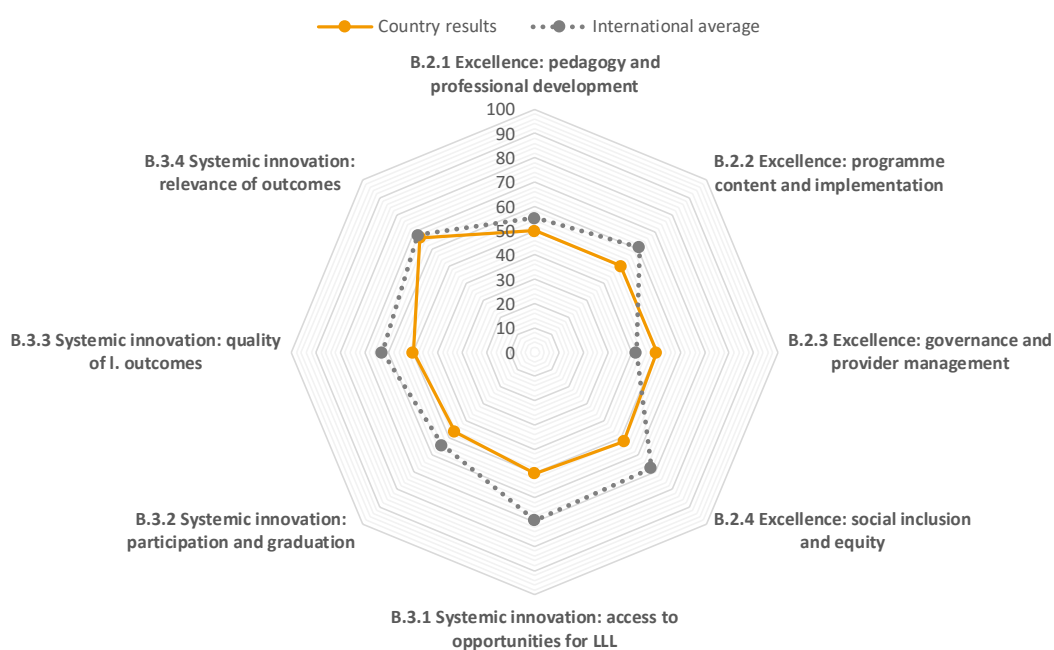
materialised yet. The benefits of these policies may still be yet to affect a critical mass of VET professionals.

In terms of excellence in programme content and implementation (Outcome B.2.2), VET in Bosnia shows performance in the mid-range as well. This area pertains to the efforts made to identify and promote highest quality of VET programmes in terms of programme design, scheduling, and coordination with key stakeholders, as well as their relevance to the world of work.

Despite progress in designing and implementing high-quality, relevant programmes that closely align with the needs of the world of work, the moderate score indicates the effectiveness of these initiatives is not yet fully realized. These promising initiatives include 54 curricula in Republika Srpska, innovated for the 2022/23 school year to align with labour market requirements, the reform in Zenica-Doboj Canton has led to the development of 53 subject curricula for primary, secondary, and IVET education, and curricular reforms in Cantons Sarajevo, Gorazde, and Una-Sana, all of which serve as a stimulus for other education authorities to follow suit and reform their programmes too.<sup>19</sup>

The VET system showcases above average results in pursuing excellence in governance and provider management (Outcome B.2.3). The transition to digital services for enrolment, although not uniformly established, represents an important innovation. However, the system lags behind in social inclusion and equity, even as it commits to highest quality solutions in these areas (Outcome B.2.4).

**FIGURE 5. EXCELLENCE AND INNOVATION FOR BETTER LLL - INDEX OF SYSTEM PERFORMANCE, BOSNIA AND HERZEGOVINA AND INTERNATIONAL AVERAGE (2023)**



Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

<sup>19</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.



The Torino Process monitoring gauges systemic innovation in terms of access to lifelong learning opportunities (Outcome B.3.1), participation and graduation (Outcome B.3.2), quality of learning and training outcomes (Outcome B.3.3), and relevance of learning and training (Outcome B.3.4).

Systemic innovation, particularly in the facilitation of access to lifelong learning opportunities in Bosnia and Herzegovina, falls below the average for other countries. This finding suggests limited innovation presence to facilitate learning access and a constrained capacity to utilise innovation to support access to VET. Similar limitations exist in the uptake of innovation to enhance participation and graduation (Outcome B.3.2). Similar limitations are present also in the degree to which the VET system is able and willing to uptake innovation in support of participation and graduation (Outcome B.3.2). It should be noted, however, that participation and completion of learning is an area in which Bosnia and Herzegovina is performing comparatively well already and so, the sub-standard results against this outcome may reflect limited demand for changes in support of retention and graduation from VET learners.

VET in Bosnia and Herzegovina is somewhat weaker than VET in other countries on average when it comes to adopting innovative practices for increasing the quality of knowledge, skills, and abilities acquired by learners (Outcome B.3.3). The VET system performs significantly better in innovating to support greater relevance of learning and training (Outcome B.3.4). Yet, while participants in the VET system show aptitude in aligning vocational education and training with market demands and ensuring the relevance of learned skills, there still seems to be a disconnection when translating these efforts into labour market success for VET graduates.

This disconnection implies that while Bosnia and Herzegovina's VET system may be open to innovation in keeping the curriculum and skillsets relevant to market needs, external factors and limitations in partnerships between VET providers and employers may negatively influence the transition from learning to work. Experience from other countries suggests that these factors usually involve external developments but also limitations in the partnerships between VET providers and employers.

#### 2.2.4 Area C. System organisation

In Area C (System organisation), the monitoring framework accommodates the last two dimensions presented in Section 2.1 – steering/management and resourcing, in which the Torino Process tracks a total of eight system outcomes. These outcomes include the availability and use of data for informed decision-making, the involvement of stakeholders in VET policy, provider management, and resourcing, quality assurance and accountability, the internationalisation of VET providers, as well as the availability and use of human and financial resources in VET. The outcomes included under Area C are defined as follows:

**TABLE 5. POLICY AND SYSTEM OUTCOMES INCLUDED UNDER MONITORING AREA C): SYSTEM ORGANISATION**

Code	Deliverable (outcome)	Description
C.1.1	Data availability and use	This outcome refers to the availability of administrative and big data as covered by Level 1 of the monitoring framework, participation in large scale international assessments, as well as technical capacity to generate/manage evidence to support monitoring and improvement
C.1.2	Participatory governance	This outcome captures the degree of involvement of the private sector and other external stakeholders in consultations and decisions concerning opportunities for LLL through initial and continuing VET
C.1.3	Public accountability and reliable quality assurance	This outcome tracks the extent to which reliable and trustworthy quality assurance (QA) mechanisms and accountability arrangements are in place which cover learners, teachers, and providers, as well as the extent to which the QA results are publicly available
C.1.4	Professional capacity of staff in leadership positions	This outcome monitors the availability and professional capacity of qualified staff in leadership roles and in other key administrative roles on provider level
C.1.5	Internationalisation	This outcome monitors the degree of internationalisation in IVET and CVET, such as internationalisation of QA arrangements, curricular content, qualifications (i.e. recognition of international credentials, awarding bodies being active beyond their country of origin, etc.)
C.2.1	Adequate financial resource allocations and use	This outcome captures the adequacy of financial resources invested in IVET and CVET in terms of level of investment and allocation, as well as the degree of diversification of funding between public and private sources
C.2.2	Adequate human resource allocation and use	This outcome captures the efficiency of human resource management in terms of availability of teachers and trainers, and the adequacy of their deployment and career management
C.2.3	Adequate material base	This outcome captures the extent to which the material base for learning and training is adequate, including learning and training materials which are supportive of and promote effective teaching, training, and learning

In assessing the organisational efficiency and performance of the VET system in Bosnia and Herzegovina, several monitoring domains exhibit stronger results. Bosnia and Herzegovina, for instance, performs fairly well compared to other countries on average in data availability and use (Outcome C.1.1), indicating a better capability to produce, manage, and utilise administrative and big data for system monitoring and enhancement.

However, akin to other countries participating in the Torino Process, data availability and use is the weakest domain among all monitored domains. Participation in international assessments like the Programme for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS) is not regular, making Bosnia and Herzegovina lack updated and comparable trend data on system performance. Also, the Agency for Statistics of Bosnia and Herzegovina does not report or calculate data on enrolment rates, which is a crucial metric for understanding trends and making informed decisions about education policy and planning.<sup>20</sup> Gaps like these hinder the ability of government officials to make evidence-informed policy decisions, which in turn inhibits schools, teachers, and the broader public from getting the necessary information to contribute to improvements in teaching and learning.

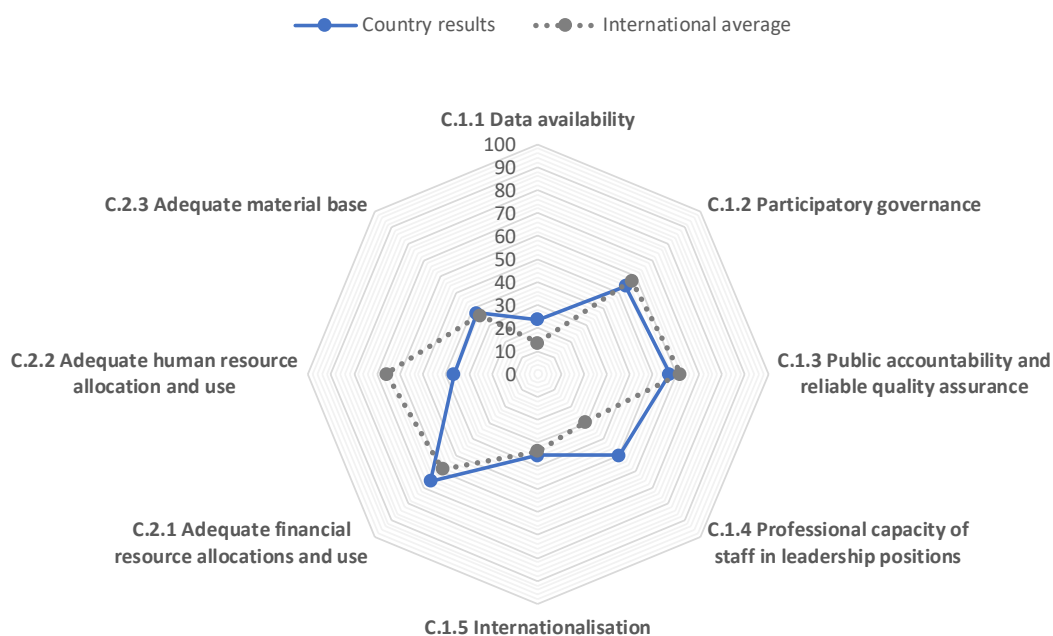
Moreover, Bosnia and Herzegovina displays an average degree of engagement from the private sector and external stakeholders in decision-making processes related to VET and lifelong learning (Outcome C.1.2). Various EU projects and donors support forums and platforms for policy dialogue. For instance, the EU supports various projects and policy dialogue forums through their ERASMUS+ programme, which Bosnia and Herzegovina has recently started to engage in more extensively. According to the Erasmus office in Bosnia and Herzegovina, 17 VET schools have participated in the programme „Sector Skills Alliances,” which is designed to address skills gaps and enhance the

<sup>20</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

responsiveness of initial and continuing VET systems to sector-specific labour market needs and demand for new skills. Despite these engagements, collaboration among different partners and stakeholders in VET and lifelong learning remain insufficient. National authorities report that part of the problem is also the weak cooperation and participation of agencies coordinating higher education in the formulation of policy in VET and lifelong learning.<sup>21</sup>

Likewise, concerning public accountability and quality assurance mechanisms as captured in Outcome C.1.3, there is potential for improvement to ensure transparency and more dependable quality assurance practices. The extent of international exposure in the VET system is also modest (Outcome C.1.5), suggesting that while some international exposure and integration exist, for instance the collaboration with the VET Centre in Velenje, Slovenia,<sup>22</sup> such exposure is not widespread or systemic across the country's VET landscape.

**FIGURE 6. GOVERNANCE, PARTICIPATION, ACCOUNTABILITY, AND RESOURCES - INDEX OF SYSTEM PERFORMANCE, BOSNIA AND HERZEGOVINA AND INTERNATIONAL AVERAGE (2023)**



*Theoretical index range: min/low performance=0, max/high performance=100*

Source: [Torino Process monitoring database](#)

Notably, Bosnia and Herzegovina outperforms in the domain of professional capacity of staff in leadership positions compared to other countries (Outcome C.1.4). Nonetheless, the performance diminishes when considering the availability and management of human resources in the VET sector (Outcome C.2.2), highlighting the need for more effective strategies for personnel deployment and career management. However, both results should be viewed cautiously, recognising the shared need

<sup>21</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

<sup>22</sup> Ibid.

among all countries participating in the Torino Process for more comprehensive methodologies to evaluate VET staff performance, including those in leadership positions.

According to the information provided by national authorities, although certain laws regulate the conditions and competences for principals and staff in leading positions in school management, the recruitment and appointment process to school leadership positions is not standardized, and the opinions about their competences for managerial positions vary widely. The information provided also reflects a consensus that managers at school do not receive enough appropriate training, affecting the overall education development.<sup>23</sup>

Despite a relatively good performance in terms of available financial resources for VET (Bosnia allocates a substantial proportion of educational spending to the sector and has pledged to maintaining the share of education in GDP at 4.6% by 2030), the adequacy of material resources for learning and training (Outcome C.2.3) remains modest. Information provided by national authorities suggests that many textbooks are outdated, and some subjects, especially practical ones in VET, are not covered at all. Additionally, there is a significant shortage of IT equipment, and library or laboratory material, further constraining the quality of teaching and learning.

This hints at shortcomings in the strategic allocation and utilisation of these financial resources within VET, particularly as it pertains to infrastructure, teaching resources, and career development support for VET teachers. The disparities in educational spending across different cantons, along with regulations that prevent providers from retaining a significant proportion of the income they generate, contribute to this situation.<sup>24</sup>

Steps are being taken to address these issues. Recent initiatives have aimed to enhance physical infrastructure. The Federal Ministry of Education and Science, for example, has financed equipment for laboratories for Science, Technology, Engineering, and Mathematics (STEM) subjects, and computers to enhance digitalisation and improve the digital competences of teachers and students. Furthermore, there have been substantial investments in infrastructure from entity and cantonal governments and from the international donor community. Yet, school directors still believe that more investment is needed, especially in infrastructure and energy efficiency, particularly in smaller cities.<sup>25</sup>

## **2.3 HOW DID POLICIES AND SYSTEMS BENEFIT SPECIFIC GROUPS OF LEARNERS?**

In this round, the Torino Process monitoring looks not only into the deliverables of national VET policies and systems in general but also into the degree to which they address the needs and expectations of present and prospective lifelong learners. The monitoring framework traces how well and equitably system outcomes are distributed to these learners depending on their age and gender and by features which can be influenced by policy, such as socio-economic disadvantage, labour market status, migration status and learning setting/pathway.

The next sections provide an overview of how the IVET and CVET subsystems in Bosnia and Herzegovina perform in a key selection of monitoring dimensions for the following key selection of learner groups: female learners (Section 2.3.1), disadvantaged learners (Section 2.3.2), populations

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<sup>23</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

<sup>24</sup> Ibid.

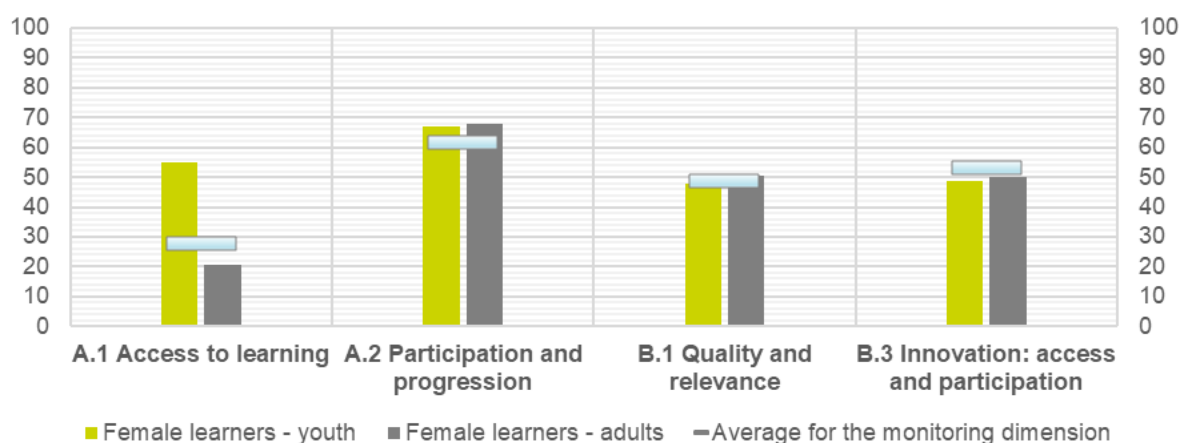
<sup>25</sup> Ibid.

who are long term unemployed, economically inactive, and have a low level of educational attainment (Section 2.3.3), as well as by their country of origin (Section 2.3.4).

### 2.3.1 Female learners

This section describes findings about VET system performance regarding access, participation, quality and relevance, and innovation to the benefit of female youth and adult learners in VET in Bosnia and Herzegovina.

**FIGURE 7. SYSTEM PERFORMANCE IN SUPPORT OF FEMALE LEARNERS IN SELECTED MONITORING DIMENSIONS, BOSNIA AND HERZEGOVINA (2023)**



Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

The monitoring results suggest the presence of certain obstacles, but also of opportunities when focusing on the experiences of female learners, both young and adult.

The matter of access to learning (Dimension A.1) emerges as a significant issue at the national level, and it's particularly sharp for adult women. In recent years in the Brčko District of Bosnia and Herzegovina, more female students have enrolled into 3-year VET programmes due to the attractiveness of these programmes in the labour market.<sup>26</sup> Despite this, adult women in Bosnia and Herzegovina, especially those in rural areas, still face more barriers to access, indicating a potential loss of untapped potential within the VET system and the economy more broadly.

Once women do gain access, both young and adult females showcase remarkable resilience, performing notably well in terms of participation and progression (Dimension A.2). Although VET system performance for both groups exceeds the national average, adult females tend to be somewhat more likely to progress successfully than their younger peers. This performance pattern may even hint at a potential gender bias that seems to disadvantage male learners when it comes to participation and graduation in VET. Indeed, as far as IVET is concerned, PISA data suggest that girls have better chances to continue their education at a tertiary level than boys.<sup>27</sup>

<sup>26</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

<sup>27</sup> Ibid. and OECD PISA 2018 database.

In examining the other two dimensions, quality and relevance of learning (Dimension B.1) and innovation in access and participation (Dimension B.3), performance aligns with the national average for all learners, regardless of gender and age. This uniformity suggests that VET policies, such as the strategic platform on adult education in the context of Lifelong Learning, EU project activities in partnership with various national stakeholders, the Gender Action Plan for Bosnia and Herzegovina, and support programmes issued by the Federal Ministry of Education and Science focusing on improving women's skills and competences, do not favour one group of learners over another.

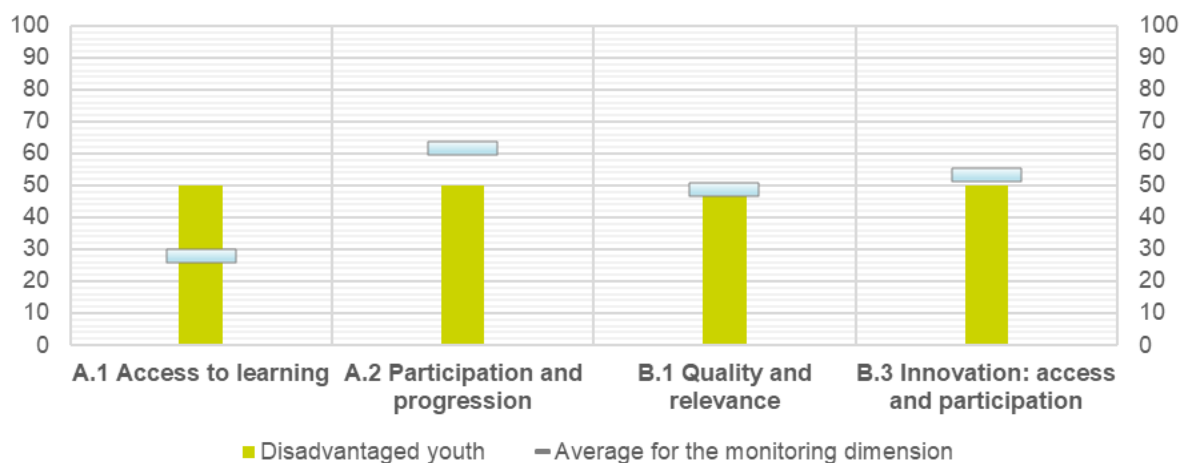
These efforts have been complemented by other initiatives such as the project supported by GIZ in cooperation with the Ministry of Education in Herzegovina-Neretva Canton and the Middle Bosnia Canton's cooperation between Mechanical VET School Travnik and GS TMT company. The information provided by authorities echoes this and shows that there is also little variance by gender in learners' abilities to acquire basic and key competences and to transition into the labour market.<sup>28</sup>

Yet, despite the strides made, the performance patterns underscore a persistent need to improve conditions for female learners, and indeed all learners. Even with encouraging trends in participation and progression, the less favourable outcomes in areas such as access to learning for adult females are a reminder of the need for further efforts to ensure an even more equitable VET system.

### 2.3.2 Disadvantaged learners

This section describes how well the VET system caters to the needs of socioeconomically disadvantaged youth regarding access, participation, and quality/relevance of opportunities for lifelong learning through VET. The section also examines whether efforts to promote innovation in VET access and participation benefit this specific group of learners in Bosnia and Herzegovina.

**FIGURE 8. SYSTEM PERFORMANCE IN SUPPORT OF SOCIO-ECONOMICALLY DISADVANTAGED YOUTH IN SELECTED MONITORING DIMENSIONS, BOSNIA AND HERZEGOVINA (2023)**



Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

The monitoring results highlight a significant trend among disadvantaged youth. These learners are gravitating towards the VET system in far greater numbers than the national average, nearly double in

<sup>28</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

fact, making the system significantly more attractive for this demographic (Dimension A.1). It appears that disadvantaged youth often perceive VET as a viable route towards prompt transition from school to work, thereby securing an income to support their families. It has been found that socio-economically disadvantaged students often live in rural areas, which also influence their choice of the nearest school to cut transportation costs.<sup>29</sup>

The attraction of the VET system has been enhanced by the focused distribution of scholarships for economically disadvantaged learners, the offer of free transportation like in the Brcko District, and the increased attention garnered by various VET programmes, like medical technician and IT, due to their potential to offer employment opportunities in advanced labour markets like Germany. The introduction of an initiative for the validation of informal learning and the commitment of certain cantons to provide obligatory secondary education (IVET) for students up to 18 years old, may provide even more opportunities for at-risk students.<sup>30</sup>

Despite promising results regarding initial access, the overall situation of disadvantaged youth in VET makes for a complex narrative. Although they participate in various dimensions of learning, their performance tends to hover around the mid-range, as shown in Figure 8. The challenges this demographic is confronted with become evident in the results describing their participation and progression (Dimension A.2), which fall below the average for other learners. This could be an indication of the hurdles they face in navigating the VET system because of their socio-economic disadvantage, compared to non-disadvantaged learners.

The impact of existing initiatives, such as bursaries from the Ministry of Education, local communities or foundations, and programmes offered by public employment services, seems to remain limited. Those learners who nevertheless manage to graduate with success frequently choose not to pursue higher education after VET, preferring to make an immediate transition into the workforce.<sup>31</sup>

Switching between parallel pathways in VET and general education also presents a challenge for socio-economically disadvantaged learners. Interestingly, the performance of disadvantaged youth aligns closely with the national average in the dimension of quality and relevance (Dimension B.1) and similarly in innovation for access and participation (Dimension B.3). This similarity indicates that at least some of the challenges confronting VET in Bosnia and Herzegovina are shared among all learners, not solely the disadvantaged ones.

Although data from international assessments show that in Bosnia and Herzegovina there is a significant disparity in achievement based on the socio-economic background of students,<sup>32</sup> evidence concerning VET specifically suggests that this group of learners can equal the achievements of advantaged students with proper support, such as bursaries from the Ministry of Education, local communities, or foundations, and programmes offered by public employment services.<sup>33</sup> Yet, while the VET system shows promise in its capacity to attract disadvantaged youth, there are still areas that require attention and improvement to ensure successful outcomes for these learners.

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<sup>29</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

<sup>30</sup> Ibid.

<sup>31</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

<sup>32</sup> Source: OECD PISA 2018 database.

<sup>33</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

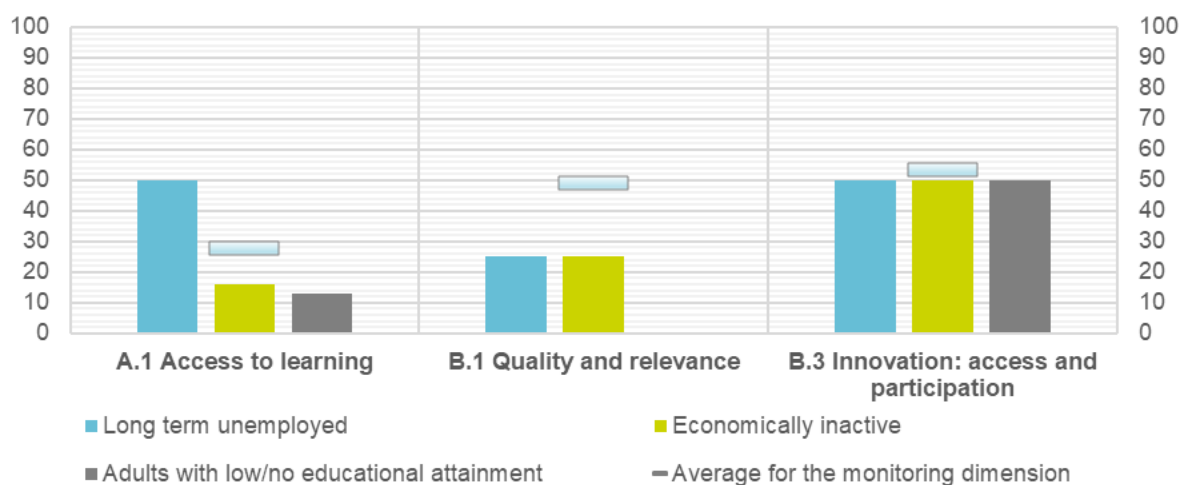


### 2.3.3 Populations who are long-term unemployed, economically inactive, and have low educational attainment

Section 2.3.3 presents findings about VET system performance from the perspective of three strategically important groups of adults: the long-term unemployed, the economically inactive adults, and those with low or no educational attainment. The selection of monitoring dimensions is narrower than the selection discussed in the previous sections, partly because some of these dimensions are not applicable and partly because of missing data for Bosnia and Herzegovina.

The Vocational Education and Training (VET) system in Bosnia and Herzegovina paints a varied picture when it comes to the long-term unemployed, economically inactive individuals, and those with low or no education. In the domain of access to learning (Dimension A.1), long-term unemployed learners show a higher propensity towards the VET system, performing notably above the national average. This higher performance can be credited to the proactive role played by key stakeholders in the education and labour market system, such as public employment services in Federation of Bosnia and Herzegovina (including cantonal public services, Public Employment Service (PES) in Republika Srpska and PES in Brcko District), VET schools, higher education institutions, local communities, chambers of commerce and companies, which facilitate Continuing Vocational Education and Training (CVET) opportunities for these individuals through specific programmes and public calls.<sup>34</sup>

**FIGURE 9. SYSTEM PERFORMANCE IN SUPPORT OF ADULTS WHO ARE LONG-TERM UNEMPLOYED, ECONOMICALLY INACTIVE, OR HAVE LOW EDUCATIONAL ATTAINMENT, BOSNIA AND HERZEGOVINA (2023)**



*Theoretical index range: min/low performance=0, max/high performance=100*

Source: Torino Process monitoring database

Contrastingly, economically inactive learners and adults with low or no education encounter significant hurdles in accessing the VET system, their performance levels falling drastically below the national average. While CVET options exist for these groups, they often remain under-utilised due to limited attractiveness or perceived relevance. For example, CVET is available for inactive adults registered at PES in Republika Srpska and Brcko District Bosnia and Herzegovina, but many of them lack motivation to participate in training or employment.<sup>35</sup> These individuals, arguably part of an

<sup>34</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

<sup>35</sup> Ibid.



underserved population, require additional support mechanisms to better integrate into the system. Career guidance services could play a significant role in motivating these learners and guiding their educational paths. It's worth noting that support services for these learners are often concentrated in urban areas, creating a geographical barrier for those residing in rural areas.

Shifting the lens towards the acquisition of basic skills and transitioning from the VET system to the labour market (Outcome B.1), the long-term unemployed and economically inactive learners face a challenging landscape. Both groups display performance levels considerably lower than the national average, indicating a significant deficit in the quality and relevance of the VET system for these groups. According to the information provided by national authorities, there is a need for increased personalization in the targeting of support measures and a more transparent approach to public invitations for training opportunities and incentives. Furthermore, the sustainability of employment following completion of training programmes is generally low, indicating that while these measures provide a quick fix to reduce unemployment statistics, they may have limited or even negative long-term impacts on the beneficiaries' positions in the labour market.<sup>36</sup>

Notwithstanding these challenges, there are some positive developments and notable examples of effective support. These include the establishment of a mobile team by the Public Employment Service of Brcko District Bosnia and Hercegovina to improve access of rural population to its services, the provision of free non-formal programmes by many providers of adult learning in cooperation with local communities to enhance knowledge and skills, and the development of shorter, more appealing training programmes to enable quicker access to the labour market. For example, in Republika Srpska, the Institute for Adult Education, in cooperation with primary schools and PES, has developed a programme for completion of primary school, and non-formal training programmes to equip individuals with occupation and qualifications required in the labour market.<sup>37</sup>

In terms of system-wide innovation in access and participation (Dimension B.3), all learner groups, as illustrated in Figure 9, benefit from an inclusive approach. For instance, in Brcko District Bosnia and Hercegovina, a new website and corresponding digital services for customers (eBiro) have been established to connect job seekers and announced job vacancies. In Republika Srpska, a new department specialised for evaluation of ALMPs and a Business Intelligence system have been set up, and a system of automatic approach to matching employers' needs and jobseekers' CVs is in function. The Chamber of Commerce and Industry of Republika Srpska has also established a Centre for Adult Education to support training for profiles that are requested in the labour market and to align formal VET programmes with labour market needs.<sup>38</sup>

In sum the VET system shows no substantial biases against any of the groups covered in this section, highlighting the effectiveness of systemic innovation in support of all learner categories. Nevertheless, there is ample room for further improvements as innovation does not seem to translate into system-wide results to the benefit of these groups of disadvantaged populations.

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<sup>36</sup> Source: 2023 Torino Process self-assessment questionnaire for Bosnia and Herzegovina.

<sup>37</sup> Ibid.

<sup>38</sup> Ibid.

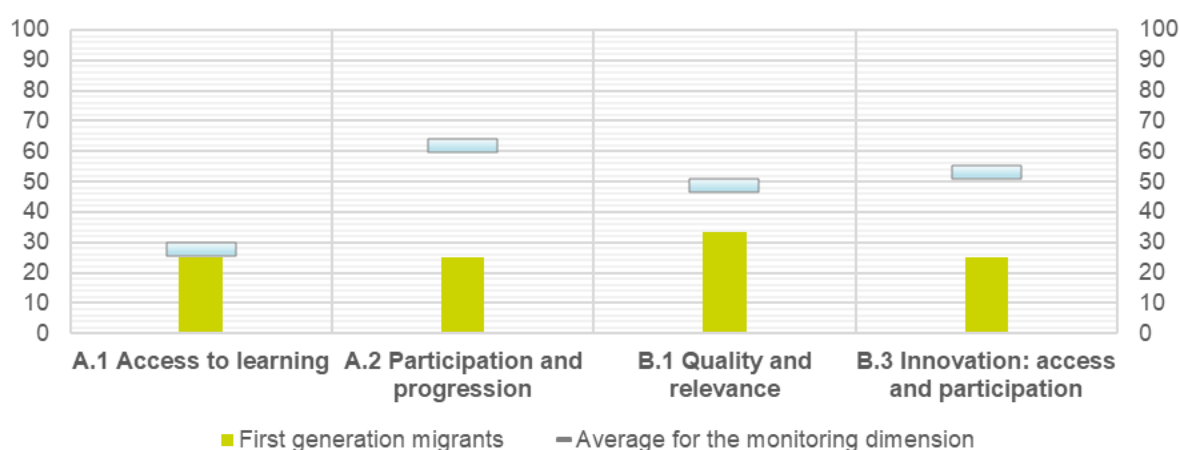
### 2.3.4 Learners by country of origin

The final section with monitoring findings discusses performance in the domains of access, participation, quality and relevance, and innovation in Bosnia and Herzegovina for learners who are first-generation migrants.

First-generation migrants often face significant challenges as learners within Bosnia and Herzegovina's VET system, and surmounting obstacles to achieve success can be a daunting task for many of them. While migrant learners can access VET on par with any other group of learners in Bosnia and Herzegovina, the gap between what VET delivers for migrants and for the average learner in other dimensions, such as participation and progression, is markedly wider (Figure 10).

Learners with a migrant background face significant limitations in their active participation and successful completion within the VET system. The reasons for these outcomes exceed the scope of this report and our collected data. Yet, it's apparent that the flexibility of the education and training system in terms of horizontal and vertical permeability is already a complex issue for all learners.

**FIGURE 10. SYSTEM PERFORMANCE IN SUPPORT OF FIRST-GENERATION MIGRANTS IN SELECTED MONITORING DIMENSIONS, BOSNIA AND HERZEGOVINA (2023)**



*Theoretical index range: min/low performance=0, max/high performance=100*

Source: Torino Process monitoring database

Authorities in Bosnia and Herzegovina have established policies to ensure access to education for this specific group of learners. Nevertheless, it's plausible that many migrants do not perceive the country as a long-term destination, which may decrease their motivation to access and actively participate in VET. This situation could explain the limited or absent opportunities for learning beyond initial VET (IVET) and continuing VET (CVET) for migrants. Added to this, language barriers and issues related to the recognition of prior learning also act as inhibiting factors for migrants' performance within this dimension.

Although VET performs less well for migrants than for other learners in all dimensions of monitoring, the dimension of best performance in support of this learner group is quality and relevance (B.1). However, the extent to which migrant learners acquire basic skills and key competencies and succeed in transitioning from school to work cannot be determined with certainty: the information provided by national authorities underlines the lack of evidence concerning the proficiency of migrants in basic skills and competencies within VET.

Given that first-generation migrants form a relatively small part of the population in Bosnia and Herzegovina, the lack of data can hinder the development and implementation of effective policies and programs that address the specific needs and capitalize on the potential of first-generation migrants within the labour market. While some support mechanisms exist, such as laws on adult learning and courses provided by various international organisations, for policymakers it can be challenging to gather comprehensive information about this group, assess their competencies, and plan accordingly.

## 3. SUPPLEMENTARY SOURCES AND INFORMATION

### 3.1 Links to background information and data

The system performance indices presented in this report were calculated based on a selection of international quantitative indicators for Bosnia and Herzegovina and the qualitative responses of stakeholders where such indicators needed to be included.

The full collection of quantitative indicators collected for Bosnia and Herzegovina for this 2023 monitoring round can be found here:

[https://docs.google.com/spreadsheets/d/1KU19I1b6wykMxDa8\\_2CQOB8GRZTsg6DI/edit?usp=sharing&ouid=110154518834912853011&rtpof=true&sd=true](https://docs.google.com/spreadsheets/d/1KU19I1b6wykMxDa8_2CQOB8GRZTsg6DI/edit?usp=sharing&ouid=110154518834912853011&rtpof=true&sd=true)

The full collection of qualitative responses to the country-specific questionnaire for Bosnia and Herzegovina can be found here:

[https://docs.google.com/document/d/1JvIxsdE7kQiP\\_fhK8kapSTjc60L4ECWm/edit?usp=sharing&ouid=110154518834912853011&rtpof=true&sd=true](https://docs.google.com/document/d/1JvIxsdE7kQiP_fhK8kapSTjc60L4ECWm/edit?usp=sharing&ouid=110154518834912853011&rtpof=true&sd=true)

A full description of the monitoring framework which guided the monitoring process can be found here: [https://drive.google.com/file/d/1x8vnQ4o8mnOnfQdXe8o6dBA\\_yTRB9krs/view?usp=sharing](https://drive.google.com/file/d/1x8vnQ4o8mnOnfQdXe8o6dBA_yTRB9krs/view?usp=sharing)

General information for the Torino Process as well as the reports and data of other participating countries can be found here: <https://www.etf.europa.eu/en/what-we-do/torino-process-policy-analysis-and-progress-monitoring>.<sup>39</sup>

### 3.2 Definitions, terminological clarifications, methodological limitations

#### 3.2.1 Definitions and terminological clarifications

This section provides an overview and definition of key terms in the Torino Process monitoring framework.

- **Youth:** Population in the official entrance age and participation in initial VET programmes.
- **Adults:** Population of working age (15+ years of age) not enrolled in initial VET programmes.
- **Disadvantaged youth:** This refers to socio-economic disadvantage and describes youth with access to below-average levels of financial, social, cultural, and human capital resources.
- **Long-term unemployed:** Long-term unemployment refers to the number of people who are out of work and have been actively seeking employment for at least one year.

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<sup>39</sup> The Torino Process monitoring reports and data will be released gradually in the period March-May 2023 in the order in which countries submit their evidence and the reports are being finalised with them.

- **Inactive populations:** Adults of working age who are outside of the labour force, meaning that they are neither employed nor registered as unemployed (that is, seeking employment)
- **Lifelong learning:** any learning activity undertaken throughout life, to improve knowledge, skills/competences and/or qualifications for personal, social and/or professional reasons.
- **System performance:** describes the extent to which the VET system delivers against a targeted selection of national and international obligations (commitments) to learners and other stakeholders in support of learning through life (lifelong learning - LLL).
- **Initial VET:** Vocational education and training carried out in the formal system of initial education (usually upper or post-secondary) before entering working life.
- **Continuing VET:** Formal or non-formal vocational education and training carried out after initial VET and usually after the beginning of working life.
- **Adult education:** Adult education or learning may refer to any formal, non-formal, or informal learning activity, both general and vocational, undertaken by adults after leaving initial education and training.

### 3.2.2 Methodological limitations

The system performance indices developed in the framework of the Torino Process, are based on a rich methodological framework. This framework relies on various principles and theoretical underpinnings to ensure that the design, implementation, and evaluation of the indices is plausible in terms of theoretical foundations, technical reproducibility, and statistical fitness. The primary aim of these indices is to offer insights that can guide the monitoring of countries and inform their policy planning, not to promote their comparative ranking.

While various options were available during the different phases of the construction of the indices, the final choices represent a series of decisions which were deemed adequate and appropriate to promote reliability and avoid bias, in full awareness that by their very nature, indices like those require constant refinement. Therefore, the construction and calculation of the performance indices will remain an ongoing process to address the following limitations:

1. Refinement of aggregations and analysis: the current version of the indices represents a sub-set of the national systems under analysis. While these are sufficient for the formulation of initial findings, future cross-country analysis will include a larger number of countries with possible alternative (dis)aggregations i.e., at regional or development level, which may also affect the formulas using in the calculation of the indices as well as their values. The methodological framework of the Torino Process monitoring allows for such extensions and refinement without jeopardizing the validity of results which have been released already.

2. Choice of evidence: while the goal of this exercise is to monitor equally the different areas of interest, their dimensions and related outcomes, different countries may rely on a different, country-specific mix of qualitative and quantitative indicators from a predefined list for all countries. This also applies to the last available (reference) year for the quantitative indicators, which may vary between indicators and countries within a five-year limit.