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Danube Region**



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Fem2forests

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- Foresta SG (Foresta SG), Czech Republic
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1 Introduction

This comparative report examines national career orientation systems in the Danube Region as part of the *Fem2forests* initiative, which seeks to promote inclusive and accessible labour markets by encouraging the participation of girls and young women in forestry careers. The study explores shared challenges, emerging good practices, and transferable elements across different national contexts, with the aim of enhancing the effectiveness and inclusiveness of career orientation systems—particularly through a gender-sensitive lens.

Career orientation systems play a vital role in helping individuals, especially youth, navigate complex transitions from education to training and employment. They contribute to lifelong learning, improve employability, and support personal development by equipping individuals with the knowledge, skills, and confidence to make informed career choices. Across the region, career orientation systems differ in terms of governance, institutional structures, delivery mechanisms, and terminology—reflecting a range of historical, administrative, and policy traditions.

Despite these differences, the systems share a growing commitment to aligning career guidance with labour market needs, strengthening cross-sectoral collaboration, and expanding services to underserved or underrepresented groups. Some countries have introduced targeted programs to support specific groups, while others are reforming their legal and policy frameworks to better integrate career orientation into education and employment systems. Digitalisation, stakeholder involvement, and work-based learning models are also becoming more central in shaping how guidance is delivered.

This report analyses these systems with a focus on how they can be further developed to address gender disparities—particularly in male-dominated sectors such as forestry. By examining terminology, policy frameworks, delivery practices, and institutional cooperation, the report provides insights for creating more equitable and forward-looking career orientation ecosystems across the Danube Region.

2 Career orientation systems in general

Career orientation refers to the structured processes and services that assist individuals in making informed decisions about their education, training, and professional development. It supports people across different life stages in identifying their interests and strengths, exploring learning and labour market opportunities, and developing the skills needed to navigate increasingly complex and dynamic career paths.

Modern career orientation is no longer limited to a one-time decision made in adolescence. Instead, it is recognized as a lifelong process, accompanying individuals through transitions such as schooling to employment, career shifts, unemployment, or re-entry into the workforce. Effective systems aim to empower people not only to choose a career, but also to manage their personal growth, learning, and employability over time.

Comprehensive career orientation systems typically include career education in schools, personalised counselling, information and digital resources, and work-based learning opportunities such as internships or mentorships. These services may be delivered through a combination of schools, public employment services, higher education institutions, and community organisations. Increasingly, digital platforms and tools—such as virtual job fairs, online self-assessments, and labour market dashboards—are playing a vital role in expanding access and customising support.

A wide range of stakeholders contribute to the success of career orientation systems, including ministries of education and labour, school counsellors, employers, industry associations, civil society organisations, and trade unions. Coordination among these actors is crucial to ensure consistency, quality, and responsiveness to evolving economic and social contexts.

In recent years, several important trends have shaped the evolution of career orientation systems. These include the growing importance of digital and green skills, the expansion of guidance services for adults and non-traditional learners, and a stronger focus on inclusion and equity. Many systems are working to reduce barriers for women, rural populations, ethnic minorities, and other underrepresented groups, while also promoting diverse and sustainable career paths.

However, challenges persist. These include limited institutional capacity, underinvestment in guidance services, unequal access across regions and population groups, and persistent gender stereotyping in guidance practices. In many contexts, school-to-work transitions remain fragmented, and the connection between education and labour market needs is not fully developed. Furthermore, systems often lack robust tools to monitor effectiveness and ensure continuous improvement.

To respond effectively to current and future challenges, career orientation systems must be adaptable, inclusive, and anchored in real-world labour market intelligence. They must balance personal empowerment with structural awareness, ensuring that all individuals—not just a privileged few—can make confident, informed, and sustainable career choices. As the world of work continues to evolve, career orientation is not just a service but a key enabler of lifelong learning, social mobility, and resilient labour markets.

3 Career orientation-related terminology

Career orientation terminology varies significantly across different national contexts, reflecting each country's unique approach to educational and vocational guidance. This analysis compares the terminology used in Austria, Bosnia and Herzegovina, the Czech Republic, Germany, Croatia, Romania, Serbia, Slovenia, and Ukraine, highlighting their conceptual frameworks, implementation strategies, and national policies.

Austria employs a structured system with distinct terminology, including "Information, Advice, and Guidance for Education and Careers" (ibobb), "Regional Coordination for Educational and Vocational Orientation Styria" (RBBOK), and "Vocational Orientation Centres of the AMS" (BIZ). The country also integrates gender-focused initiatives such as "Girls' Day" and "Boys' Day", promoting non-traditional career choices. Additionally, "MINT" projects encourage women in STEM fields, and "KOST" and "NEBA" coordinate services for young people and individuals with disabilities.

Career orientation in **Bosnia and Herzegovina** operates within a decentralized framework. Key terms include "lifelong learning", which encompasses formal, non-formal, and informal education, and "career development", which refers to managing learning and work transitions. "Career orientation" focuses on skill development for decision-making and career management. The emphasis on globally recognized concepts reflects the country's alignment with broader European career orientation policies.

The **Czech Republic's** system uses structured terminology such as "National System of Occupations" (NSP) and "National System of Qualifications" (NSK), which standardize occupational requirements and recognize informal learning. "Qualification and Evaluation Standards" provide skill benchmarks, while "Career Counselling Services" offer guidance through schools and labour offices. The emphasis on "lifelong learning" supports individuals in adapting to labour market changes, demonstrating a comprehensive and transparent system.

In Bavaria, **Germany**, career orientation is framed through "career orientation", "vocational orientation", and "career choice".

Croatian career orientation terminology includes "professional orientation", "career counselling", "career informing", and "lifelong career orientation". The multidisciplinary approach integrates elements from psychology, sociology, and economics. "Career counselling" supports self-assessment and decision-making, while "career informing" provides a broad knowledge base about work and education. "Lifelong learning" is emphasized as a means of continuous professional development.

Romania employs terminology focusing on "self-knowledge", "educational, occupational, and labour market exploration", "career decision-making" and "personal promotion". The

guiding and counselling services aim to help individuals transition between education levels and employment. Career Counselling and Guidance (CCG) plays a crucial role in equipping students with skills necessary for informed decision-making regarding their professional futures.

Serbia's approach to career orientation is outlined in the "Rulebook on the Standards of Career orientation and Counselling Services". The key terms include "career orientation and counselling," "career management skills," "career practitioners," and "career information". Policies emphasize accessibility and inclusivity, ensuring all individuals can access career services. "Career development" is viewed as a lifelong process, aligning with international career management models.

Slovenia's career orientation terminology varies across policy documents. The "Law on the Organisation and Financing of Education" uses "occupational counselling", the "White Paper on Education" refers to "career orientation", and school counselling services use "occupational orientation". The inconsistency in terminology has led to challenges in policy implementation, as different stakeholders interpret career orientation differently.

Ukraine's career orientation terminology includes "professional orientation", which encompasses "professional information", "professional consultation", "professional selection" and "professional adaptation". The country also employs "career consultation", a newer term that refers to licensed services helping individuals choose career paths. The "mentorship system" and "practical internship" are emphasized as key career preparation tools, while "non-formal learning" and "informal learning" provide alternative educational pathways.

While all nine countries recognize the importance of career orientation, their terminology reflects distinct national priorities and policy structures.

4 Policy framework on career orientation

The policy framework on career orientation varies significantly across respective countries, reflecting each country's socio-economic structure, administrative organization, and strategic priorities.

Austria's policy framework emphasizes the importance of integrating career orientation within the educational system. The School and Education Act, along with compulsory training until the age of 18, underscores the country's commitment to continuous education and skill development. Additionally, Austria prioritizes gender considerations in vocational orientation, promoting equality and inclusiveness in career choices.

In contrast, **Bosnia and Herzegovina** presents a more complex administrative structure, with separate policy frameworks in the Federation of Bosnia and Herzegovina (FBiH), Republika Srpska (RS), and the Brčko District (BD). At the national level, strategic documents such as the Strategy for the Development of Vocational Education and Training (2007-2013) and Strategic Directions of Education Development (2008-2015) highlight efforts to integrate career orientation into the educational system. Specific policies focus on entrepreneurial learning and fostering partnerships between educational institutions and businesses. Each administrative unit has tailored policies to address local needs, such as the FBiH Employment Strategy (2023-2030), which aligns workforce skills with labour market demands through active labour market policies and career counselling. Similarly, RS emphasizes educational quality and labour market alignment in its Education Strategy (2022-2030), while BD focuses on workforce planning and stakeholder collaboration.

The Czech Republic's policy framework on career orientation is characterized by its alignment with labour market needs through comprehensive national policies. The Education Act (Act No. 561/2004 Coll.) integrates career counselling into school curricula, while the National System of Occupations (NSP) and the National System of Qualifications (NSK) standardize job roles and qualifications. Sectoral councils, including those for forestry, work with the Ministry of Agriculture to align job profiles with sustainable practices. National strategies such as the Lifelong Learning Strategy and the National Employment Policy emphasize continuous skill development and vocational training, with a focus on inclusivity and supporting marginalized groups.

Germany's approach to career orientation is embedded within the Third Book of the Social Code (SGB), which mandates the federal employment agency to provide career orientation services for students, job seekers, and employers. Career-oriented education is further reinforced by the Bavarian Law of Education and Teaching (BayEUG), promoting personalized career choices based on individual strengths. National strategies, supported by the Federal Institute for Vocational Education and Training (BIBB) and the Federal

Ministry of Education and Research (BMBF), sponsor programs that offer hands-on career exploration and aim to break gender role stereotypes through initiatives like "Klischeefrei" (free of clichés). This integrated framework ensures comprehensive career orientation from early education to professional development.

In **Croatia**, career orientation is integrated within the educational system through legislative frameworks overseen by the Ministry of Science and Education and the Ministry of Labour, Pension System, Family, and Social Policy. The Law on Education in Primary and Secondary Schools outlines career orientation objectives that prepare students for a dynamic labour market. The National Curriculum Framework emphasizes professional competency development, lifelong learning, and responsiveness to labour market demands. Croatia's National Development Strategy until 2030 prioritizes workforce adaptability and inclusivity, particularly addressing gender equality, work-life balance, and equal pay.

In **Romania**, career orientation policies are embedded within a comprehensive legal structure that covers education, employment, youth, and social inclusion. Laws such as the Labour Code and the Education Law (Law no. 1/2011) provide a foundation for career orientation, ensuring access to quality education and vocational counselling. The recent Law on pre-university education (Law 198/2023) marks a significant shift, mandating inclusive education and customized recommendations for students. Additionally, national strategies, including the National Strategy on Employment (2014-2020) and the National Strategy on Social Inclusion (2015-2020), aim to improve employability and reduce poverty. Romania's approach reflects a holistic view, where career orientation is linked closely with broader socio-economic policies.

In **Serbia**, the strategic framework for career orientation emphasizes lifelong personal development, employability, and career management. The Strategy for Career orientation and Counselling (2010) outlines a comprehensive approach that goes beyond initial career choices. Key laws such as the Law on the Foundations of the Education System (2021) and the Law on Dual Education (2020) support this strategy by promoting a flexible educational system aligned with labour market needs. Moreover, the Rulebook on the Standards of Career orientation and Counselling Services (2019) introduces structured standards for career management skills and service organization. Serbia has a distinct focus on formalizing standards and competencies within the career orientation sector.

Slovenia's career orientation framework is characterized by an integrated system that involves educational institutions and employment services. Career counsellors are present at all educational levels, from primary schools to universities, providing consistent guidance. The Employment Service of Slovenia plays a crucial role in lifelong career orientation and active employment policy implementation. Legislative support comes from the Ministry of Labour and the Ministry of Education, ensuring cross-sectoral collaboration. Notably, Slovenia emphasizes the involvement of parents and

individualized counselling, reflecting a more community-oriented approach. This holistic system ensures continuous support throughout an individual's career journey.

Ukraine's policy framework on career orientation is embedded within its broader educational and employment policies. Laws such as the Law on Education and the Law on Employment provide a foundation for vocational and professional training. The Concept of the State System of Professional Orientation highlights the importance of guiding youth through educational transitions. However, the ongoing martial law conditions have led to adjustments in educational policies, reflecting resilience and adaptability. Compared to other countries, Ukraine's policies demonstrate a strong link between national security conditions and career orientation, focusing on maintaining educational continuity despite challenges.

Austria emphasizes educational integration and inclusiveness; Bosnia and Herzegovina adapts policies to its complex administrative structure. The Czech Republic and Germany focus on aligning career orientation with labour market demands through comprehensive national policies. Croatia prioritizes adaptability and inclusivity, whereas Romania integrates socio-economic policies with career orientation. Serbia emphasizes standardized competencies and lifelong development, Slovenia offers continuous support through cross-sectoral collaboration, and Ukraine demonstrates resilience under socio-political challenges. These diverse frameworks provide valuable insights into how national policies shape career development opportunities across the Danube region.

5 Career orientation delivery and stakeholder involvement

Each country has a distinct system for delivering career orientation, shaped by its' educational structures, socio-economic contexts, and levels of stakeholder involvement.

Austria has well-established and structured approach to career orientation, particularly within its education system. The vocational orientation in Austria begins early, with programs like “ibobb” offering advice and guidance on education and career paths. These efforts are supported by a strong network of vocational centres, schools, regional educational bodies, and employment services, such as the AMS and BIZ. In Styria, the regional coordination of career orientation through “RBBOK” ensures a targeted approach, with local stakeholders involved at multiple levels, from companies to parents. This systematic structure provides a robust support system for young people, helping them make informed decisions regarding their career paths. Austria's integration of programs like “Girls’ Day” and “Boys’ Day” also works to break gender stereotypes, promoting non-traditional career paths for both genders. The involvement of various stakeholders, from schools and employment services to chambers of commerce, ensures that career orientation is comprehensive, although challenges remain in reaching all students effectively, particularly in rural areas.

In **Bosnia and Herzegovina**, career orientation faces significant challenges primarily due to a fragmented and underdeveloped system. While there are institutional frameworks in place at the entity, cantonal, and local levels, the delivery of career orientation services lacks coordination. Career orientation is delivered mainly by schools, with limited involvement from employers or public employment services. Schools focus on guiding students toward general or vocational education paths, but career orientation is often treated as an additional responsibility, leading to a lack of consistency and effectiveness. Higher education institutions, including universities, provide some career development support, where initiatives to connect students with the labor market are mostly project-based and not systematic. Public employment offices also play a role but are overwhelmed with other responsibilities, limiting their capacity to focus on career orientation. The role of industry professionals and NGOs remains minimal, further reducing the impact of career orientation efforts in Bosnia and Herzegovina. This results in a gap between the skills young people acquire and the demands of the labour market, contributing to high youth unemployment.

In the **Czech Republic**, career orientation benefits from an integrated and systematic approach, with collaboration between schools, vocational training centres, industry professionals, and government agencies. Career orientation begins early in elementary schools and continues through secondary education. The Czech system integrates career

orientation into the curriculum, with teachers and career counsellors helping students explore educational and career paths. Vocational training centres provide hands-on experience and strong links with industry, ensuring that students receive practical exposure to potential career opportunities. Higher education institutions also offer career services, including internships and job placement assistance. Online platforms like the National System of Occupations (NSP) and National System of Qualifications (NSK) provide students with comprehensive career information, supporting career planning and skill recognition. Gender equality in education and career development is a key focus in Czech policies, with special initiatives encouraging women to enter non-traditional sectors like STEM and forestry. The Czech Republic benefits from active collaboration between educational institutions, industries, and government bodies, ensuring that career orientation is aligned with labour market needs. This structured approach, coupled with innovative tools like online assessments and career fairs, provides a strong support system for young people.

In **Germany**, career orientation is a mandatory and systematically integrated part of the school curriculum, particularly well-developed in Bavaria. Schools provide structured and progressive guidance through activities such as internships, company visits, career days, and interdisciplinary projects with external partners. A key feature is the vocational orientation module, which is integrated into year nine across different types of schools—Mittelschule, Realschule, and Gymnasium. This module introduces students to career options, supports self-assessment, and often includes practical experiences such as voluntary work placements. Stakeholder involvement is extensive and well-coordinated. The Federal Employment Agency plays a central role by offering comprehensive online tools, interest-based tests, and personalized counselling at local career centres. Additional actors such as the Bavarian Ministry of Family, Employment and Social Affairs, the Chamber of Commerce and Industry, and sector-specific employers like the Bavarian State Forest Enterprise contribute through digital platforms, job fairs, and informational events. Innovative and youth-friendly digital tools with inclusive, gender-sensitive content further enhance accessibility. This cohesive and multi-stakeholder system ensures that career orientation in Germany is effective, widely available, and aligned with labour market demands.

In **Croatia**, career orientation is primarily managed by the Croatian Employment Service (CES), which works closely with primary and secondary schools, as well as other institutions such as adult education centres and universities. The system focuses on guiding students in their final years of school through personalized counselling, which is complemented by online platforms like the Career Guide and e-Guidance. These tools help students explore potential career paths based on their skills, interests, and educational options. The CES also runs Centres for Career Information and Counselling (CISOK), which provide free services to students and parents. Stakeholder involvement in Croatia includes a broad range of organizations, such as the Croatian Employers'

Association and the Croatian Chamber of Trades and Crafts, which play a role in offering guidance and connecting students with employment opportunities. Collaboration between these bodies ensures a comprehensive approach to career orientation, though it is mainly structured around individual counselling rather than group activities or hands-on work placements.

Romania's career orientation system is more decentralized, involving a wide array of stakeholders, including the Ministry of Education, county school inspectorates, universities, and various governmental and non-governmental organizations. Career counselling is delivered through mandatory and elective classes, extracurricular activities, and individual counselling, often provided by teachers who are also trained as school counsellors. In addition to these school-based activities, Romania has initiatives led by universities and civil society organizations, such as the COACH USV project, which aims to support students' career development by providing guidance and opportunities for international internships. Stakeholder collaboration in Romania extends beyond educational institutions, involving employers' associations, youth organizations, and even public agencies like the National Anti-Drug Agency, highlighting a multidisciplinary approach to career orientation. This system emphasizes the importance of both formal education and extracurricular involvement, with a focus on practical exposure to various career options.

Serbia's career orientation system places a strong emphasis on professional development through partnerships between educational institutions and employers. The Serbian Ministry of Education, in collaboration with local Employment Services, facilitates career orientation through both theoretical guidance and practical experiences, including internships and career days. The country also has several tools, such as the "My Career" platform, which provides career counselling and educational resources tailored to students' interests and skills. In Serbia, there is significant involvement from public institutions like the Serbian Chamber of Commerce and private sector actors, ensuring that career orientation is aligned with the labour market's needs. This holistic approach is aimed at better equipping students for the challenges of entering the workforce, with a particular focus on helping them develop soft skills and practical experience through internships.

In **Slovenia**, career orientation is a structured and systematic part of the educational process. Schools are required by law to provide career orientation through counselling services that work closely with students, parents, and teachers. These counselling services are staffed by professionals such as psychologists, pedagogues, and social workers, and they collaborate with external stakeholders like the Employment Service of Slovenia. The career orientation services are incorporated into the school curriculum, emphasizing vocational information, career education, diagnostic testing, and personalized counselling. However, the Slovenian system often relies heavily on external projects and

initiatives to enrich and support career orientation efforts. For example, various projects run by the Employment Service of Slovenia, such as the "Career Centre for Youth", provide additional services, including individual counselling and career planning. These projects, funded through national and EU sources, help to extend the reach and effectiveness of career orientation. Additionally, tools like the Multifactorial Battery of Tests (MFBT) and online career decision-making tools are used to help students identify their strengths and guide them in making informed career choices. Collaboration between educational institutions, the Employment Service, and various other partners, such as the Slovenian Chamber of Commerce and Industry, ensures that career orientation remains relevant and accessible. While the foundation of career orientation is solid, external projects play a key role in broadening the scope and impact of these services, making them more comprehensive and tailored to the needs of students.

Career orientation in **Ukraine** is less formalized and more dependent on external initiatives, with a greater emphasis on the open market and competition among educational institutions. While the Ministry of Education and Science of Ukraine has made efforts in recent years to create innovative career orientation tools, such as the "Choose Your Dream Career" project and online resources, career orientation activities are often optional and limited to certain schools or programs. Stakeholders like universities, vocational schools, and private organizations contribute to career orientation by organizing events like career days, open houses, and thematic classes, offering students opportunities to engage directly with professionals and learn about different career paths. However, career orientation often lacks the same level of integration within the school system, and some professions, particularly those with lower prestige or lower salaries, may not be adequately promoted. The career orientation tools available, such as personality tests and career simulators, are often free and accessible online but are still in the developmental phase in terms of their widespread application and integration into the school curriculum. Additionally, the involvement of private companies and non-governmental organizations in career development activities is prominent, with projects aimed at expanding career opportunities for underrepresented groups, such as women in traditionally male-dominated professions. These efforts are crucial, as they help raise awareness of alternative career paths and support Ukraine's socio-economic recovery.

The comparative overview of career orientation systems across the Danube region highlights the diversity of approaches shaped by national education structures, stakeholder cooperation, and socio-economic conditions. Countries like Austria, the Czech Republic, Slovenia, and Croatia offer structured and well-integrated systems with strong institutional support and stakeholder involvement. In contrast, countries such as Bosnia and Herzegovina, Ukraine, and Romania face challenges related to decentralization, fragmentation, or limited coordination, often relying on external projects or non-formal initiatives to fill systemic gaps. Nevertheless, efforts to promote gender equality, strengthen collaboration between schools and employers, and integrate digital tools are increasingly evident in all contexts. These findings underscore the importance of sharing good practices and fostering transnational dialogue to enhance the effectiveness, inclusiveness, and sustainability of career orientation systems for all young people in the region.

6 Strengths, weaknesses, challenges, and barriers in national career orientation systems

The national career orientation systems each present unique strengths, weaknesses, challenges, and barriers, with notable differences influenced by their socio-political contexts and sectoral focus, particularly in fields like forestry.

Austria's career orientation system is characterized by strong communication initiatives such as the “wood be nice” campaign, promoting the forestry sector's value chain. Austria also benefits from well-established networks like the “ibobb”-network, which facilitates regular exchanges among career orientation institutions. Local initiatives, including career fairs and open days, are well received, allowing for personalized and effective engagement with students. The system also integrates career orientation within school curricula from elementary to secondary education. Additionally, the forestry sector has strong institutional backing, with courses aimed at vocational guidance teachers and increased focus on forestry and wood-related career paths. However, the Austrian system faces several weaknesses, including the lack of comprehensive teaching materials specifically for forestry and timber professions. Teachers' limited knowledge about these industries further compounds the issue, as does the underrepresentation of forestry and timber industry representatives at career fairs. Additionally, the sector's financial limitations hinder the execution of widespread initiatives, and traditional attitudes within the forestry sector create barriers to attracting younger people, particularly women.

In **Bosnia and Herzegovina**, the career orientation system operates within a fragmented governance structure across its entities, leading to inconsistent implementation of policies and practices. Despite the presence of strong foundational strategies and policies, such as vocational education and employment strategies, BiH's decentralized administrative structure creates significant challenges in policy execution. Career orientation is not sufficiently embedded across all educational levels, particularly in higher education, and there are resource limitations, which hinder the sustainability of career orientation programs. BiH has opportunities to integrate career orientation more comprehensively into future education reforms, particularly in targeting specific sectors like forestry to address skills gaps. The country could also benefit from leveraging international partnerships and digital transformation, which could modernize career services and increase engagement. Political and economic instability, along with high levels of emigration, pose significant threats to the long-term development of career orientation systems.

The **Czech Republic's** career orientation system is marked by a solid foundation in both vocational education and industry collaboration, particularly in the forestry sector. National career orientation platforms such as the NSP and NSK provide detailed

information on job profiles, career paths, and required qualifications. These platforms, coupled with strong school-industry partnerships, ensure that students gain practical experience. The country's emphasis on lifelong learning and the flexibility of its career orientation system allows individuals to adapt to changing labour market demands. Additionally, the Czech Republic has received international recognition for its innovative practices in career orientation. One of its key strengths is the success of forestry traineeship programs, where schools collaborate with forestry companies to provide hands-on training. However, gender inclusion remains a significant challenge, with forestry and other traditionally male-dominated fields struggling to attract young women. The system also faces difficulties in modernizing curricula to include emerging technologies and sustainable practices in forestry. Furthermore, the integration of digital tools into career counselling has been slow, particularly in rural areas where access to resources is limited. These challenges are especially pronounced for girls and young women, who are often discouraged by traditional gender roles, limiting their opportunities in male-dominated sectors like forestry.

In **Germany**, the career orientation system is highly structured and provides young people with a range of platforms to explore their career paths. The country's vocational education and training (VET) system, which combines theoretical learning with practical work experience, has received significant praise for its effectiveness in reducing youth unemployment and smoothing transitions into the workforce. However, there are weaknesses, particularly in Bavaria's forestry sector, where comprehensive and accessible career orientation materials are lacking. The fragmented nature of the available resources and the absence of interactive tools on career websites hinder young people's ability to make informed decisions about forestry careers. Furthermore, the overload of information, especially from digital platforms, can overwhelm students, and the absence of personalized guidance from educators and mentors, highlighted during the pandemic, reveals a critical gap in effective career orientation.

Croatia's career orientation system, supported by the Croatian Employment Service (CES), offers systematic and timely guidance, with a focus on vocational education. The country has made significant strides in enhancing the relevance of its vocational education system, with high rates of enrolment in vocational programs. However, there are still challenges, particularly regarding the gender imbalance in fields such as forestry. Gender stereotypes and limited access to career counselling, especially in rural areas, create significant barriers for young women interested in forestry. Additionally, while Croatia's VET reforms and green skills curricula represent promising advancements, there is a mismatch between the growing number of vocational graduates and the employment rate, indicating that the system may still be underdeveloped in terms of labour market integration. Furthermore, forestry as a career is often underrepresented in career counselling sessions, with limited exposure to the practical aspects of the field.

In **Romania**, the country has made strides in improving employment outcomes through initiatives like the dual education system, which combines classroom learning with professional internships. This model has helped improve employment prospects for young graduates, with a notably high percentage continuing to work with their internship employers. However, forestry education faces its own set of challenges. Public perception of the forestry sector is heavily influenced by negative media coverage, which deters young people from pursuing careers in this field. Additionally, the lack of practical exposure and limited role models in forestry counselling programs further exacerbates the situation. While initiatives such as the "Green Week" and partnerships with the private sector are pushing for greater gender equality and sustainable practices, Romania's career orientation system still suffers from a lack of coordination between stakeholders, leading to inefficient use of resources in guiding students. Moreover, gender imbalance remains a persistent issue, particularly in male-dominated fields like forestry, despite the country's efforts to promote gender equality.

In **Serbia**, the strengths of the career orientation system include the existence of Service Standards for Career orientation and Counselling (CGC), which are evolving to better meet the needs of students. The University of Belgrade's Career Development and Student Counselling Center, along with its collaboration with the Faculty of Forestry, provides a concrete example of good practice through events like the "Meeting of Profession and Science". However, the system faces significant weaknesses, such as the general nature of the Service Standards, which makes it difficult for institutions to tailor career orientation services effectively. There is also a lack of dedicated funding for CGC activities and an outdated strategy for forestry development, which hinders the progress of career orientation within the sector. The primary challenge lies in refining the CGC standards, as their high level of generality limits their ability to evaluate the success of career orientation programs comprehensively.

In **Slovenia**, the strengths of the career orientation system are evident in its robust policy framework and the involvement of multiple stakeholders, including the Ministry of Labour, Family, Social Affairs and Equal Opportunities, and the Ministry of Education. The tools and training provided to career counsellors are well-developed, particularly the multifactorial tests and project-based initiatives like "Career Day" and regional career centres, which offer students valuable exposure to different career paths. However, weaknesses remain, particularly in the lack of systematic lifelong career orientation in primary and secondary school curricula, which undermines the long-term effectiveness of career orientation. There is also no official educational program at the university level for career counsellors, which limits the professionalization of career orientation services. The primary challenges include the inconsistency in terminology and goals across stakeholders, disparities in resource allocation between urban and rural areas, and the exclusion of career orientation from the formal school curricula.

In **Ukraine**, the forestry sector stands out as a key area of career orientation, with strengths rooted in the sector's potential for sustainability and the recovery of the country post-conflict. The Ukrainian government has invested in initiatives such as the "Forest in the Smartphone" digital program, which improves transparency and raises awareness of forestry-related professions. Additionally, there are several projects aimed at enhancing the image of forestry and increasing youth involvement, such as the "Young Forest Rangers" initiative. However, the system is hampered by weaknesses, including the lack of a clear, mandatory framework for professional orientation in schools, limited access to modern technologies, and the low popularity of forestry education due to stereotypes and perceptions about the sector's low prestige and low salaries. The challenges are compounded by the ongoing conflict in Ukraine, which makes long-term planning difficult and further disrupts career orientation efforts. The low involvement of women in forestry professions and the lack of sufficient financial resources to support youth programs in professional education add to the barriers to effective career orientation.

The career orientation systems across the countries examined exhibit several key **strengths**, particularly in the areas of vocational education and industry collaboration. Many countries, such as Austria, the Czech Republic, and Serbia, benefit from well-established networks and partnerships between educational institutions and industry players. These connections provide students with practical experiences and increase their employability, particularly in fields like forestry. Additionally, national career orientation platforms in countries like the Czech Republic offer valuable information on job profiles, career paths, and required qualifications. Countries like Austria and Germany have also implemented successful communication campaigns and local initiatives that foster direct engagement with students, such as career fairs and open days. These strengths contribute to an overall robust framework for career orientation, aiming to guide young people towards relevant career paths and skills.

However, these systems also exhibit notable **weaknesses**. Many countries face challenges related to the fragmentation of career orientation resources, which hampers the accessibility and effectiveness of career orientation services. In Bosnia and Herzegovina and Serbia, for instance, governance structures are fragmented, leading to inconsistent implementation of policies across regions. Furthermore, several countries, including Croatia and Slovenia, struggle with the lack of integration of career orientation into the formal school curricula, particularly at the primary and secondary education levels. This gap undermines the long-term impact of career orientation efforts. Additionally, there is often a shortage of high-quality teaching materials, particularly in specific sectors like forestry, where industry representatives are underrepresented in career fairs, and teachers may lack knowledge of the field. The absence of clear,

standardized career orientation frameworks also poses a challenge in evaluating the success of the programs, particularly in Serbia and Ukraine.

The **challenges and barriers** these systems face are compounded by several socio-political and economic factors. Gender imbalances persist in many sectors, especially in forestry and timber sector, where young women are underrepresented. Traditional gender roles and stereotypes, coupled with the perception of certain industries as male-dominated, discourage women from pursuing careers in these fields. In countries like Romania, Ukraine, and the Czech Republic, these barriers are particularly pronounced. Moreover, many countries struggle with limited access to modern technologies, particularly in rural areas, which hampers the ability to provide comprehensive and up-to-date career orientation. Economic instability, such as in Bosnia and Herzegovina and Ukraine, further exacerbates the situation, limiting the resources available to support career orientation initiatives. Additionally, sectors like forestry face significant barriers in terms of negative public perceptions and a lack of practical exposure for students, which deters young people from pursuing careers in these fields. These challenges underscore the need for more cohesive and inclusive policies, as well as greater investment in modern resources and gender-equal initiatives.

7 Opportunities for synergy and improvement

The following comparison explores opportunities for synergy and improvement in career orientation and vocational training across several countries, specifically in the forestry and timber sectors. By analysing key challenges and potential solutions, this overview highlights how collaboration and modernization efforts can enhance the relevance and inclusivity of career orientation systems in each country.

Austria presents numerous opportunities to enhance the forestry and timber sector's visibility and career orientation services. proHolz, with its experience and established presence in the field, provides a strong foundation for future collaboration. The expansion of joint activities between proHolz and other stakeholders in career orientation could improve access to relevant educational materials and create a broader reach for the sector. However, there is a pressing need to address the lack of knowledge among teachers about forestry and woodworking professions, and enhancing teacher training and support through proHolz would be vital. Additionally, increasing the sector's presence at career fairs and promoting it as part of the modern, sustainable "green job" economy could significantly increase its appeal to young people, especially with more female role models in the field. In terms of networking, opening up the forestry and timber sectors more actively would create a more inclusive and accessible environment for career orientation.

In **Bosnia and Herzegovina**, the integration of career orientation into future education reforms presents an exciting opportunity to align the education system with labour market needs, especially in fields such as forestry. The potential to leverage EU partnerships could bring in valuable expertise and funding, supporting the modernization of career services through digital transformation. However, political and economic instability, alongside skills mismatches in the education system, represent significant challenges that must be overcome for these opportunities to be realized. Strengthening international partnerships and promoting gender and inclusion initiatives could improve the sector's accessibility and diversity, particularly in non-traditional fields for women and marginalized groups. The establishment of more coherent collaboration between education, employment services, and industries would further improve career development opportunities, aligning them with evolving job market demands.

The **Czech Republic** offers opportunities for collaboration through international exchange programs and leveraging EU initiatives like Erasmus+. These exchanges, alongside industry partnerships, would strengthen the Czech career orientation system, particularly in forestry. However, there is room for improvement in terms of inclusivity, particularly by encouraging women to enter fields like forestry and STEM, which are still underrepresented. Additionally, integrating more modern technological tools into career orientation, such as AI-driven assessments and virtual internships, would provide

students with more personalized and engaging career exploration experiences. Public-private partnerships can play a pivotal role in ensuring that curricula are aligned with labour market needs, helping prepare students for future career challenges. Further efforts to improve the accessibility of career services in rural areas would ensure broader reach and effectiveness.

Germany's approach to vocational education and international cooperation has a strong foundation, particularly with its dual education system and international partnerships. Through programs like Erasmus+, students gain valuable international exposure, which enhances their skills and employability. However, given the current shortage of skilled workers in Germany, there is a growing emphasis on career orientation starting at younger ages. Implementing career orientation earlier in the education process, even in elementary schools, could help address this need. Additionally, modernizing career orientation tools and strengthening the involvement of the economy in schools could improve the guidance system. Expanding digital tools to assist students in their career planning would ensure that the system keeps up with technological advances and meets the needs of the labour market.

Croatia's involvement in European initiatives such as Erasmus+ and its active participation in international forestry associations presents significant opportunities for fostering international cooperation in career orientation. By continuing to promote student exchanges and internships, Croatia can enhance its forestry education system and provide students with diverse career experiences. However, there is room for improvement in promoting gender equality and encouraging young women to pursue careers in forestry and other non-traditional sectors. Expanding career orientation services, particularly in rural areas, would also ensure more equitable access to career opportunities for all students. Strengthening industry partnerships, including offering internships and mentorship programs, would provide practical experience and bridge the gap between education and employment.

Romania's commitment to career counselling, particularly through initiatives like the COACH USV project, presents a strong foundation for improving career orientation in forestry and other sectors. The opportunity to continue strengthening international partnerships with institutions like EFI and BOKU Austria can enhance the quality of guidance services and provide students with more resources and opportunities. Promoting role models, especially women in forestry, through job fairs, media campaigns, and mentorship programs, would help challenge stereotypes and encourage more young women to pursue careers in this field. Expanding career counselling services, especially in rural areas, and strengthening industry partnerships for internships and hands-on experience would significantly improve career development opportunities.

Serbia has numerous opportunities to improve its career orientation system by developing a strategy that focuses on the evolving needs of the forestry workforce.

Cooperation with universities and forestry faculties from neighbouring countries, along with industry collaborations, can strengthen career development opportunities for students. By establishing a database of best practices and providing internships, job shadowing, and career development programs in collaboration with employers, Serbia could improve its system significantly. However, challenges such as political instability and a lack of coordinated efforts in aligning education with market demands must be addressed. Promoting gender inclusivity, particularly for women at various qualification levels in the workforce, would also be a critical area for improvement.

Slovenia offers various opportunities to enhance career orientation through strengthened international partnerships, particularly within the EU. Collaborating with private sector stakeholders can help align career orientation with labour market needs, providing students with real-world insights. The inclusion of digital tools and AI-driven career assessment platforms could modernize career services, improving accessibility, especially in rural areas. Encouraging girls and young women to pursue careers in underrepresented fields such as forestry and technology through targeted campaigns can help overcome gender disparities and foster inclusivity. Furthermore, the integration of lifelong career orientation into education curricula would ensure that individuals are well-equipped to navigate career transitions throughout their lives.

Ukraine, despite its current challenges, has promising opportunities to improve career orientation, particularly within the forestry sector. Integrating career orientation activities into school programs, coupled with the introduction of career counsellors, could significantly improve the support provided to students in choosing and planning their careers. Strengthening cooperation between the employment service, industries, and educational institutions would help align the system with market demands. Moreover, promoting careers in forestry, especially for women, and ensuring that information about these careers is widely available through online platforms would enhance the sector's appeal and accessibility.

While each country presents unique opportunities and challenges, the overall theme is the need for greater collaboration between educational institutions, industries, and government bodies. Whether through international partnerships, strengthening digital tools, or promoting gender inclusivity, all countries can improve their career orientation systems to better align with the evolving labour market and provide students with the support and resources they need to succeed in their chosen careers.

8 Conclusion

This cross-country analysis underscores both the **diversity and convergence** of career orientation systems in the Danube Region. While countries such as Austria, Germany, and the Czech Republic exemplify mature, structured approaches—with well-resourced counselling services, national qualifications frameworks, and stakeholder coordination—others like Bosnia and Herzegovina and Ukraine are still grappling with institutional fragmentation, regional disparities, and capacity gaps.

One of the recurring strengths across several systems is the **integration of career orientation within national employment and lifelong learning strategies**. For instance, Romania's Law 198/2023 mandates individualized counselling and structured school-based guidance, while Serbia's Rulebook on Career Guidance Standards emphasizes measurable outcomes and practitioner competencies. Croatia's system features strong partnerships between schools and employment services, reinforced by the "National Curriculum Framework" and strategies for lifelong career development.

Yet, **key challenges persist**: the lack of systemic gender mainstreaming in forestry-related career guidance; insufficient monitoring and evaluation tools; underinvestment in school counselling staff; and the limited involvement of private-sector or local actors in some contexts. Ukraine's resilience in adapting career services during wartime—through IT studios, online Digigram certifications, and hybrid guidance models—offers valuable insights into the role of digital innovation in ensuring continuity.

Critically, **gender equality remains an underdeveloped dimension** in most systems. While Austria's "Girls' Day" and Germany's "Klischeefrei" initiative offer transferable models, other countries lack targeted actions to address gender stereotypes or support women's leadership in sectors like forestry. Bosnia and Herzegovina, for example, has ratified key gender equality conventions, but its forestry education laws do not yet integrate youth support measures like internships or mentorships.

For the *Fem2forests* project, this analysis provides a robust foundation for:

- Designing inclusive career orientation activities for girls and young women,
- Strengthening institutional capacity for gender-aware guidance,
- Fostering cross-sectoral and cross-country collaboration,
- And aligning national systems with the project's participatory and transnational innovation model.

Ultimately, the report calls for **systemic, cross-cutting, and inclusive reforms**—with coordinated action from ministries, schools, labour offices, and forestry stakeholders—to ensure that young people, particularly young women, are empowered to see a future for themselves in forestry and other sustainable sectors of the green transition.

9 Annexes

National reports on career orientation systems from:

- Austria (Annex 1)
- Bosnia and Herzegovina (Annex 2)
- Czech Republic (Annex 3)
- Bavaria, Germany (Annex 4)
- Croatia (Annex 5)
- Romania (Annex 6)
- Serbia (Annex 7)
- Slovenia (Annex 8)
- Ukraine (Annex 9)

Annex 1:

Description of the structure of the national career orientation system in Austria

1. Vocational orientation-related terminology at national level

→ **ibobb: Information, advice and guidance for education and careers**

"The abbreviation ibobb stands for "Information, advice and guidance for education and careers" and covers all measures for educational and career guidance at school."

<https://www.bmbwf.gv.at/Themen/schule/schulpraxis/ba/bo.html>

→ **RBBOK: Regional Coordination for Educational and Vocational Orientation Styria**

(Regional BBO Coordination/RBBOK)

Are located in all major Styrian regions and are linked to the respective regional managements

<https://www.verwaltung.steiermark.at/cms/ziel/157910846/DE/>

→ **BIZ Vocational orientation centers of the AMS**

There are 70 career information centers of the AMS in Austria

<https://www.ams.at/arbeitsuchende/karenz-und-wiedereinstieg/so-unterstuetzen-wir-ihren-wiedereinstieg/fit-frauen-in-handwerk-und-technik#steiermark>

→ **FIT Women in crafts and technology / MINT (mathematics, information technology, natural sciences and technology)**

Various AMS measures to promote women in craft/technical professions

→ **KOST**

Are coordination centers nationwide and in the federal states. KOST "supports the Social Ministry Service in the areas of training up to 18 and training - job. It forms the information hub and accompanies processes within the framework of the training obligation and the support services of the Social Ministry Service. The aim of these services is to support young people and people with disabilities in all aspects of training and employment."

<https://www.bundeskost.at/>

→ **NEBA**

"The NEBA umbrella brand provides a differentiated and needs-based system for supporting young people and people with disabilities or special needs."

<https://www.bundeskost.at/ausbildung-beruf.html>

→ **WKO, career guidance & career counseling and training strategies to secure skilled workers**

Offers career information, especially on apprenticeships, talent check, potential analysis, also in different languages and online.

<https://www.wko.at/fachkraeftesicherung/berufsorientierung-berufsberatung>

→ **MINT (Mathematics, Informatics, Natural Sciences and Technology)**

There are many projects and initiatives aimed at increasing the proportion of women/girls in STEM education and professions

→ **Girls Day**

Girls Day takes place in Austria every year and gives girls the opportunity to get to know companies and their fields of activity, especially in MINT areas

<https://girlsday.berufsorientierung.at/>

→ **Boys Day**

Boys Day also takes place in Austria every year and offers boys the opportunity to reflect on conventional images of masculinity and get to know professions in which (still) few men work.

<https://www.boysday.at/daten-fakten/uber-den-boys-day>

2. Policy framework for career guidance

- School and Education Act / Ordinance
- Compulsory training until 18
- Gender in vocational orientation

3. Implementation of career guidance and involvement of stakeholders

The Austrian education system consists of the following levels:

- **Primary level** comprises grades 1-4 and is attended by children aged around 6-10 years. The primary level in Austria consists of the so-called elementary school and is the same for all children.
- **Secondary level 1** comprises grades 5-8 and is no longer the same for all children. In Austria, children between the ages of 10 and 14 attend either the so-called Mittelschule (which ends with the 8th grade) or a Allgemeinbildende Höhere Schule (AHS), which can usually be attended up to the 12th grade and ends with a Matura, which entitles the child to study.
- **Secondary level 2** comprises grades 9-13. Compulsory education ends in Austria on completion of grade 9. Secondary level 2 offers a wide range of options for young people between the ages of 14 and 19:
 - Polytechnic school (1 year)
 - Dual training (apprenticeship)

- Various vocational schools
 - General secondary school (upper secondary level)
 - Training courses for healthcare professions
 - Various other training courses
- ➔ **Post-secondary or tertiary level** includes many further education courses, university studies, studies at universities of applied sciences or teacher training colleges, but also various master schools, for example.

<https://www.bildungssystem.at/en/>

3.1 Career guidance in Austria, structures, providers, offers and more

3.1.1 Vocational orientation at school

➔ ibobb: Information, advice and guidance for education and careers

“The acronym ibobb stands for “Information, Advice and Guidance for Education and Careers” and encompasses all measures for educational and career guidance. Decisions on educational and vocational paths should be made based on individual interests, inclinations and abilities and largely independent of gender and family, social and regional background. The school supports pupils in finding their individual educational and career path by offering support in a number of ways”

This includes support and competence building in the context of decision-making and research in the career choice process. Information and advice in the context of career and training opportunities for students and parents. Promotion and facilitation of practical experience (internships and real-life encounters) and referral to counseling centers and experts as needed. The educational and vocational orientation lessons focus on the 7th and 8th grades and also in the 11th and 12th grades.

<https://www.bmbwf.gv.at/Themen/schule/schulpraxis/ba/bo.html>

3.1.2 Vocational orientation in regional development in Styria

➔ RBBOK: Regional Coordination for Educational and Vocational Orientation Styria

(Regional BBO Coordination/RBBOK)

“With the installation of regional BBO coordinators, the need for a systematic approach in the implementation of educational and vocational orientation in Styria is taken into account.”

<https://www.verwaltung.steiermark.at/cms/ziel/157910846/DE/>

BBO coordinators work regionally on the implementation of the Styrian state strategy and have the following tasks Research, identification of needs and problems, exchange, communication, active networking, passing on

information for companies, organizations, relevant stakeholders, pupils, teachers, parents, etc., recommendation of activities, evaluation of measures taken.

<https://www.google.com/search?client=firefox-b-d&q=Steirischen+Strategiepapier+BBOK>

3.1.3 Vocational orientation at employment service (AMS)

➔ BIZ - Vocational orientation centers at employment service

Advice, information material and events in the context of career and training information are offered free of charge in the career guidance centers. In addition, the AMS offers comprehensive services on the website.

<https://www.ams.at/arbeitsuchende/aus-und-weiterbildung/berufsinformationen/biz---berufsinfozentren#steiermark>

<https://www.ams.at/arbeitsuchende/aus-und-weiterbildung/berufsinformationen/online-tools-rund-um-berufsorientierung-und-ausbildung#steiermark>

➔ FIT - Women in craft and technology

The employment service supports women in acquiring qualifications in technical/craft professions with various measures, offers and funding opportunities.

<https://www.ams.at/arbeitsuchende/karenz-und-wiedereinstieg/so-unterstuetzen-wir-ihren-wiedereinstieg/fit-frauen-in-handwerk-und-technik#steiermark>

<https://www.ams.at/arbeitsuchende/karenz-und-wiedereinstieg/so-unterstuetzen-wir-ihren-wiedereinstieg/fit-frauen-in-handwerk-und-technik#welche-ausbildungen-foerdern-wir>

3.1.4 Ministry of Social Services / compulsory education until 18

➔ KOST

It sees itself as an information hub for training up to 18 and training and employment. "The main aim of the respective services is to enable young people at risk of exclusion and those with disabilities / impairments to receive long-term support in school, training or work."

<https://www.bundeskost.at/ueber-uns.html>

➔ NEBA (Vocational assistance network)

Provides numerous offers for young people to guide them towards jobs and training and to prevent them from dropping out of education.

3.1.5 Chamber of economy Austria (WKO)

→ WKO, Career guidance & counseling and training strategies to secure skilled workers

The Austrian Federal Economic Chamber provides information on career and training opportunities. The offer is aimed at companies to support them in their personnel selection as well as schools, young people and adults in the career choice process. Young people can use talent **checks and potential analyses to plan their professional future.**

<https://www.wko.at/lehre/bildung-beruf-information>

3.1.6 Girls' Day / Boys' Day

→ Girls' Day

On Girls' Day, participating companies offer girls the opportunity to spend a day getting to know the company, try out activities for themselves, exchange ideas with apprentices and specialists, ask questions and get to know occupational fields, especially in the so-called non-traditional area.

<https://girlsday.berufsorientierung.at/teilnehmende-unternehmen/>

→ Boys' Day

"The Austrian Boys' day is a career orientation day for young men between the ages of 12 and 18 and also serves to develop a stereotype-free image of masculinity." On this day, boys can get to know professions in the social sector, education and care. "They can also think about their life plans, discuss images of masculinity and develop their social skills."

<https://www.boysday.at/daten-fakten/uber-den-boys-day>

4. Strengths, Weaknesses, Challenges, and Barriers in National Career Orientation Systems

Strengths:

→ Communication offensive „wood be nice“

Austria-wide communication campaign for the forest-wood value chain

www.woodbenice.at (via proHolz Austria)

→ ibobb-network

Well-functioning Styrian ibobb network with regular exchange (approx. 30 - 40 career guidance institutions, chambers, etc.); organizes, among other things, the "ibobb Fair" held annually in March for approx. 150 - 200 career guidance teachers

→ Local initiatives

- Locally offered career orientation fairs, e.g. for 2 - 3 secondary schools; these small fairs work much better than the huge fairs with thousands of visitors!

Example: MS Wildon: https://www.meinbezirk.at/leibnitz/c-lokales/berufsorientierung-an-der-ms-wildon_a6743207

- Open days at individual schools are very well received if they are well advertised.

→ **Initiatives of the industry**

Well-functioning initiatives such as “Fascination Technology” (Styrian Chamber of Commerce) - but more for the industrial sector, e.g. timber industry, not for forestry.

→ **Strengthening the anchoring of career guidance**

- Increased anchoring of the topic of forest/wood in the training (course) for vocational orientation teachers (according to Sabine Fritz, University College of Teacher Education Styria), materials for this are currently being developed.
- Continuous anchoring of vocational orientation in the new curricula from elementary school to the Matura class (also in subject curricula for the individual school subjects, not only in the subject “vocational orientation”) → Integration of vocational orientation in each individual school subject (i.e. where do you apply what you have learned professionally). Vocational orientation has also been mandatory at AHS for 2 years.

→ **Setting priorities**

There are more and more schools (secondary schools) with a focus on wood (as a preliminary stage to further forestry and wood training).

Weaknesses:

→ **Lack of good teaching and learning materials for vocational orientation in the forestry/timber sector**

Only marketing materials are currently available.

→ **Teachers' lack of or very little knowledge about forestry and woodworking professions**

Although the forestry and timber industry is committed to conveying information about the forest and forest products, little or nothing is taught about the job market behind it. “The forester” is cemented as a stereotype, other job profiles, with the exception of ‘the woodcutter’, are not known to the general public or pupils in particular.

→ **Too little participation of the forestry and timber industry**

In contrast to other sectors, the industry is almost not represented at many career orientation fairs (BEST, SBim etc.).

Challenges:

→ Lack of knowledge, lack of information, misinformation about the forestry and timber industry

- There is a lack of basic knowledge about the industry, the products and related topics, while at the same time there is a lot of “false knowledge” circulating (e.g. from NGOs). Many children and young people therefore have no opportunity to engage with the professions.
- Forest pedagogics as a means of reaching the non-forestry public has long been well established in the forestry industry. However, it is seen by the sector more as a public relations tool for the forestry industry in general and not as a tool of positively promoting forestry professions.

→ Heterogeneity of the industry - lack of a common voice, little coordination

Throughout the forestry and timber industry there are - historically grown - many players, organizations and associations. Their interests coincide in some areas, while in others they tend to work against each other. Accordingly, there are many very heterogeneous and not always coordinated activities in order to be visible to the outside world.

→ Low financial strength of the forestry and timber industry

Forestry in particular, as part of primary production, is traditionally financially weak, the resources for projects, initiatives etc. are low, and the desire for a wide range of activities is still great. Joint cross-sector financing is difficult to realize and the corresponding funds are contested (see above - heterogeneity).

→ Attitude of the sector leads to a lack of attractiveness

- The attitude within the sector tends to be problem-focused and not very solution-oriented. A future-oriented image as an employer must be conveyed to the outside

world in order to market the forestry and timber industry positively.

- Hierarchies and traditions are upheld, particularly in the forestry sector - but this sometimes has a deterrent effect, especially on young people and women who do not have a forestry background.
- The sector's attitude towards female employees is still very cautious (prejudices: possibility of pregnancy, less resilience, etc.). There is a lack of female role models.

→ Lack of or low significance and perception of the sector as an employer

- The core sector of forestry and the timber industry is often not perceived as an

employer.

- The forestry labor market, job opportunities and job offers are hardly transparent for “outsiders”. In the past, employment in the forestry and timber industry was often passed on “within the family”, there was hardly

any need to recruit workers “from outside” or there are sometimes even reservations about outsiders.

5. Opportunities for synergies and improvements

→ Improved cooperation with and support from proHolz

proHolz Styria has already been very successful in the field of education with a wide range of activities and has a competent and experienced team. More joint activities in the area of career guidance should be implemented.

<https://www.proholz.at/proholz-austria>

→ Development of meaningful teaching and learning materials for career guidance in the forestry/timber sector

The “eLABoration Wood” educational laboratory will be used to create relevant, meaningful teaching and learning materials for career guidance. The forestry and timber sector should play a greater role in both the creation and dissemination of this material.

→ Teachers' lack of or very little knowledge about forestry and woodworking professions

- Work needs to be done here on teacher training and further training; proHolz should be supported accordingly with expertise and personnel.
- Forest pedagogics should include information about forestry professions in forest education activities.

→ Opening up and networking of the forestry and timber sector

- The sector should be much more strongly represented at career guidance fairs and present itself there in a modern way.
- Girls' Days should take place in all areas of the forestry and timber sector, and the relevant contacts should be established in a targeted manner.
<https://girlsday.berufsorientierung.at/>
- The sector should consciously open up to the outside world - less tradition and “We are us”, but rather “We are part of society” and we offer “green jobs”
- There is a need for role models (especially female role models) who work with the next generation (“career ambassadors”). The networks that are helpful for this, e.g. the Forstfrauen, already exist.

Annex 2:

Description of the structure of the national career orientation system in Bosnia and Herzegovina

1. Career orientation-related terminology used at country level

In Bosnia and Herzegovina (BiH), the system of career orientation operates within a decentralized structure, influenced by the country's unique administrative and political context. The conceptual foundation of career orientation is built on globally recognized terminology¹ that emphasizes lifelong learning, career development and career orientation.

Lifelong learning: Any learning activity undertaken throughout life to enhance knowledge, skills, and competences in personal, civic, social, and professional/work domains. It includes formal and non-formal education, as well as informal learning. Therefore, lifelong learning can serve various purposes, such as personal fulfilment, active citizenship, social inclusion, employability, and adaptability to different labour market demands.

Career development: A lifelong process of managing learning, work, leisure, and transitions to achieve individual professional advancement as determined by the person themselves.

Career orientation: Encompasses all activities undertaken throughout life to identify one's abilities, competencies, and interests; develop the skills needed to gather relevant information, analyse it, and make fact-based decisions related to learning, education, and career processes; and manage one's own learning and career development.

2. Policy framework on career orientation

2.1. National policy and legal framework

The administrative structure of BiH is comprised of two entities, the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS), as well as the Brčko District (BD), which operates under separate administrative status. Each unit function under constitutional provisions that define their jurisdictions and responsibilities. The career orientation development on a national and different administrative levels has been supported by several key strategic/ policy documents and supporting legislative framework, as presented in the table below.

¹ The terminology is derived from key policy documents for career orientation in BiH.

Table 1. National policy and legal framework²

Administrative level	Key strategic/ policy documents	Supporting legislative framework
1. BiH	<ol style="list-style-type: none"> 1. Strategy for the development of vocational education and training in BiH 2007 – 2013; 2. Strategic Directions of Education Development in BiH with the Implementation Plan 2008 – 2015; 3. Priorities in integrating entrepreneurial learning and entrepreneurial key competencies into the educational systems in Bosnia and Herzegovina 2021-2030: The document emphasizes the integration of career orientation through entrepreneurial learning by promoting entrepreneurship as a career option in higher education, with 30% of institutions expected to develop career guidance systems by 2023. It aims to establish alumni career tracking systems in 10% of gymnasium schools, 30% of vocational schools, and 50% of higher education institutions. Additionally, it focuses on fostering partnerships with local businesses, supporting university start-up centers, and encouraging entrepreneurship-focused initiatives and activities. 	<ol style="list-style-type: none"> 1. Convention on Human Resources Development, International Labour Organization 1975 (No. 142); Bosnia and Herzegovina (ratification: 1993); 2. Framework Law on Primary and Secondary Education in BiH, adopted in 2003; 3. Framework Law on Secondary Vocational Education and Training in BiH, adopted in 2008; 4. Framework Law on Higher Education in BiH, adopted in 2007; 5. Principles and standards in the field of adult education in BiH, adopted in 2014.

² The table provides description of overall content for the documents that are not outdated.

FBiH	<ol style="list-style-type: none"> 1. Strategic directions of career orientation development in FBiH 2015 – 2020; 2. Strategy for strengthening the mediation function in public employment services in FBiH (2014); 3. Operational plan of activities for the implementation of measures and recommendations contained in the Analysis with the situation in the field of secondary education with a proposal for harmonization of education measures with the needs of the economy (2011); 4. Analysis of the situation on the possibilities of gaining work experience of young people in FBiH with recommendations (2013); 5. Information for the FBiH Government on "Analysis of enrolment policy in high school education in FBiH from the aspect of labor market needs" (2014); 6. Strategic directions of higher education development in FBiH 2012–2022; 7. FBiH employment strategy 2023-2030: Outlines key measures to enhance employment opportunities, reduce unemployment, and align workforce skills with labor market needs. It emphasizes active labor market policies, career counseling, vocational training, and support for vulnerable groups, fostering a 	<ol style="list-style-type: none"> 1. Labor Law of FBiH: Establishes workers' rights and employer obligations, indirectly supporting career guidance by promoting professional development and employment stability. 2. Law on Employment of Foreigners in FBiH: Not directly related to career orientation but contributes to understanding labor market dynamics and opportunities, which may influence guidance strategies. 3. Law on Volunteering in FBiH: Supports career orientation by encouraging volunteering as a way for individuals, especially youth, to gain skills, work experience, and career insights. 4. Law on Adult Education in FBiH: Directly relevant, as it promotes lifelong learning, upskilling, and reskilling, key components of career orientation for adults transitioning careers or re-entering the workforce. 5. Law on Secondary Vocational Education and Training in FBiH: Highly relevant to career orientation as it emphasizes skills and competencies aligned with labor market needs, preparing students for employment or further education. 6. Law on Higher Education in FBiH: Promotes alignment of education with labor market needs, encouraging higher education institutions to integrate career orientation
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	<p>more inclusive and adaptable workforce.</p>	<p>activities, such as internships and skills development.</p> <p>7. Law on Civil Service in FBiH: Indirectly relevant by establishing career paths and professional standards for public service employees, setting an example of structured career progression.</p> <p>8. Law on Mediation in Employment and Social Security of Unemployed Persons in FBiH: Directly supports career orientation by mandating employment services to provide counseling, job matching, and active labor market measures, including career guidance.</p>
RS	<p>1. Employment Strategy of Republic of Srpska 2021-2027: This strategy aimed to modernize curricula, enhance teacher training, and align educational outcomes with labor market needs. A central objective was the modernization of curricula for initial teacher training, including establishing a "positive selection" of candidates enrolling in teacher training programs.</p> <p>2. Education Strategy of Republika Srpska 2022-2030: This strategy emphasizes improving the quality of education, promoting inclusive education, and integrating modern technologies into the learning process. It also focuses on aligning education with labor market demands to enhance employability.</p>	<p>1. Law on Secondary Education in RS: Regulates secondary education in RS, emphasizing skills and competencies relevant to the labour market, indirectly supporting career orientation.</p> <p>2. Law on Employment and Rights During Unemployment in RS: Governs the operations of employment services, including career guidance and counselling for job seekers.</p>

	<p>3. Early Childhood Development Programme of RS 2022–2028: This program underscores the importance of early childhood education as a foundation for lifelong learning and development. It aims to improve access to quality early childhood education and care services.</p> <p>4. Strategy for the Development of Science, Technology, Higher Education, and Information Society in Republika Srpska: This strategy focuses on advancing scientific research, technological development, and higher education to foster innovation and economic growth. It also addresses the integration of information society principles to enhance educational outcomes.</p>	
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BD	<ol style="list-style-type: none"> 1. Development Strategy of Brčko District 2021–2027: The strategy highlights inadequate human resource management and calls for improved workforce planning, recruitment, and career development, focusing on education and public health sectors. Measure 1.5.3 aims to align education with labour market needs by connecting stakeholders, enhancing collaboration, and fostering partnerships between industries and educational institutions. 2. Employment Strategy 2024–2027: The BD Employment Strategy 2024–2027 envisions a labour market with quality jobs, good working conditions, and a skilled workforce. Its mission is to build a dynamic labour market through partnerships, employment programs, career counselling, and stakeholder capacity building, aiming for sustainable employment growth. 	<ol style="list-style-type: none"> 1. Law on Primary and Secondary Education in BD: Regulates the organization of primary and secondary education, including vocational programs that align with labor market demands. Encourages career orientation initiatives within schools, such as counseling and collaboration with local employers. 2. Law on Adult Education in BD: Supports lifelong learning, reskilling, and upskilling opportunities, enabling career transitions and labor market adaptability. 3. Law on Employment and Rights During Unemployment in BD: Governs employment services, including career counseling, job placement, and active labor market programs to support job seekers. 4. Labor Law in BD: Regulates labor market conditions, indirectly supporting career orientation through provisions for professional development and employee training. 5. Law on Vocational Training in BD: Focuses on vocational education and training programs tailored to the labor market, ensuring students and job seekers acquire relevant skills.
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2.2. International and regional commitments to gender equality

BiH has demonstrated its commitment to advancing gender equality through the ratification of key international treaties and conventions. These include the UN Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)

and its Optional Protocol, reinforced by the Beijing Declaration and Platform for Action (1995), which sets forth actionable steps toward gender equality. BiH has incorporated CEDAW recommendations into its policies and continues to address gender-related priorities in line with global standards.

Additionally, BiH was one of the first European countries to ratify the Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence (Istanbul Convention) in 2013. The Istanbul Convention provides a framework for preventing violence against women, protecting victims, and ensuring justice. BiH has taken steps to implement this framework, including the adoption of the Framework Strategy for Istanbul Convention Implementation (2015–2018).

The legal framework in BiH has seen significant advancements toward aligning with international standards on gender equality, although challenges remain. The Constitution of Bosnia and Herzegovina and many laws are still considered **gender-blind**, lacking explicit provisions for actively promoting gender equality. This gap is exacerbated by inconsistencies across political entities, uneven implementation, and insufficient monitoring mechanisms. Despite these limitations, BiH has made notable efforts to harmonize its legal framework with international commitments. Key legal provisions:

Table 2. Key legal provisions addressing gender equality in BiH

Law	Description
Law on Gender Equality (2003, Amended in 2009)	The law addresses critical areas such as education, employment, access to resources, healthcare, social protection, culture, public life, and media. It mandates equal representation of men and women (minimum 40%) in public sector bodies, including legislative, executive, and judicial branches, political parties, and international delegations. The 2013 amendment to the Election Law incorporated this gender representation threshold into candidate lists.
Law on Prohibition of Discrimination (2009, Amended in 2016)	The amendments expanded protection grounds to include age, disability, sexual orientation, gender identity, and sexual characteristics. Provisions were strengthened to address multiple, repeated, and severe forms of discrimination, victimization, and incitement. Mechanisms for judicial protection were enhanced, including extended deadlines for filing lawsuits, collective lawsuits, and provisions for "situation testing" to verify discrimination cases.
Laws on Protection from Domestic Violence	Separate laws in the RS (2012), FBiH (2013), and BD (2018) align with the Istanbul Convention and define domestic violence as physical, psychological, sexual, or economic harm. These laws provide comprehensive protection mechanisms, including rulebooks for implementation.

Labour laws and parental leave provisions	Labour laws in both entities advance gender equality by including parental leave for fathers, promoting shared caregiving responsibilities and breaking traditional gender roles.
Law on development planning in FBiH (2018)	This law emphasizes gender equality as a foundational principle in sustainable socio-economic planning and development.

2.3. Sector-specific integration: Forestry

The forestry sector in BiH is regulated by legislation adopted on different administrative levels.

In **FBiH**, forestry legislation at the cantonal levels regulates professional qualifications, and employment procedures in the forestry sector. The primary focus is on ensuring expertise through clearly defined educational and work experience requirements. This approach contributes to the professionalization of the sector and supports sustainable forest management. However, the laws do not contain provisions that directly address career orientation or support for young professionals at the start of their careers. There are no initiatives such as internship programs, career advisory services, or facilitated entry into the labour market. This absence represents a missed opportunity to strategically develop the next generation of forestry experts. Similar to FBiH, the legislative framework in **RS** and **BD**, does not include specific provisions for career orientation, or tailored approach to young professionals or initiatives aimed at their integration into the sector. There are no specific measures such as internships, mentorship programs, or structured support for early career development.

3. Career orientation delivery and stakeholder involvement

Career orientation in BiH has a long-standing institutional tradition. Following World War II, a structured system was established, reaching its peak in the mid-20th century with comprehensive programs for requalification, training, and lifelong learning. These efforts were supported by a network of evening schools, worker universities, and corporate training initiatives. However, the 1970s education reforms gradually marginalized this system, and by the 1990s, career orientation had lost its institutional prominence, becoming an underregulated sector.³

³ From University to Employment: Higher Education Provision and Labour Market Needs in Bosnia and Herzegovina, Academia.edu. Available at: https://www.academia.edu/33287770/From_university_to_employment_Higher_education_provision_and_labour_market_needs_in_Bosnia_and_Herzegovina

Today, BiH faces a challenging labour market characterized by high unemployment, particularly among youth⁴ and a mismatch between educational outcomes and market demands.⁵ Simultaneously, globalization and technological advancements are reshaping the economy, emphasizing the importance of continuous professional development and lifelong learning to maintain employability. This shift from lifelong employment to lifelong employability underscores the need for robust career orientation services to support individuals in navigating dynamic career paths.⁶

Delivery of career orientation

Career orientation in BiH is delivered through a fragmented network of schools, vocational training centres, public employment services, and higher education institutions, with limited coordination and standardization. While efforts have been made to integrate career guidance into education and employment systems, challenges persist in ensuring effective implementation, collaboration, and resource allocation.

Table 3. Delivery of career orientation system in BiH

Administrative level	Institutional framework
FBIH	<p>Entity level:</p> <ol style="list-style-type: none"> 1. Federal Ministry of education and science (FMON): The ministry coordinates planning and activities in education, including preschool, primary, secondary, and higher education. It oversees pedagogical standards, teacher training, and the implementation of the Bologna Process. While FMON sets educational policies, career orientation initiatives are typically managed at the cantonal level.⁷ 2. Federal Ministry of labor and social policy: Responsible for labor regulations and employment policies, this ministry collaborates with employment services to enhance employability and align education with labor market needs. It plays a role in developing strategies that may include aspects of career guidance.⁸ 4. Federal employment institute: The institute develops employment strategies and coordinates with cantonal employment services to implement active labor market measures, including career guidance and counseling. <p>Cantonal Level:</p>

⁴ Youth Unemployment Rate in Bosnia and Herzegovina, Statista, 2023. Available at: <https://www.statista.com/statistics/811689/youth-unemployment-rate-in-bosnia-and-herzegovina/>.

⁵ "Career Guidance and Counselling", National Policies Platform, EACEA. Available at: <https://national-policies.eacea.ec.europa.eu/youthwiki/chapters/bosnia-and-herzegovina/34-career-guidance-and-counselling>.

⁶ Ibid.

⁷ Official web page of the Government of FBIH. Available at: [Vlada Federacije BiH](http://vlada.gov.ba)

⁸ PRAVA ZA SVE: Employment strategy in the FBIH (2023-2030). Available at: [Prava Za Sve](http://prava.za.sve.ba)

	<ol style="list-style-type: none"> 1. Cantonal ministries of education: Each of the ten cantons in FBiH has its own Ministry of Education, responsible for implementing educational policies and programs, including career orientation services within schools. These ministries tailor initiatives to regional needs, ensuring that career guidance aligns with local labor market demands. 2. Cantonal employment services: Operating under the guidance of the Federal Employment Institute, these services provide career counseling, job matching, and training programs. They work closely with educational institutions to facilitate the transition from education to employment. 3. Cantonal employment services: These services operate at the cantonal level, providing direct support to job seekers through counseling, training, and job placement services. They play a crucial role in career orientation by offering information on labor market trends and opportunities. <p><u>Local Level:</u></p> <ol style="list-style-type: none"> 1. Municipal education departments: At the municipal level, education departments support schools in delivering career orientation programs, often in collaboration with cantonal authorities. 2. Schools: Individual schools implement career guidance activities, including counseling sessions, workshops, and collaboration with local businesses for internships and practical training. 3. Local employment bureaus: Direct services to job seekers, including registration, counselling, and job search assistance.
RS	<p><u>Entity level:</u></p> <ol style="list-style-type: none"> 1. Ministry of education and culture: Oversees educational policies, including preschool, primary, secondary, and higher education. Implements career orientation programs within schools, focusing on aligning educational outcomes with labour market needs, and coordinates with schools and other institutions to integrate career guidance into the curriculum. 2. Ministry of labor and protection of veterans and disabled persons: Responsible for employment policies and strategies, including career guidance as part of active labour market measures. Collaborates with the Employment Office to develop programs that link education and employment opportunities. 3. Employment office of RS: Implements career counselling and guidance as part of its active employment measures. Provides job seekers with labour market information, skills training, and counselling to support career decision-making. Works with educational institutions to facilitate school-to-work transitions. <p><u>Local level:</u></p>

	<ol style="list-style-type: none"> 1. Regional employment branches: Deliver career orientation services directly to job seekers, including counseling, job matching, and training. Organize career fairs and workshops in collaboration with local schools and businesses. 2. Schools: Implement career guidance activities through counseling, career days, and partnerships with local businesses. Focus on practical training and connecting students with potential employers.
BD	<p><u>BD level:</u></p> <ol style="list-style-type: none"> 1. Department for education of the government of BD: Manages education policies for schools in BD, including career orientation and guidance programs. Encourages collaboration between schools and local businesses for internships and practical training. 2. Employment office of BD: Offers career counseling, labor market information, and job search assistance. Organizes training programs and workshops to enhance employability and match job seekers with labor market needs. Works with schools to support students transitioning into the workforce. <p><u>Local Level:</u></p> <ol style="list-style-type: none"> 1. Schools: Provide career orientation through counseling sessions, career fairs, and partnerships with local employers. Focus on preparing students for the labor market with practical training opportunities. 2. Local businesses: Collaboration with schools and the Employment Office to provide internships and training, fostering a practical understanding of career opportunities.

Stakeholders' involvement

Multiple stakeholders contribute to the delivery of career orientation in BiH with their specific roles.

Schools: Career guidance in early education in BiH focuses on identifying and nurturing students' skills and interests. School psychologists, pedagogues, and teaching councils are primarily responsible for guiding students in educational and vocational decision-making. Activities include individual interviews, counselling, workshops, guest lectures, parental involvement and incorporating career guidance into annual work plans. However, the practice is underdeveloped, with limited teacher involvement and weak collaboration with employers and public employment services. Career orientation is often treated as an additional responsibility for school staff, reducing its effectiveness. Primary education focuses minimally on career awareness, while secondary education places greater emphasis on guiding students toward general or vocational education paths.

Higher education: There are 28 accredited universities in BiH⁹, with a total of 5 forestry faculties or faculties having specific forestry departments. These faculties primarily focus on attracting prospective students, while career development support for enrolled students is less prioritized. Initiatives to connect students with the labor market are mostly project-based, such as research tailored to industry needs and partnerships with employers to align curricula with labor market demands. While these activities are valuable, they vary significantly across institutions, and many lack dedicated career centers or structured career support systems.

Career development centres: Several universities have university-affiliated career development centres that offer mentorship programs, and events such as career days¹⁰. These initiatives help students connect with potential employers and prepare for the labour market. However, there is room for improvement in expanding access to career services and increasing industry collaboration. Strengthening partnerships with the private sector would enhance students' practical experiences and better align their skills with labour market demands.

Public employment offices: Employment offices in BiH are organized at various administrative levels. In the FBiH, the Federal Employment Office coordinates with ten cantonal offices, which work with local bureaus to offer services like registration, counseling, and job search assistance. This decentralized structure allows cantons to address local labor market needs. In the RS, a central Employment Office operates through regional branches providing similar services, including training and employer connections. The BD Employment Office functions independently, offering a full range of employment services tailored to its unique status. **Overall, employment office' primary functions and activities include** managing registration and records, providing access to benefits like health insurance, and offering career counselling, workshops, and guidance to job seekers, including students nearing graduation. Key functions include active employment measures such as reskilling, co-financing jobs for vulnerable groups, and promoting self-employment. Offices also connect job seekers with employers through job fairs and recruitment support. Despite their importance, resource constraints and competing priorities, such as social welfare responsibilities, limit their focus on comprehensive career guidance.

Industry professionals and employers: They are involved sporadically, primarily through partnerships with universities.

⁹ Agency for Development of Higher Education and Quality Assurance of Bosnia and Herzegovina (HEA). Available at: <https://hea.gov.ba/Content/Read/lista-akreditiranih-vsu>.

¹⁰ Career Development Centers in Bosnia and Herzegovina, EURAXESS Bosnia and Herzegovina. Available at: <https://www.euraxess.ba/bosnia-and-herzegovina/jobs-funding/career-development-centers>.

Non-governmental organizations: NGOs play a minimal role, though their potential for contributing to career guidance remains untapped.

Adult education and lifelong learning

Career guidance for adults remains underdeveloped, despite increasing demand driven by the dynamic labour market. While the national qualifications framework aims to create clear pathways for acquiring market-relevant skills, no dedicated institution exists to address lifelong career orientation needs. Public employment services attempt to fill this gap but are often overburdened.

Innovative methods and technologies

Innovative approaches to career orientation are not widely implemented in BiH. While public employment services and some institutions use online platforms and labour market portals to disseminate information, advanced tools like virtual reality simulations and AI-based assessments remain largely untapped. Gender considerations are not systematically integrated, though there are occasional efforts to promote gender equality in non-traditional career paths.

5. Strengths, Weaknesses, Challenges, and Barriers in National Career Orientation Systems

BiH's career orientation system presents a mix of opportunities and challenges due to its fragmented structure, diverse administrative frameworks, and varying levels of capacity. Below is an in-depth SWOT analysis that reflects the system's strengths, weaknesses, opportunities, and threats across the FBiH, RS and BD.

6. Table 4. SWOT analysis

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. Comprehensive strategies and policies: Existing strategies (vocational education, employment, gender equality) provide a robust foundation for career orientation. 2. Established institutional infrastructure: Strong network of educational institutions and public employment services supports further development of career orientation field. 3. Commitment to international standards: Alignment with global strategies, 	<ol style="list-style-type: none"> 1. Fragmented governance: Lack of cohesion across FBiH, RS, and BD limits scalability. 2. Decentralized administrative structure and gaps in legislative framework: Leads to inconsistent implementation across entities. Sectoral legislation lacks provisions for career guidance. 3. Limited and uneven integration in curricula: Career orientation is inadequately embedded in educational systems, especially in higher education.

<p>including gender equality, enhances credibility.</p> <ol style="list-style-type: none"> Public-private partnerships: Collaborations between educational institutions and employers align education with labour market needs. Emphasis and recognition of lifelong learning: Lifelong learning is increasingly recognized as vital for employability. Scalable pilot programs: Localized pilot programs provide successful models for scaling up. 	<ol style="list-style-type: none"> Resource limitations: Insufficient funding and reliance on donor projects reduce sustainability. Technology gap: Underutilization of modern digital tools limits efficiency and engagement. Gender inequities: Lack of gender-sensitive approaches and barriers for women, rural youth, and marginalized groups reduce inclusivity.
Opportunities	Threads
<ol style="list-style-type: none"> Integration into future education reforms: Embedded career orientation in curricula at all levels for labour market alignment. International partnerships: Leveraged EU and international cooperation to enhance funding, expertise, and technology. Digital transformation: Investing in AI, online platforms, and data analytics to modernize career services. Sector-specific strategies: Targeting fields such as forestry to address skills gaps and strengthen employer links. Gender and inclusion initiatives: Launch targeted programs to promote diverse career options for women and marginalized groups. Enhanced stakeholder collaboration: Strengthen partnerships between education, employment services, and industries. 	<ol style="list-style-type: none"> Political and administrative instability: Divergent priorities and limited funding create obstacles for cohesive development. Economic volatility: Overreliance on donor funding affects sustainability. Institutional resistance: Preference for traditional practices hinders reform adoption. Brain drains: High emigration among skilled youth reduces available domestic talent pool. Skills mismatch: Education and training systems are lagging evolving industry demands. Legal and administrative barriers: Bureaucratic complexities and differing regulations hinder policy implementation.

Annex 3:

Description of the structure of the national career orientation system in Czech Republic

1. Career orientation-related terminology used at country level

In the Czech career guidance system, the following key terms are used:

- **National System of Occupations (NSP):** A comprehensive database that describes job positions, including qualification, skill, and knowledge requirements. It supports career decision-making and helps employers define job roles.
- **National System of Qualifications (NSK):** Focuses on recognizing qualifications, including those gained through informal learning, via standardized exams and certificates.
- **Qualification and Evaluation Standards:** Define the skills and knowledge required for various occupations, forming the basis for certification.
- **Career Counseling Services:** Provided by schools, labor offices, and specialized counselors, helping individuals with education and career decisions.
- **Lifelong Learning:** Emphasizes continuous education and skill development to adapt to labor market changes.

Key terms outlined, it is important to understand that the Czech career guidance system is designed to be flexible and supportive of both individuals and employers. The National System of Occupations (NSP) provides clear information for aligning personal career development with market needs, while the National System of Qualifications (NSK) allows for recognition of skills obtained outside formal education. The emphasis on lifelong learning ensures that individuals can adapt to changing career paths and labor market demands. These systems promote transparency and accessibility in career guidance, offering a framework other countries can reference.

2. Policy framework on career orientation

In the Czech Republic, career orientation is primarily governed by a series of national policies and regulations aimed at aligning education with labor market needs. Key elements include:

- Education Act (Act No. 561/2004 Coll.): Governs education at all levels, including career counseling as part of school curricula.
- National System of Occupations (NSP): Provides an organized framework for defining job roles, skills, and qualifications across sectors, including forestry.
- National System of Qualifications (NSK): Allows for the recognition of skills gained through both formal and informal education.

Specific to the Forestry Sector:

- Sectoral councils (e.g., for forestry) collaborate within NSP and NSK to define job profiles and competencies needed for the sector. The Ministry of Agriculture often plays a key role in defining standards related to forestry, aligning them with sustainable practices and sector-specific needs.

3. National Strategies and Action Plans:

Several national strategies impact career orientation:

- Lifelong Learning Strategy: Emphasizes continuous learning and the development of skills throughout a person's life to remain competitive in the labor market.
- National Employment Policy: This policy promotes employment and vocational training through various programs, with an emphasis on supporting marginalized groups, including women, in non-traditional sectors like forestry.
- Action Plan for Gender Equality: Promotes gender inclusion across all sectors, ensuring equal opportunities in education, vocational training, and career progression, including in traditionally male-dominated industries like forestry.
- These laws and policies form an integrated approach to career orientation and vocational guidance, aligning educational outcomes with labor market demands while promoting inclusivity and lifelong learning opportunities.

4. Career orientation delivery and stakeholder involvement

In the Czech Republic, career orientation is delivered through a multi-faceted system involving schools, vocational training centers, online platforms, and direct collaboration with industry professionals and government agencies.

School System and Integration of Career Orientation:

- **Elementary and Secondary Schools:** Career orientation begins in elementary school and intensifies in secondary education. Guidance counselors help students explore educational and career pathways. Students receive individual consultations and attend career workshops.
- **Vocational Training Centers:** Students opting for vocational education are guided through hands-on experiences and partnerships with companies. Schools often have formal collaborations with industries to provide internships.
- **Higher Education:** At universities, career services assist students in finding internships, jobs, and navigating career choices.

Online Platforms:

- **NSP (National System of Occupations) and NSK (National System of Qualifications):** These platforms provide comprehensive information about job roles, qualifications, and career prospects. They also offer self-assessment tools for skills recognition and career planning.

Gender Dimension:

- Czech policies emphasize gender equality in education and career development. Special initiatives encourage women to pursue non-traditional sectors, including STEM fields and forestry, aiming to break stereotypes and improve gender diversity.

Stakeholders - Career orientation involves various stakeholders:

- **Educators:** Teachers and counselors play a central role in guiding students, offering career advice, and helping them with decisions.
- **Industry Professionals:** Businesses and sector-specific councils collaborate with educational institutions, offering internships, apprenticeships, and real-world insights into different career paths.
- **Government Agencies:** Ministries, such as the Ministry of Education, Youth, and Sports, and the Ministry of Labor and Social Affairs, create policies and provide

resources to ensure career guidance is accessible and relevant to labour market demands.

Innovative Methods and Technologies:

- Online platforms: NSP and NSK provide digital tools for career planning and qualifications recognition.
- Career Fairs and Job Shadowing: These initiatives allow students to explore careers first-hand.
- Personalized Career Counselling: Increasing use of online assessments and tools that help students evaluate their interests and skills.

Partnerships and Collaborations:

There are numerous partnerships between educational institutions, industries, and government bodies to enhance the effectiveness of career orientation. For example, sectoral councils provide input to update curricula and ensure that skills taught in schools match labour market needs. This structured, collaborative approach helps to create a supportive environment where students are equipped to make informed decisions about their future careers.

5. Strengths, Weaknesses, Challenges, and Barriers in National Career Orientation Systems

Strengths:

The Czech national career orientation system has several strengths, especially in the forestry sector:

- Comprehensive Platforms (NSP, NSK): These provide detailed information on job profiles, required qualifications, and career paths, making it easier for individuals to navigate their options.
- Collaboration with Industry: Strong partnerships between schools and industries, particularly in vocational training, provide students with practical experience and exposure to real-world forestry challenges.
- Lifelong Learning and Flexibility: The emphasis on continuous education ensures that individuals can upgrade their skills to meet labor market demands.
- A key strength of the Czech career orientation system is its adaptability to rapid changes in the labor market and online interaction trends. The National Career Guidance Award 2021 highlighted the system's dynamic development and

flexibility. The award celebrated 13 innovative practices in career guidance, showcasing the sector's ability to meet evolving demands. The conference, supported by the National Guidance Forum, emphasized the need for personal and career development in schools, aligning with sectoral strategies from the Ministry of Education and Labor. This recognition fosters the sharing of best practices across Europe.

- **Successful Programs: Forestry Traineeship Programs:** Partnerships between schools and forestry companies offer apprenticeships that provide hands-on training, serving as a model for other sectors and countries.
- Secondary education falls within the remit of the regions, including, for example, the appointment of head teachers, or in the case of forests, that the forests belonging to secondary forestry schools are owned by the regions, not the schools themselves. The fact that regional influence makes it possible to focus more on regional specifics or needs can be interpreted as a strength, while at the same time, the fact that some regions may be distant from central politics due to their own policies and thus hinder some government activities can be interpreted as a weakness.

Weaknesses:

- **Gender Inclusion:** Despite national strategies, gender imbalance persists, particularly in forestry and other traditionally male-dominated sectors. More targeted programs are needed to encourage young women to pursue careers in these fields.
- **Modernization of the Curriculum:** The system could benefit from updating curricula to reflect technological advancements in forestry, such as digital forestry tools, GIS, and sustainable management practices.

Challenges and Barriers:

- **Stereotypes and Cultural Norms:** Traditional views on gender roles still act as a barrier for girls and young women entering sectors like forestry.
- **Limited Resources in Rural Areas:** Career counseling and access to modern technology are often less available in rural schools, limiting career exploration for students in those regions.
- **Technological Adaptation:** The slow integration of digital and innovative tools into career counseling limits the effectiveness of the orientation system in preparing students for modern industry needs.

These challenges disproportionately affect girls and young women, especially in male-dominated fields like forestry, making it crucial to develop programs that promote inclusion and broaden career possibilities for underrepresented groups.

6. Opportunities for synergy and improvement

Opportunities for Collaboration:

- **International Exchange Programs:** Collaborating with other countries to create student and expert exchange programs can help enhance skills and knowledge in career orientation and vocational training. Countries with advanced forestry and vocational systems, such as Germany or Finland, could offer valuable insights.
- **European Union Initiatives:** Leveraging EU programs like Erasmus+ for both students and professionals can improve the quality of career counselling services. It promotes cross-border partnerships and best practice sharing in education and training.
- **Industry Collaboration with International Companies:** Partnering with global companies operating in forestry and other sectors can bring modern technologies and industry insights into the Czech system.

Recommendations for Improvement:

- **Inclusivity:** focus on gender-specific initiatives to encourage women to pursue careers in non-traditional sectors like STEM and forestry. Providing mentorship programs for young women can help break stereotypes and boost participation.
- **Relevance and Industry Alignment:** regularly update career counselling resources to reflect current industry needs, particularly in emerging fields such as digital forestry, environmental sustainability, and tech-based jobs.
- **Technology Integration:** usage of modern tools, such as AI-driven career assessments and virtual internships, to provide students with more interactive and personalized career orientation experiences.
- **Public-Private Partnerships:** strengthen collaboration between educational institutions, government bodies, and industries to ensure curricula are aligned with labour market demands, ensuring students are well-prepared for future career challenges.

- National and International Conferences: Host and attend international conferences on career orientation to exchange successful strategies and innovative practices with other countries, thus strengthening the career guidance system overall.

The career orientation system in the Czech Republic, particularly within the forestry sector, benefits from strong collaboration between educational institutions, industry partners, and government bodies. Platforms like the NSP and NSK provide structured career guidance, but there is room for improvement in gender inclusivity and modernizing the curriculum with digital technologies. Strengthening public-private partnerships and enhancing access to career services in rural areas are crucial steps. These improvements will ensure the system remains relevant, inclusive, and aligned with industry needs, especially in the evolving forestry sector.

Annex 4:

Description of the structure of the national career orientation system in Bavaria (Germany)

1. Career orientation-related terminology used at country level

The terms used in Bavaria for career orientation are "*career orientation*", "*vocational orientation*" and "*career choice*".

2. Policy framework on career orientation

In Germany, the main principles for career orientation are outlined in the Third Book of the Social Code (SGB) which regulates the promotion of employment in Germany. The third book of the SGB has been in force since 1998. The tasks of the federal employment agency on career orientation are outlined in Article 1, paragraph 33 of the SGB:

"The employment agency has to provide career guidance to prepare young people and adults for their career choice and to inform those seeking training, jobseekers, employees and employers. It should provide comprehensive information and advice on questions of career choice, on occupations and their requirements and prospects, on the paths and promotion of career training and on professionally significant developments in companies, administrations and on the labour market."

In Bavaria, the teaching of career-oriented education is also emphasized in Art. 2 Paragraph 1 of the Bavarian Law of Education and Teaching (BayEUG) as a central task of all schools. According to the BayEUG, career orientation is open-ended and should enable young people to make an individually suitable career choice based on their personal strengths and talents. To this end, schools work with external partners such as the employment agency, chambers, associations, and companies to offer their pupils a comprehensive and practical range of information.

There are several national strategies related to education, vocational training, and gender inclusion. One example is **the Federal Institute for Vocational Education and Training (BIBB)** which is a centre of excellence for vocational research and for

the progressive development of vocational education and training in Germany and also serves as a sponsor for several programs dealing with vocational orientation.

The **federal ministry of education and research (BMBF)** also sponsors many programs that support career orientation in Germany. The career orientation program BOP offers pupils in year 7 and 8 the possibility to learn about their interests and possible career options with practice days at companies participating in the program. Further projects and programs sponsored by the BMBF can be found at the BMBF website.

Another example of a career orientation program with a focus on gender inclusion is the “Klischeefrei” initiative which aims to break down gender role stereotypes when it comes to choosing a career. Teenagers and young adults should make their career choices based primarily on their talents and abilities - free from clichés.

The federal employment agency offers a variety of tools and services dedicated to career orientation as outlined in paragraph 33 of the SGB. These include career information centres, several online tools, guidance material, success stories and a film portal on professions, among others.

3. Career orientation delivery and stakeholder involvement

School system in Bavaria

In the Bavarian educational system, there are four types of general high schools which are called: “Mittelschule” (preparatory school for vocational education and training – lower/mid-level), “Realschule” (preparatory for vocational education and training – mid-/higher-level), “Gymnasium” (preparatory for enrolment at university) and “Waldorf/Montessori Schools”. There are no high schools with a specialisation in forestry as in other countries of the Danube Region. In Bavaria, forestry professions can be pursued in the secondary educational system with a university degree or a vocational training at one of the forestry training facilities.

Career orientation is integrated at all types of high schools in Bavaria and mandatory by law. The following section gives an overview of career orientation at the different types of high schools in Bavaria:

Mittelschule

Vocational orientation measures are an integral part of educational concept at the Mittelschule. This includes job application training, vocational orientation measures,

company visits, career orientation days and internships. These measures have been developed in cooperation with the state education authorities and the local employment agencies and are structured as a set of modules giving pupils an opportunity to learn about their own strengths, gain an overview about career opportunities in a variety of areas and get ready for the job application process. Vocational orientation measures at Mittelschule are geared towards practical experience: initial contacts are made with companies during company visits and work placements, which are also useful for later in-company training.

Realschule

Vocational orientation also plays an important role at the Realschule. In year nine, it forms the interdisciplinary educational objective. As part of the career orientation process at Realschule, pupils have the opportunity to complete a voluntary work placement. The experiences gained by the pupils are shared in class with their classmates. The coordinators for vocational orientation serve as contact persons for questions regarding career choices.

Gymnasium

In year nine of Gymnasium, the vocational orientation module focuses primarily on career guidance and the possibility of starting a vocational training. This module can also include a work placement, to give pupils an initial insight into the real world of work. In eleventh grade, pupils carry out a “project-seminar for career orientation” which includes a subject-specific, career-related project with external partners (e.g. regional companies). This gives pupils a first-hand experience insight of work life and helps them to identify suitable courses of study and training paths for themselves. In twelfth and thirteenth grade, pupils continue this orientation process in the advanced module on career orientation. Here, they deepen their career choice skills and develop a plan for their post-school education. The core element of the advanced vocational orientation module are five “project days” (self-exploration, career exploration, study exploration, application and reflection).

Waldorf and Montessori Schools

At Waldorf and Montessori schools career orientation is also integrated into their curriculum. Pupils have the possibility to do internships to learn more about different careers and get a taste of working life. At Montessori school these internships start already in 5th and 6th grade and from 7th grade onward young people are coached by careers advisors in addition to the support class teachers. Internship weeks are an important part of the career orientation program at Montessori schools. From year 9

onwards, a two-week internship during school time serves as direct application training in a company. Personal cover letters, CVs and preparing for a job interview are discussed in class during career orientation workshops.

Stakeholders in the career orientation system of Bavaria

In Bavaria, career orientation is delivered through multiple channels. One major stakeholder is **the federal employment agency** that offers a variety of online tools for pupils to explore their interests and learn which professions could match their personal strengths. Job descriptions including videos and factsheets about professions in multiple areas can be accessed through the career orientation webpages of the federal employment agency. These descriptions also cover several careers in the area of forestry. A compact overview of all steps for career orientation in Germany is available in German, English and Ukrainian (https://planet-beruf.de/fileadmin/assets/01_Neu/05_PDF_Neu/meinwegzumberuf/VBW_MeinWegzumBeruf_2024_ENG.pdf). Regional offices of the federal employment agency that offer career orientation services (short “BiZ”) can be found in each German City and all major towns. Here pupils and parents have the opportunity to talk to career orientation professionals and get a personal assessment.

The **Bavarian Ministry of Family, Employment and Social Issues** also offers pupils a career orientation Webpage (www.boby.bayern.de) that is directed to pupils, parents, teachers and employers. The BOBY Website puts a special focus on professions that can be pursued at vocational schools and serves as a platform for employers to offer trainings for students at vocational schools and announce career fairs. It also provides lots of useful information to guide pupils into finding a suitable profession, such as online tools and Apps to select a career based on their interests. Information about upcoming job fairs, and links to many other career orientation webpages that are available in Germany can also be found on the BOBY Website.

The **Bavarian Forestry Administration** and the **Bavarian State Forest Enterprise (BaySF)**, which are major employers in the forestry area, inform pupils and students about forestry professions, educational requirements to enter these professions and career opportunities in forestry on their websites and career fairs.

The **Chamber of Commerce and Industry (IHK)** is another stakeholder in Germany that provides information about vocational education and training. On the IHK Website pupils can find career descriptions and online tools for career orientation.

Innovative methods and gender dimension in the career orientation system

The websites for career orientation that are specifically addressing pupils are in easy understandable language and display a fun user interface with bright colours and many graphical elements. Some online tools are inspired by computer games and very interactive (e.g. <https://abenteuer-berufe.planet-beruf.de/>). The job descriptions on all websites are in gender equitable language, with an equal distribution of girls and boys in the pictures used on the websites.

4. Strengths, Weaknesses, Challenges, and Barriers in National Career Orientation Systems

Strengths:

The career orientation system in Germany is very comprehensive and offers young people multiple platforms to explore their strengths and interests to find a suitable profession. These platforms also offer plenty of information on career descriptions and ways how to prepare for the job application process (e.g. personal cover letters, CVs and preparing for a job interview).

The German vocational education and training system, where trainees attend vocational school and work in a company to become familiar with both practical and theoretical learning has received positive international attention, and scientific studies link it to low rates of youth unemployment and a smoother transition from school into work life (Haasler 2020). Successful programs promoting career orientation for vocational education and training include the “Berufbildungsprogramm” of the federal ministry of education and research and the “Bildungsketten” initiative where existing support programs that help young people find the right training for them are better coordinated and the competencies of the stakeholders involved - schools, federal states, federal government, employment agencies, local authorities - are bundled and offers for pupils are tailored to their needs. This initiative is implemented across all German states and also integrates gender inclusion as in the “KAUSA Transfer Project” in Bavaria.

Weaknesses:

The career orientation system of Bavaria in the area of forestry still needs improvement. At the moment there is no comprehensive website that gives an overview of all forestry professions with detailed descriptions of the educational pathways needed for each profession, working tasks and personal experiences from

people working in the forest sector. The information available from the Bavarian Forestry Administration, BaySF and the federal employment agency about careers in forestry is good, but the websites are not connected and hence do not complement each other. Flyers and informational material are also not available for all professions. Furthermore, regional career fairs on forestry professions are not a standard. The websites do not display any interactive tools for career orientation and the language does not address young people. Gender equitable language and pictures showing both males and females are used on the Websites and information material, yet women are not specifically addressed to pursue a career in forestry. Programs like the “Klischeefrei” initiative are missing in the forestry career orientation program of Bavaria.

Challenges, and Barriers:

One of the key challenges of the career orientation system in Germany is the overload of information. A study conducted in 2022 by the Bertelsmann Foundation showed that young people are overwhelmed by the information on offer, especially by digital career orientation. The study also found that the internet does not replace career guidance by parents and educators but is only complementary. During the pandemic internships, career fairs and expert career counselling, which led to a higher number of young people breaking off their training and studies in the years following the pandemic, showing how strong guiding and practical experience is for effective career orientation in young people.

5. Opportunities for synergy and improvement

The German government's strategy for international cooperation in vocational education and training from 2019, forms the framework for joint and coherent action by stakeholders from education, research, politics and business. Germany makes its expertise on the dual system of vocational education and training available to interested partner countries worldwide. The central office that coordinates the international career orientation activities of the German government is called GOVET, which is an acronym for German Office for International Cooperation in Vocational Education and Training. It is the central German point of contact for issues related to international cooperation in vocational education and training. International cooperations on career orientation in Europe exist with Italy, Greece, Portugal, Latvia

and Denmark. New international cooperations can be established through the promotional programs of the federal ministry of education and research.

In Bavaria the Erasmus+ Program offers pupils the possibility to conduct internships abroad to learn more about the international work environment. Interested pupils can apply for the Erasmus+ Program through their high school.

Recommendations to improve the career orientation system

The German employment market is facing a shortage of skilled labour force. Therefore, career orientation to guide young people into professional life is more important than ever. German politicians consider several options to improve this situation. According to politics, one possible solution for successful careers guidance could be, a “strong involvement of the economy and networking between schools and local companies”. Another idea to improve the situation is a stronger focus on implementing career orientation in schools, and that it should start at a younger age, even in elementary schools as it is practiced in Switzerland. Additionally, to improve the quality of career orientation the use of existing digital tools that help students find the right profession could be improved and new tools could be developed.

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Annex 5:

Description of the structure of the national career orientation system in Croatia

1. Career orientation-related terminology used at country level

Some of the terminology used in regards of career orientation in Croatia is **professional orientation, career counselling and career informing, lifelong career guidance and lifelong learning**.

Professional orientation in Croatia is viewed as a multidisciplinary activity involving a range of related sciences such as pedagogy, sociology, psychology, economics, and disciplines alike. Professional orientation is a professional and social activity that emerged from the need for more adequate preparation and direction of individuals for employment and the labour market, as well as for continuing education.

Career counselling (Career guidance) helps students independently assess their abilities and potentials, enabling them to make well-informed decisions about continuing their education. It supports students in gaining a better understanding of themselves and their environment while fostering self-confidence.

Career informing is considered the broadest activity within career guidance in schools. It refers to the aspect of career guidance focused on reviewing and generalizing all facts about the world of work, education, and professional development. The goal of career informing is to equip young individuals with a sense of responsibility toward their work and professional growth.

Lifelong career guidance provides individuals with the opportunity to become aware of their abilities, interests, and skills at any stage of life, enabling them to make decisions about their education and professional development.

Lifelong learning: Emphasizes continuous education and skill development to adapt to labour market changes.

2. Policy framework on career orientation

Professional guidance has its place within the educational system in the Republic of Croatia. It is provided through the legislative work involving **the Ministry of Science and Education and the Ministry of Labour, Pension System, Family and Social Policy**. One of the strategic documents supporting its implementation is **the Law on education in primary and secondary Schools**, which provides the basis for conducting career guidance activities.

Regarding career guidance present in primary and secondary schools in Croatia, the current legal framework defines specific educational goals related to this activity. Article 4 of the Law on education in primary and secondary schools (NN 86/12, 126/12, 94/13, 152/14, 07/17, 68/18, 98/19, 64/20, 151/22, 155/23, 156/23) lists among its goals: "To ensure that students acquire fundamental (general education) and professional competencies, prepare them for life and work in a changing socio-cultural context in line with the demands of the market economy, modern information and communication technologies, and scientific knowledge and achievements, as well as for lifelong learning."

Furthermore, Article 57 of the same law stipulates that: "... schools cooperate with employment services and other institutions to provide timely information and career guidance to students." This demonstrates that the implementation of career guidance in education requires an understanding of the existing partnership model, which involves collaboration between schools and employment services.

National Curriculum Framework (Nacionalni okvirni kurikulum) is a key strategic document in the Croatian education system that provides guidelines for the development of curricula at all levels of education. The *National Curriculum Framework* among its objectives highlights the need to acquire professional competencies and to prepare students for life and work in a changing society, enabling them to achieve successful outcomes in response to labour market demands.

Under the 5.2. Strategic Goal 2: "Educated and Employed People" of the **National Development Strategy of the Republic of Croatia until 2030**, the objective of a Harmonized and Prospective Labour Market emphasizes building an adaptable, inclusive workforce and fostering a culture of lifelong learning. This objective also prioritizes addressing inequalities, particularly those faced by women. Key initiatives include:

- Promotion of Women's Position and Equal Pay: Measures will ensure equal pay for equal work and support the protection of mothers' and women's rights in the labour market.

- **Work-Life Balance:** Enhanced investment in childcare and family support services aims to help women, especially mothers, balance career and family responsibilities. Employers will also be encouraged to address the family needs of young workers, particularly women.
- **Lifelong Learning:** Emphasis will be placed on lifelong education to improve digital, entrepreneurial, and financial literacy skills, enhancing employability and adaptability in a changing labour market.
- **Professional Guidance and Support:** Development of a lifelong career guidance system and profiling techniques for unemployed and disadvantaged groups will help align skills with market demands. Special focus is on women, low-skilled individuals, long-term unemployed, and young people in vulnerable situations (e.g., NEET status).

The objective of the **Strategy of Lifelong Professional Guidance and Career Development in the Republic of Croatia 2016-2020** is to identify the priorities, measures, and activities for establishing a lifelong learning guidance system. It aims to assist citizens in accessing quality professional guidance services for developing lifelong careers in accordance with their abilities, interests, personality traits, and job market demands.

Main objectives of the strategy include:

- **Enhancing the career guidance system:** Developing and implementing effective mechanisms for providing career counselling at all levels of education and employment.
- **Connecting education with the labour market:** Ensuring educational programs align with labour market needs, facilitating employability and adaptability to economic changes.
- **Promoting lifelong learning:** Encouraging citizens to continuously upgrade their skills and acquire new ones throughout their lives.
- **Ensuring equal opportunities:** Providing access to career counseling for all citizens, regardless of age, gender, social status, or geographic location.

Currently, there are no specific measures for forestry and related sectors within the National Strategy for Lifelong Career Guidance. However, **Croatia's National Development Strategy 2030** recognizes the importance of sustainable management of natural resources, including forestry. It highlights the need for education and training in these areas to support sustainable development and economic competitiveness. In this

context, general measures for career guidance and education are expected to support sectors like forestry. These efforts aim to ensure a skilled workforce and promote sustainable development.

One of the important goals of the Croatian Chamber of Forestry and Wood Technology Engineers is a lifelong learning process in forestry sector. Since November 2008, the Chamber organizes workshops, education, and lectures for its members, in accordance with the annual program, with the participation of scientists, professionals and experts from different fields of the forestry sector and with the goal to enhance adaptability and knowledge of chartered engineers.

3. Career orientation delivery and stakeholder involvement

Career orientation in Croatia is carried out by the **Croatian Employment Service (CES)** and involves working with students, unemployed individuals, and job seekers. Employment offices feature a career orientation service. Career orientation is conducted by professionals in pedagogy and psychology, who are most often employed in schools, social institutions, and specialized professional services. The CES provides professional orientation to students in their final grades of primary and secondary school, offering professional information and counselling. The process involves collaboration with schools and parents through a Survey on Professional Choices for Primary and Secondary School Students. Additionally, students are provided with information on education, relevant areas for occupational choice, and employment.

There are a few online platforms that use innovative methods for career orientation and are carried out by CES

- The Career Guide (*Vodič kroz zanimanja*) is a tool designed to assist individuals in exploring and identifying potential career options based on various job aspects. It is used primarily for career counselling and aims to help individuals assess their interests, skills, and the requirements of different occupations.
- e – Guiding (*e – Usmjeravanje*) is a newer portal for career counselling that is also based on job aspects. On this platform, students can find useful information needed to guide their career development. It provides resources and tools to help individuals explore various career options and make informed decisions about their professional future.

- *Moj izbor* is a computer program for career counselling, used in the regional offices of the Croatian Employment Service (*Zavod za zapošljavanje*). This program helps individuals assess their skills, interests, and abilities, and provides guidance on suitable career paths and educational opportunities. It is designed to support professional orientation and help users make informed decisions about their career development.

Accessibility through **CISOK Centers**: CES has established a network of 13 Centres for Career Information and Counselling (CISOK) across the country. These centres provide free, personalized services to students and parents, enhancing the accessibility and effectiveness of career guidance.

Professional orientation through the **lifelong career guidance centres** is also available to other users interested in participating in formal education, retraining, or making a career change.

Additional institutions engaged in professional guidance are:

- primary and secondary schools
- adult education institutions
- universities and polytechnics
- Croatian Employers' Association
- Croatian Chamber of Trades and Crafts
- agencies for vocational education, training, and adult education
- Competence center d.o.o. for research and development (collaboration with forestry sector)
- Agency for Science and Higher Education
- Agency for Mobility and EU Programmes

4. Strengths, Weaknesses, Challenges, and Barriers in National Career Orientation Systems

Strenghts:

Comprehensive Support: The Croatian Employment Service (CES) offers systematic information, guidance, and counselling for students nearing the end of primary and secondary education, including vocational education and training. This ensures students receive timely and relevant advice tailored to their career aspirations.

Croatia continues to improve the labour market relevance of vocational education and training (VET). It has one of the highest shares of learners at medium-level education that are enrolled in vocational programmes in the EU (70.5% vs EU 54.2% in 2022)²⁰. However, the employment rate of recent VET graduates is still below the EU average (70% vs EU 81% in 2023)²¹. The Croatian VET system is shifting from being input-oriented to being learning-outcome oriented, with many aspects of the reformed system currently in development. In 2023, 25 VET schools successfully transformed into Regional Centres of Competence, to ensure innovative teaching, top quality infrastructure and work-based learning (Cedefop and ReferNet, 2023a).

Croatia is undertaking major reforms to improve the relevance, quality, and attractiveness of VET. With the support of the ESF+ programme, outdated subject-based curricula are replaced by modular curricula based on occupational standards and aligned with labour market needs. **Croatia aims to make its VET system greener.** Since 2022, digital and green skills have been mapped for a catalogue integrated into the application for learning vouchers, financed by the recovery and resilience plan (RRP) and the ESF+. All new occupational standards include both green and digital skills (Cedefop and Refernet, 2023d). In addition, the Croatian Agency for VET and Adult Education (ASOO) offers VET teachers a course in green skills via VET teacher conferences, sector-specific training and the teacher training web portal.

Croatia is making progress in developing a high quality and labour market-relevant adult learning system. New curricula are being developed based on the Croatian Qualification Framework (CROQF). The implementation of the voucher for skills scheme under the RRP helps learners build digital and green skills relevant for the labour market.

Good practice examples in career orientation in the forestry sector:

EU Project Development and Implementation of Professional internship in the study programs of the Faculty of forestry. The purpose of the project carried out from 2020 to 2023 was to support the enhancement of employability for students of the Faculty of Forestry and Wood Technology in the labour market by enabling the acquisition of practical skills for work through the improvement and implementation of professional practice. Project partner, among others, was Croatian Chamber of Forestry and Wood Technology Engineers. After the project ending the Faculty implemented internship as an obligatory and integral part of the undergraduate studies and continues to connect the sector with the students.

Micro-qualification Programs

With the introduction of the new Adult Education Act, new programs—micro-qualifications—have been implemented, aimed at training or upskilling participants in specific fields. A significant portion of these micro-qualifications is funded through vouchers provided by the Croatian Employment Service (HZZ), intended for both employed and unemployed individuals. Some of the programs offered connected to the forestry field are:

- Handling Chainsaws in Forestry
- Bandsaw Operator in Primary Wood Processing
- Contribution to Environmental Protection by Efficient Use of Materials and Energy in the Production of Furniture and Other Wood Products
- Digital Cartography
- Energy Utilization of Forest Biomass
- Geoinformation Infrastructure

Active involvement of the Faculty of Forestry and Wood Technology at the University of Zagreb and vocational forestry schools through Croatia in promotion of forestry education in secondary and primary education through the country.

Croatian Chamber of Forestry and Wood Technology Engineers supports professionals in the forestry and wood technology sectors through workshops, education programs, and lectures. The Chamber plays a key role in ensuring members remain well-informed, skilled, and competitive in an evolving industry supporting lifelong learning process in forestry sector.

Weaknesses:

Adult learning in Croatia still has limited coverage and skills mismatches contribute to labour shortages. Croatia's rate of participation in adult learning remains at a low level compared to the EU average, particularly among the low-skilled, elderly, rural and the long-term unemployed.

Gender Inclusion: Despite national strategies, gender imbalance persists, particularly in forestry and other traditionally male-dominated sectors.

Lack of Practical Exposure: Career counselling often focuses on theoretical guidance rather than hands-on exposure. Forestry, which requires specific technical skills and a strong understanding of ecological systems, benefits greatly from direct experience, which is rarely integrated into counselling programs.

Limited Role Models: Forestry lacks visible role models and ambassadors in counselling programs who can inspire students to pursue this career path.

Challenges, and Barriers: Identify the key challenges and barriers that limit the effectiveness of the career orientation system. Describe how these challenges impact different groups, particularly girls and young women.

Challenges:

Traditional perceptions of gender roles continue to pose significant challenges for girls and young women seeking to enter fields such as forestry. Addressing these barriers requires proactive measures, such as awareness campaigns, mentorship programs, and inclusive policies, to challenge stereotypes and create a more equitable environment for all genders.

Many forestry-related opportunities are concentrated in **rural regions** where the need for the workforce is also the greatest, but career counselling services often struggle to reach students in these areas effectively. The lack of resources and access to career counselling centres like CISOK in remote locations limits awareness among young people about forestry careers.

Narrow Focus: Career counselling tends to emphasize popular or urban-centric professions, leaving sectors like forestry underrepresented in guidance sessions.

5. Opportunities for synergy and improvement

Opportunities for Collaboration: International Cooperation

Good practice example:

One of the strategic goals of the Faculty of forestry and wood technology in Zagreb is active participation in the European Research Area (ERA) and the European Higher Education Area (EHEA), as well as the systematic and organized implementation of lifelong learning programs and the mobility of students and staff.

- European Union Initiatives Within the Erasmus+ program, students at all levels of study have the opportunity to undertake a study exchange or complete a professional internship in one of the program countries.
- The Faculty is involved in several international scientific and higher education associations in the field of forestry and wood technology, the most significant

of which are: IUFRO (International Union of Forest Research Organisations), COST Domain Committee Forest Products and Services, FORMEC (Forestry Mechanization), Innova Wood, WOODEMA, Pro Silva Europa, Silva Network, EFI (European Forest Institute)

Recommendations for improvement:

- Promote role models: Highlight successful women in forestry through career fairs, media campaigns, and mentorship programs.
- Challenge stereotypes: Conduct workshops and awareness programs to dismantle traditional gender norms and encourage girls to explore unconventional career paths.
- Continue to strengthen industry partnerships: Develop collaborations with forestry organizations to provide internships, job shadowing, and hands-on experience.
- Enhance Accessibility: Expand career counselling services in rural areas and ensure equal access to information for all students.

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Annex 6:

Description of the structure of the national career orientation system in Romania

1. Career orientation-related terminology used at country level

The aim of guiding and counselling in Romania is to provide targeted personal development interventions and to help individuals transition between different levels of the school system and job life. The present guiding and counselling services in Romania were established in the 1990s, with further improvements. The primary providers of these services are schools, colleges, and state employment agencies.

Some of the terminology used in regards of career orientation in Romania is **self-knowledge, educational, occupational and labour market exploration, career decision-making, and personal promotion.**

- **Self-knowledge.** Exploring and structuring information about oneself (personality characteristics, skills, abilities, interests, values, aptitudes, etc.);
- **Educational, occupational and labour market exploration.** Collecting information on educational opportunities (types of educational institutions, streams, profiles, specialisations), occupational opportunities (types of occupations, nature of work, educational requirements to enter a job, employment prospects, work environment, salary, etc.) and the labour market (the specific configuration of job supply and demand existing at a given time);
- **Career decision-making.** Choosing one option from the options available at a given time (1. content of the decision: What decision am I going to make?, 2. decision-making process: How will I make this decision?, 3. context of the decision: What factors influence my decision?), e.g. developing a career plan (goal, objectives, achievement strategies, deadlines, resources, possible obstacles, solutions); ▪
- **Personal promotion.** Systematising and presenting information about one's own abilities, interests, educational and occupational experiences.

These extensive definitions demonstrate the relevance of career counselling and assistance for education, work, and their intersection. These categories are significant in Romania, where social workers coordinate local initiatives for poor children.

Career Counselling and Guidance (CCG) is crucial in education, both in compulsory schools and beyond, for acquiring career-relevant knowledge, skills, and attitudes, and making informed decisions to align educational and professional goals with interests and abilities.

The CCG helps young people obtain information on short-term and long-term job prospects, enabling them to make educated choices regarding training and employment.

2. Policy framework on career orientation

- a. Romanian Parliament, The Labour Code;
- b. Romanian Parliament, Law no. 1/2011 The Education Law;
- c. Romanian Parliament, Law no. 76/2002 on unemployment insurances and employment measures;
- d. Romanian Parliament, Law no. 333/2006 on setting up information and counselling centers for young people;
- e. Romanian Parliament, Law no. 350/2006 Youth Law;
- f. Romanian Parliament, Law no. 351/2006 Law of the Romanian National Youth Council
- g. The Romanian Parliament, Law no. 335/2013 on traineeship for university graduates;
- h. Romanian Government, National Strategy on Employment 2014-2020 and the Action Plan approved by Government Decision no. 75/2014;
- i. Romanian Government, Strategy on reducing early school drop out;
- j. Romanian Government, The Strategic Framework for Lifelong Learning;
- k. Romanian Government, The Strategic Framework for Tertiary Education;
- l. Romanian Parliament, Law on pre-university education 198/2023. Romania is changing its career counselling and guiding laws with the implementation of the new law (Romanian Parliament, 2023) on September 4, 2023.

Main legislative measures for CCG work adopted by Law 198/2023 include:

- The right of primary beneficiaries of pre-university education to have access to free quality education;
 - To have access to information and school counselling, vocational and psychological services;
 - the school counsellor and the class master are obliged to issue customized recommendations;
 - Each educational institution shall assure the operation and proper equipment of the school counselling office;
 - Inclusive education.
- m. OM 3070/2015 for the modification of the Methodology - framework regarding the organization and functioning of the Career Counseling and Guidance Centers

(CCOC) and OM 650/2014, the organization and operation of the centers are regulated;

- n. Romanian Government, Government Ordinance no. 129/2000 on adults vocational training;
- o. Romanian Parliament, Law no. 272/2004 on the Protection and Promotion of Child Rights;
- p. Romanian Government, Government Ordinance no. 75/2005 on the quality of Education;
- q. The Romanian Parliament, Law no. 279/2005 on apprenticeship;
- r. The Romanian Parliament, Law no. 292/2011 of social assistance;
- s. The Romanian Government, Decision no. 918/2013 on the National Qualification Framework;
- t. Romanian Government, National Strategy on Social Inclusion and against poverty 2015-2020 approved by Government Decision no. 383/2015;
- u. Romanian Government, National Youth Policy Strategy 2015-2020 approved by Government Decision no. 24/2015.
- v. The Romanian Strategy regarding the promotion of equal opportunities and treatment between women and men and the prevention and combating of domestic violence for the period 2022 – 2027

3. Career orientation delivery and stakeholder involvement

Key actors for career counselling and guidance activities, are as follow:

- Ministry of Education
- County School Inspectorates and the School Inspectorate of the Municipality of Bucharest
- Universities
- Youth
- Bucharest Municipal Agency for Employment/ County Agencies for Employment (AJOFM)
- Civil society organisations
- Employers' associations/business community (**ROMSILVA – Romanian state-owned enterprise**)
- National Prison Administration
- National Anti-Drug Agency • National Centre for Mental Health and Drug Abuse Control
- Romanian Police

Counselling and guiding activities are conducted in the following manner (Figure 1) as part of an educational strategy and educational practice:

- via mandatory and elective classes, as well as extracurricular activities, under the Counselling and Guidance curriculum area, which is conducted by class masters in partnership with other important individuals;
- via individual and/or group counselling activities carried out by teachers who are also school counsellors at the psycho-pedagogical support offices of the school
- via initiatives that are developed by different educational institutions in collaboration with the community, which is represented by non-governmental organisations and/or local and national authorities and institutions that provide career advising for students.

At the level of the University of Suceava there are different projects about career counselling. One of them is COACH USV - Creation and development of the Center for guidance, association and career counselling for researchers in the North-East Development Region of Romania. And the second project will help students to study as an intern in different European countries. At the same time, both learners and teachers acquire a whole new set of competences, as they benefit from an innovative and challenge-based pedagogical approach and integrated mobility. The project is a Consortium NEOLAiA - *Transforming Regions for an Inclusive Europe*.

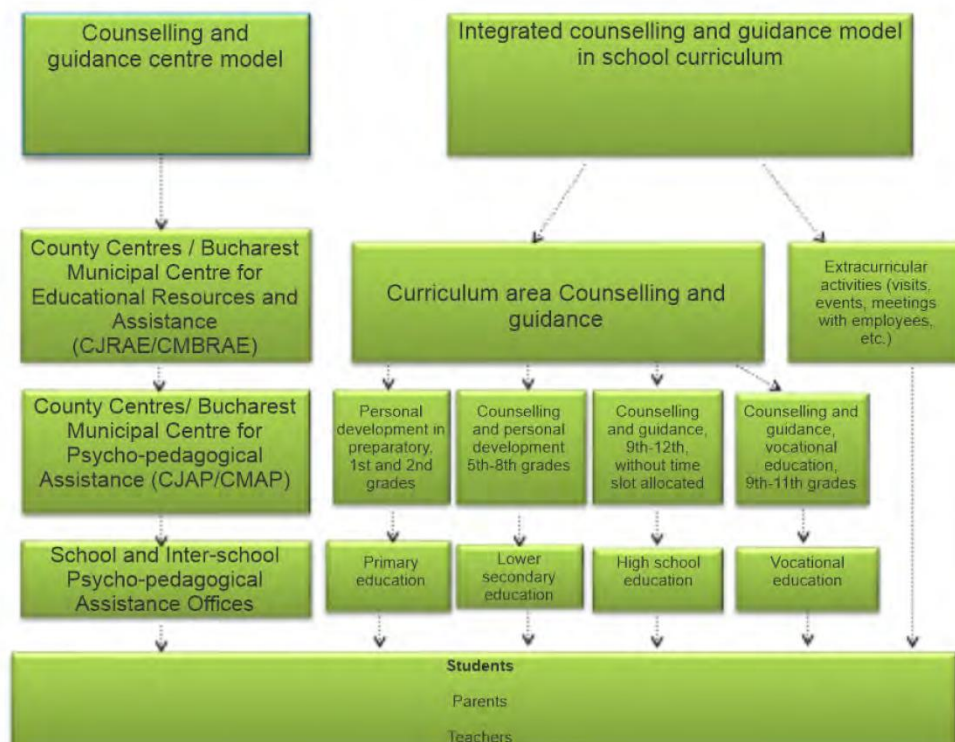


Figure 1 Modalities of career counselling and guidance in Romania (World Bank Report 2019)

4. Strengths, Weaknesses, Challenges, and Barriers in National Career Orientation Systems

Strengths:

General aspects. After completing an internship, 59% of young Romanians continued working with their employer, compared to the European average of 39%. *For example, from 2018 to date, 191 students have been enrolled in the dual education classes at Anghel Saligny Technical College, of which 66 have graduated and 125 are still in training. 30 college graduates are already Apa Nova employees.* The Association for Values in Education (AVE) and Brio are two initiatives actively contributing to the transformation of the Romanian education system. AVE trains educational leaders and managers through the implementation of development programs, while Brio operates the largest edtech platform for measuring educational performance.

In 2021, the employment rate of higher education graduates aged up to 34 in Romania was 83% and 84.9% in the EU27, while the overall employment rate of higher education

graduates aged up to 34 in Romania was 88.9% and 87.1% in the EU27 (Deaconu and Hâj, 2022). In 2022, the unemployment rate was (22.8%) for young people aged 15-24 (National Institute of Statistics, 2022).

Forestry aspects. In Romania, young girls who study forestry have the same access to information, research projects, practical activities as their peers. There is no gender discrimination and there has been an increase in the number of female students in recent years. Even the heads of the graduating classes in recent years have been girls. For example, Bucovina Forestry College offers specialised European programs that guarantee equitable access to high-quality education for its students.

EU Programs. European Union Initiatives Within the Erasmus+ program, students at all levels of study have the opportunity to undertake a study exchange or complete a professional internship in one of the program countries.

National programs. “Green Week” is a national program, in line with the provisions of the report “Climate Change and Environmental Education in Sustainable Schools”, elaborated by the Presidential Administration working group, the National Strategy on Environmental Education and Climate Change 2023 - 2030 and the National Strategy for Sustainable Development of Romania 2030.

Pedagogical circles. Bucovina Forestry High school Câmpulung Moldovenesc is actively involved in many activities aiming to increase the quality of students and their competencies in forestry. They had activities related to:

- Partnership between school and economic agents;
- Good practice in the use of methodological benchmarks for grade XII
- Promoting students participating in forestry contests;
- Participating with students at relevant and important events (conferences, competitions e.g. **a Romanian girl team won the European Students Championship Skills in Forestry competition in 2024.**)

Partnerships between faculties and schools. Events are organized about different topics, such as engaging teaching methods (what strategies can we use to enhance class interest and effectiveness?), collaborating with industry (what steps are we taking to equip students for their future careers?), and Erasmus+ projects (what are the ways to incorporate global experiences into our educational institutions?).

Partnerships between industry, organizations and faculties. There is a strong partnership between industry and forestry faculties. Some companies, e.g. Egger Group Romania, HR Timber are offering scholarships and training for students, not only for

students who follow forestry faculties. These companies are involved in CSR projects. ProPark Romania provides classes for training as a biodiversity specialist or as a ranger.

Good practices. Quality Education - The Romania Unfolds platform follows stories from local communities where the key to solving local challenges is a sustainable solution. These examples of sustainable best practices are in fact accessible actions with high impact. Bucovina Forestry High School was recorded during the European Students Championship Skills in Forestry in 2024, and they mentioned that the internships in other countries helped them see that there was a need for gender equality, so they decided to create a team and enroll their girls for the championship. **The Bucovina Forestry College is the first college in the country that prepared and enrolled a girls' team in this competition. This achievement marks an important step for equal opportunities between girls and boys in forestry education.**

Transilvania Năsăud Forestry High School and Theodor Pietraru Forestry College from Brănești have been selected for funding under the call "Equipping with intelligent laboratories for educational institutions", through the National Research Program for Research and Technological Development (PNRR). **Bucovina Forestry College** is taking a new step forward in training students and promoting sustainable forestry by acquiring an **innovative forest management simulator**. Professionals, students, and enthusiasts alike will benefit from this advanced equipment, which aims to develop the skills necessary for effective and sustainable forest management. **Students have the opportunity to acquire practical skills using authentic forestry equipment and tools in a safe and controlled environment. This aspect of learning helps to develop specialists who are well prepared for real-world challenges.**

Weaknesses:

General aspects. In Romania, graduates with technical education have an employment rate 13.4% higher than those with theoretical education, while in the EU, the employment rate of technical graduates is 2.8% lower than that of general education graduates. **Only 8.4% of students in technical and vocational education benefit from practical work experience. The EU average is 60.1%.** *Not all class masters/teachers/counselors are interested in career counseling training; they are overloaded with bureaucratic tasks, suffer from burnout, do not have time for in-service training, and may have costs for in-service training courses.*

Forestry aspects. In Romania, in recent years, the news in the media has caused a great disadvantage to the forestry sector, which was also seen in the organisation of admissions to the faculties. Additionally, the sector's overly technical language obscures many aspects of forestry activities. There is a need to adapt the language so that everyone can

understand that the forest is a renewable resource that needs to be properly managed. This explains why young people are reluctant to pursue careers in forestry.

School learning in Romania still has limited coverage and skills mismatches contribute to labour shortages. However, there is a minor change. Forestry high schools have initiated the implementation of a smart lab by bringing forests into their laboratory courses. This initiative is expected to enhance their skills and increase their likelihood of securing employment.

Gender Inclusion: Despite national strategies, gender imbalance persists, particularly in forestry and other traditionally male-dominated sectors. According to Social Progress Index Romania has a low degree of social inclusion and low community involvement with one of the lowest values (54.69).

Lack of Practical Exposure: Career counselling often focuses on theoretical guidance rather than hands-on exposure. Forestry, which requires specific technical skills and a strong understanding of ecological systems, benefits greatly from direct experience, which is rarely integrated into counselling programs.

Limited Role Models: Forestry needs recognisable role models and ambassadors in counselling programs that might inspire and motivate students to pursue this career path.

Challenges, and Barriers:

General aspects. Dysfunctions in the operationalisation of school-other stakeholder partnerships (economic agents, AJOFM, universities, NGOs) in the field of career counselling in schools. Low level of parental education/information (e.g. information provided by a specialist about types of upper secondary and vocational schools), unrealistic expectations of parents, reluctance of parents about how to support their child in career choice, high proportion of pupils not aware of career counselling needs. Lack of professional quality standards and code of ethics in career counselling, validated and institutionalised in the education system.

Forestry aspects. There is a decreasing number of students pursuing a forestry career. Year by year, there are fewer students who opt for environmental protection or forestry. The same situation is also for both Master programs. The reasons for this situation include low salaries, difficulty finding employment after graduation, and political factors.

5. Opportunities for synergy and improvement

Good practice example:

General aspects. USV has different projects about career counselling. One of them is COACH USV - Creation and development of the Center for guidance, association and career counselling for researchers in the North-East Development Region of Romania.

Forestry aspects. Faculty of Forestry from Suceava has European initiatives within the **Erasmus+ Lifelong Learning Programme** or **CEEPUS programme**, students at all levels of study have the opportunity to undertake a study exchange or complete a professional internship in one of the program countries. **Creating an academic environment based on a responsible student-academic staff partnership** is one of the Faculty's aim. Therefore, the aim is to include students/master students/doctoral students in as many research project as possible together with teaching staff. Their involvement in promoting the image and the educational offer of the university is also important.

The Faculty collaborates with different international scientific and higher education associations in the field of forestry and wood technology, the most significant of which are:

- EFI (European Forest Institute),
- E.N.G.R.E.F. (National School of Rural Engineering, Water and Forests) Nancy, France,
- I.N.R.A. (National Institute for Agricultural Research) France,
- BOKU Austria, Faculty of Forestry and Environmental Sciences,
- Albert-Ludwigs University Freiburg, Germany,
- Institut für Landespflege, Freiburg University, Germany,
- Polytechnic School from Zurich, Switzerland,
- Sopron University, Hungary.

Recommendations for improvement:

Promote role models: Through job fairs, media campaigns, and mentoring programs, highlight successful women in forestry.

Challenge stereotypes: Organise workshops and awareness campaigns to challenge conventional gender norms and motivate young women to pursue unconventional career paths.

Continue to strengthen industry partnerships: Maintaining the partnerships and creating new ones with forestry organisations to offer scholarships, job mentoring, and hands-on experience.

Enhance Accessibility: Ensure that all students have equal access to information and that career counselling services are expanded also in rural areas.

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Annex 7:

Description of the structure of the national career orientation system in Serbia

1. Career orientation-related terminology used at country level

The development of career guidance and counselling (CGC) in policy, research, and practice in Serbia gained special momentum in the second decade of the 21st century. As stated in the Rulebook on the Standards of Career Guidance and Counselling Services (Official Gazette of the RS, 2019), the approach to defining standards that support career guidance and counselling in Serbia is based on: "1) *policies and developed practices at national and European level*; 2) *orientation towards quality indicators and outcomes that are measurable*; 3) *implementation of policies that ensure evidence of the impact of CGC*; 4) *an approach that encourages and empowers individuals to take responsibility for their own career development*; 5) *the achievement of the concept of lifelong learning*" (Official Gazette of the RS, 2019). Policies and projects in this area are intended to improve the quality and accessibility of career services for all, regardless of gender, age, ethnicity and occupational group.

This Rulebook defines key terms and concepts in the field of career guidance and counselling in Serbia:

Career guidance and counseling – a process, services and activities aimed at helping a person of any age and at any stage of life to make educational, training and vocational decisions and to manage their career.

Career management skills – competencies that help an individual recognize their existing skills, develop personal and professional learning and development goals, and take action to improve their career.

Career practitioners – competent professionals with different qualifications in various fields (education, employment, industry, youth policy) who carry out career guidance activities and work with individuals or groups of different age groups to help them manage learning, work, career change and other aspects of personal development.

Career development – a lifelong process of managing learning, work, leisure and career change to work towards chosen goals.

Career information – the process of providing information about educational and career opportunities.

Career counseling – a process aimed at helping a person discover and understand their own attributes, consider educational and career options, make decisions and plan their career.

Career education – education delivered through programs, activities and learning experiences designed to enhance a person's career development. It takes place in both formal and non-formal settings and is aimed at developing career planning skills.

Educational and career opportunities – available forms of formal, non-formal education and informal learning, training and work that are accessible to an individual.

Professional orientation – refers to activities (assessment, self-assessment) aimed at supporting a person in career planning, usually in the choice of their first profession.

Source: Official Gazette of the RS, 2019

2. Policy framework on career orientation

A key role in the creation of the strategic framework and system of career guidance and counseling in Serbia is played by the Strategy for Career Guidance and Counseling in the Republic of Serbia, which was adopted in 2010. This strategy promotes the idea that career guidance and counseling is more than just the initial choice of school and profession and emphasizes that it is a lifelong process in which individuals achieve personal development in education, improve their employability and manage their careers (Euroguidance¹¹; IPA, 2023; Official Gazette of the RS, No. 16/2010).

Important elements of the strategic framework for the development of career guidance in Serbia also include:

- The Strategy for the Development of Education and Upbringing in the Republic of Serbia until 2030;
- The National Youth Strategy for the period 2015–2025;
- The Employment Strategy in the Republic of Serbia for the period 2021–2026 and the accompanying Action Plan for the period 2021–2023.

Among the laws, the following are particularly significant:

- The Law on the Foundations of the Education System in the Republic of Serbia (2021)
- The Law on Primary Education and Upbringing (2021)
- The Law on Secondary Education and Upbringing (2021)
- The Law on Higher Education (2021)
- The Law on Adult Education (2020)
- The Law on Dual Education (2020)
- The Law on the National Qualifications Framework of the Republic of Serbia (2023)
- The Labor Law (2017)
- The Law on Youth (2022)

Among the other legal acts regulating this area, the aforementioned Rulebook on the Standards of Career Guidance and Counseling Services (2019) is of particular importance. This rulebook includes four sets of standards: standards for career management skills, standards for career practitioner competencies, standards for the organization of services, and program standards. An improved version of these standards is currently being developed as part of the project "Support to the Reform of the Dual System of Secondary Vocational Education and the National Qualifications Framework in the Context of Lifelong Learning in Serbia". Experts from the Institute of Pedagogy and

¹¹ https://euroguidance.rs/karijerno_vodjenje/kvis_u_srbiji/zakonski_okvir_kvis/

Andragogy at the Faculty of Philosophy, University of Belgrade are involved in this work, with the support of the Office for Dual Education and the National Qualifications Framework of the Republic of Serbia and with financial support from the Swiss Agency for Development and Cooperation (SDC).

Among the legal acts, there are no documents that specifically regulate career guidance and counseling in the forestry sector. The Strategy for the Development of Forestry in the Republic of Serbia (2006) states the general need for the development of a forestry education strategy and the establishment of an advisory body for forestry education and training (Official Gazette of the RS, No. 59/2006).

3. Career orientation delivery and stakeholder involvement

The education system in Serbia consists of preschool, primary, secondary, and higher education. Compulsory education lasts 9 years: nine months of pre-school education and 8 years of primary education. Children start compulsory education at the age of 5-6 and complete it at the age of 14-15 (Eurydice¹²).

There are primary schools, primary ballet and music schools, and primary for students with disabilities (Official Gazette of the RS 129/2021). Schools can be public or private. Public primary and secondary schools are free of charge. Secondary education takes place in high schools (4 years) or vocational schools (education – 1 to 2 years, three and four-year schooling), art schools, mixed schools (grammar school and vocational or art school) and schools for students with disabilities (Official Gazette of the RS, No. 129/2021). Secondary education is still not compulsory in Serbia (Official Gazette of the RS, No. 63/2021). After completing a four-year grammar school or vocational school, in addition to the possibility of employment, one also acquires the prerequisites for admission to higher education (Official Gazette of the RS, No. 129/2021).

Dual education is an *"implementation model in the secondary vocational education system in which knowledge, skills, abilities and attitudes are acquired, refined and developed through theoretical instruction and practice at school and learning through work with an employer in accordance with the qualification standard and curriculum and teaching plan"* (Official Gazette of the RS, No. 129/2021).

Among the vocational high schools in Serbia, there are five schools for forestry technicians (one of which offers a three-year program for the forestry profile), with an average female participation rate of 12% (Fem4Forest, 2021).

The academic study system is organized at three levels:

- Bachelor and undergraduate studies – last 3-4 years, 180 to 240 ECTS credits;

¹² <https://eurydice.eacea.ec.europa.eu/national-education-systems/serbia/overview>

- Master's and specialist studies – last 1-2 years, 60 to 120 ECTS credits;
- Doctoral studies – a minimum of three years of study or 180 ECTS credits (Eurydice).

In Serbia, there is one Faculty of Forestry, within the University of Belgrade, which was founded more than 100 years ago. According to the data for the period from 2010 to 2020, the average percentage of women among graduated forest engineers was 21%, with the highest percentage (33%) recorded in 2017 (Fem4Forest, 2021).

Adult education in Serbia is organized in both the formal and non-formal sectors. Within the formal sector, there are primary schools for persons over 15 years of age, based on the framework of basic functional education for adults, as well as vocational schools that provide training, requalification, and reeducation for adults in various fields and profiles in order to create employment opportunities or further education. In the non-formal adult education sector, there are a variety of programs and opportunities for career development. This sector includes accredited organizations known as "publicly recognized organizers of adult education activities". They offer training (including for the acquisition of qualifications and development of career management skills) and validation of prior learning - in accordance with the standards set by the Serbian Qualifications Agency and the Ministry of Education.

In primary school, the observation of student preferences and career choice support is carried out by a professional guidance team consisting of teachers and professional staff in accordance with the Law on Primary Education and Upbringing (2021). In secondary schools, career guidance and counseling teams are formed, consisting of teachers and professional staff (in accordance with the Law on Secondary Education and Upbringing, 2021). They inform and advise students and parents about educational opportunities and the requirements of the labor market, monitor developments and encourage students to evaluate their own preferences and aspirations.

The Law on Higher Education (2023) stipulates that career guidance and counseling for the students of the University of Belgrade is provided by the Career Development Center of the University of Belgrade, whose main task is *"to help the students of the University of Belgrade develop the knowledge and skills that are important for them during their studies and in their job search; to help them gain professional experience and knowledge of the business world during their studies; and to prepare students for a successful transition to the next phase of their career development after graduation"*) <http://www.razvojkarijere.bg.ac.rs/node/174>).

The Law on Dual Education (2020) provides for the establishment of a team in secondary vocational schools to implement the CGC; the team is to be made up of representatives from the school, professional associations, local government and employers.

Table 1. Key service providers of CGC in the career orientation system in Serbia

Macro level	Education	Youth	Employment	Industry	Civil society
Ministry of Education	Primary schools	Youth organizations	National Employment Service offices	Companies	NGOs
Ministry of Tourism and Youth	Grammar schools		Accredited private employment agencies	Private business entities (outsourcing)	Providers of non-formal education (e.g. Belgrade Open School)
Ministry for labor, employment, veterans' and social affairs	Vocational schools				
National employment office	University Centers for CGC				
National qualifications Agency	Publicly Recognized Adult Education Activity Organizers				
Office for dual education and National qualifications					

In addition to the providers listed in Table 1, the key players include the Euroguidance Center Serbia and several reform projects: Education to Employment (E2E); the IPA 2020 project, in which, among other things, new approaches and active employment policy

programs are to be implemented that also target long-term unemployed women. Looking at the target groups of the providers listed above, women appear as users in the following cases: Groups with weak employment potential (in the area of "employment"), then the group of young women and within the user groups where women can be assumed to be represented in slightly higher numbers — single parents, victims of violence, recipients of financial social assistance (IPA, 2023).

There are numerous cases of cross-sector collaboration between CGC providers. For example, cooperation between vocational schools and offices of the National Employment Service and "Job Info Centers"; between vocational schools and business organizations; between guidance organizations and companies; between schools and non-governmental organizations and others (IPA, 2023).

4. Strengths, Weaknesses, Challenges, and Barriers in National Career Orientation Systems

Strengths:

- the existence of Service Standards for Career Guidance and Counselling (CGC) at the national level and the ongoing work to improve them;
- the functioning of the Career Development and Student Counselling Center at the University of Belgrade;
- cooperation between the Career Development and Student Counselling Center at the University of Belgrade and the Faculty of Forestry;
- the examples of CGC activities at the University of Belgrade - Faculty of Forestry (e.g.: the info point of the Career Development Center, "Meeting of Profession and Science" – as an example of good practice);
- the analysis of relevant statistical data on the forestry sector, employment in forestry, educational institutions in this sector and the development of the number of students at the Faculty of Forestry (in the last three years, a decrease was observed from 1,602 in 2022/2023 to 1,018 in 2024/2025; <https://opendata.mpn.gov.rs/otvoreni-podaci/visoko-obrazovanje.html>) can provide a good basis for the development of CGC strategies in this area and for the University of Belgrade - Faculty of Forestry.

Weaknesses:

- the Standards for CGC at the national level are too general, making it difficult for individual institutions to develop and improve CGC activities;
- unregulated funding for CGC activities at the national level;

- the lack of a Center for Career Development and Student Counseling at the Faculty of Forestry¹³;
- lack of an updated strategy for forestry development (the last one dates back to 2006);
- dispersion of data relevant for CGC strategy development at the University of Belgrade-Faculty of Forestry or in the forestry sector across different databases and sectors.

Challenges and Barriers:

- the main barrier, and challenge to improving the CGC system is the enhancement of CGC Service Standards, which is currently underway. The high degree of generality of the standards limits the ability to assess the impact of CGC in the area of career management skills;
- there is a lack of evaluation of these activities in practice, as the most recent analysis shows (IPA, 2023).

Opportunities for Synergy and Improvement:

- development of the CGC strategy based on the current status and forecasts for the development of the forestry workforce by qualification levels, taking into account trends related to the unequal position of women at different qualification levels in the labor market and the expected decline in the employment of personnel with lower qualification levels (GIZ, PMD, 2022);
- establish a database of examples of good practice in career services in Serbia and other countries, which would be accessible to career practitioners; the National Employment Service and the civil sector in Serbia have particular experience in this area with marginalized groups.

There are numerous opportunities for cooperation with other countries and organizations to improve the CGC system:

- cooperation between universities in the region and beyond, in the exchange of students, teaching staff, sharing best practices, and in initiating projects or initiatives;
- cooperation between forestry faculties from different countries, sharing best practices and enhancing career development opportunities for students;
- cooperation between the Faculty and vocational secondary schools in the field of forestry in the country, with a particular focus on supporting the transition of secondary school students to higher education;

¹³ At the University of Belgrade, there are such centers at certain faculties, such as the Career Development Center at the Faculty of Philosophy: <https://czrkff.rs/> or at the Faculty of Organizational Sciences: <https://www.fonovcentar.rs/>.

- cooperation between the Faculty and National employment service, private employment agencies and employers¹⁴ to provide students with internships, “job shadowing” and career development that meets the needs of the labor market;
- cooperation between the Faculty and the Chambers of Commerce and the Chamber of Forest Engineers to monitor trends and align career policies and support students in employment and career development.

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¹⁴ In 2020, the Employers' Council was established at the Faculty of Forestry, University of Belgrade: <https://www.sfb.bg.ac.rs/fakultet/savet-poslodavaca/>

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Annex 8:

Description of the structure of the national career orientation system in Slovenia

1. Career orientation-related terminology used at country level

Career orientation refers to the *systematic development of self-knowledge competences, the search for information that helps people to make informed decisions, choose a career path and plan and manage their careers* (Sentočnik, 2012; in Rupar et al., 2021).

In the field of career orientation in Slovenia, different terms are used. The Law on the Organisation and Financing of Education (2017; in Gregorčič Mrvar et al., 2021) uses the term “occupational counselling”; the White Paper on Education in the Republic of Slovenia (2011; in Gregorčič Mrvar et al., 2021) uses the term “career orientation”; and the guidelines for the school counselling service uses the term “occupational orientation” (Programme Guidelines, 2008; in Gregorčič Mrvar et al., 2021). The different definitions lead to different understandings of the content, objectives and areas, as well as of the ways in which career orientation is implemented in practice. Career orientation encompasses both the promotion and the acceptance of the personal and social development of the learner (Gregorčič Mrvar et al., 2021). In the operational documents in the field of education and training, it is possible to trace a discrepancy in the very definition of lifelong career orientation in the Slovenian educational space, a discrepancy that is reflected both at the level of the use of terminology, as well as at the level of content and objectives. Thus, as one of the obstacles to the successful implementation of career orientation, school counsellors cite the lack and uniformity of objectives among different actors both at the school level (management, school counsellors, teachers, parents) and at the broader systemic level (Štramfel and Lovšin, 2015).

2. Policy framework on career orientation

There are two established guidance and counselling systems in Slovenia that provide guidance and counselling:

- Education and training institutions,
- The Employment Service of Slovenia and other institutions in the field of career orientation.

Young people have access to guidance by school counsellors in primary and secondary schools and career counsellors at universities' career centres as well as by career counsellors in any of 12 Career centres of the Employment Service of Slovenia. Adults can receive free career counselling at Career centres of the Employments Service of Slovenia or educational guidance at 17 regional adult education guidance centres operating in the frame of the Slovenian Institute for Adult Education.

Career orientation service provision and development's main national authorities in Slovenia are:

- Ministry of Labour, Family, Social Affairs and Equal Opportunities and Ministry of Education are responsible for legislation in the field of guidance service provision and development.
- National Education Institute is implementing and monitoring innovative programmes and practices in schools and develops guidelines for school counselling service for primary and secondary schools.
- Employment Service of Slovenia is one of the key Slovenian labour market institutions with the following activities: employment advice and job broking, life-long career orientation, unemployment benefit and unemployment insurance, implementation of active employment policy measures and programmes, issuing of work and employment permits for foreign workers, preparation of analytical, development and other professional materials and labour market information.
- Institute of the Republic of Slovenia for Vocational Education and Training develops vocational standards for vocational education and training programmes.
- Slovenian Institute for Adult Education is the main national institute for research and development, quality and education, guidance and validation, promotional and informative activities in the field of adult education.
- Public Scholarship, Development, Disability and Maintenance Fund of the Republic of Slovenia provides career orientation of employees by strengthening human resources departments in companies and consequently providing their employees accessible and qualitative career development.
- The lifelong career orientation expert group (a national guidance forum) is a cross sectoral group that discusses and puts forward to The Ministry of Education recommendations on national and European policy developments in the field of lifelong career orientation (Euroguidance, n.d.)

The Programme Guidelines for School Counselling in Primary Schools (2008; in Pečjak et al., 2019) state that vocational or career orientation is one of the tasks of school counsellors. School counsellors work together with teachers in vocational education,

which aims to help pupils develop the perceptions, skills and knowledge that enable them to make appropriate choices in the transition from primary to secondary school. They also inform parents and pupils about further education and employment opportunities, which they can do through lectures and visits to various organisations. In the final two years of school, they give at least two lectures per year per department for pupils, and at least two lectures per year for parents of pupils in the last two years of school. The Programme Guidelines also include as a task the identification of pupils' characteristics, such as abilities, skills, interests, experience, which are necessary for a career or further education. They also provide individual or group career counselling for pupils, and parents may also be involved. They must conduct at least one counselling interview with each pupil (or with their parents) in Year 9 (last year of primary school), interviews may also be conducted in previous years.

Lifelong career orientation is also mentioned in Article 18 of the **Labour Market Regulation Act (LMRA)**, which states (4) that activities aimed at pupils, students and their parents may also be provided as lifelong career orientation. Lifelong career orientation comprises activities that enable the identification of competences, abilities and interests for decision-making in education, employment, training and career choices, and provide life path guidance so that individuals learn and use these abilities and competences. Lifelong career orientation also includes career orientation for young people (National Assembly of the Republic of Slovenia, 2010).

3. Career orientation delivery and stakeholder involvement

Overview of the Slovenian school system

The school system in Slovenia consists of primary, secondary and tertiary education. Primary education is provided by public and private kindergartens, primary schools, adapted primary schools, institutions for the education of children with special needs and music schools (Ministry of Education, 2024). Primary education in Slovenia is compulsory and lasts 9 years. Children are enrolled in first grade of primary school when they reach the age of 6 in a calendar year, and their schooling may be postponed for up to one year. Primary education is considered to be completed when pupils successfully complete the ninth grade, while the primary education obligation is fulfilled after nine years of education. Parents can choose whether their child attends a public or private primary school or is educated at home. The school year starts on 1 September and ends on 31 August, with classes finishing on 24 June, except for pupils in ninth grade, who finish on

15 June. Primary school is divided into three educational periods (triads), each consisting of three grades. A maximum of 28 pupils can be in a class (Ministry of Education, 2024). Secondary education is provided by secondary schools and grammar schools (slo. gimnazije). Secondary education is divided into general education, vocational-technical education and secondary professional or technical education. Tertiary education is provided by public and private institutions. It consists of higher post-secondary vocational education and higher education. Higher post-secondary vocational education is provided by higher vocational colleges, while higher education is provided by faculties, academies and independent higher education institutions (Ministry of Education, 2024).

Career orientation for children and youth in Slovenia

Career orientation activities are particularly important in terms of choosing the right secondary school or programme, as a lack of clear intentions can lead to dissatisfaction, lack of motivation, lower academic performance and ultimately to dropping out of education (Gregorčič Mrvar et al., 2021).

In Slovenia, career orientation is provided by various organisations, such as schools, universities, career centres and education centres, as well as the Employment Service of the Republic of Slovenia.

Career orientation in schools

Organisation and Financing of Education Act (Article 67) defines that a counselling service shall operate at a public preschool or school to counsel children, apprentices, university students, teachers and parents; and to plan, monitor and evaluate the development of a preschool or school and provide education in cooperation with preschool teachers, teachers and the school leadership; and provide career orientation. The counselling service shall participate in the development and implementation of individualised programmes for children with special educational needs. A counselling service shall be provided by counselling specialists, namely psychologists, pedagogues, social workers, social pedagogues, and special pedagogues. In providing career orientation, the counselling service shall cooperate with the Employment Service of Slovenia. Career orientation in Slovenian schools is organised as a school counselling service. This work is defined by the guidelines for career orientation service, according to which career orientation includes information on careers, diagnostics, career counselling and career education as well as guidance activities for parents. Apart from career counselling, school counselling services also cover learning problems, special needs, identifying talented students, self-development, and personal and social development, as well as coordination of dropout prevention.

The school counselling service in primary schools has several tasks as a standard in the following fields: learning and teaching; school culture, education, organisational environment and discipline; physical, personal (cognitive and emotional) and social development; education; and career orientation and socioeconomic problems. Career orientation includes vocational information, diagnostics, vocational guidance, career education, placement, advocacy, providing feedback and monitoring.

The school counselling service in secondary schools has several tasks as a standard including guidance with students; guidance with teachers and parents (lectures, group work, individual consultations); planning, monitoring and evaluation of schools and guidance in schools (participation in preparation and implementation of open information days, the annual work plan, monitoring and reporting of guidance and counselling service); development and analytical tasks on needs for guidance; and advancements as well as psychological and social problems of students.

The school counselling service coordinates guidance and counselling, which are not included in the school curriculum as subject-based career education but integrated with other subjects as a cross-subject activity integrated in all subjects, including extracurricular activities (Employment Service of Slovenia and Euroguidance Slovenia, 2023).

Career orientation outside of school

Career counsellors in career centres of the Employment Service of Slovenia provide free guidance for young people as well. In the past, for example, the European Union from the European Social Fund and the Republic of Slovenia have co-financed two projects, namely the “Career Centre for Youth - VšečkAM and GREM project” and the “Karierni Plac - Career Centre for Youth project”. The projects were implemented under the Operational Programme for the Implementation of the European Cohesion Policy 2014-2020, with the priority axis 10. "Knowledge, skills and lifelong learning for better employability", priority investment 10.1 "Improving equal access to lifelong learning for all age groups in formal, non-formal and informal forms of learning, acquisition of knowledge, skills and competences for the workforce and promotion of informal forms of learning, including through occupational counselling and validation of acquired competences", specific objective: 10.1.3 "Promoting flexible forms of learning and support for quality career guidance for young people in education at all levels of the education system". The project “Career Centre for Youth (KCM) - VšečkAM in GREM” was implemented in the area of the Eastern Slovenia Cohesion Region, while the project “Karierni Plac - Career Centre for Youth” was implemented in the area of the Western Slovenia Cohesion Region. The projects provided various career orientation activities for primary and secondary school

pupils, their parents, carers and professionals. Young people aged between 6 and 19 were offered individual information, career testing, career counselling on career planning and management, as well as professional support in career decision-making and school choice. Parents, on the other hand, benefited from expert lectures and support activities to facilitate their children's career planning. School professionals were able to attend educational expert consultations and events (Karierni center za mlade, 2024; Karierni plac, 2024). With the end of the project, the activities are being implemented on a reduced scale and are also chargeable.

The Commerce Chamber of Slovenia, Employment service of Slovenia and National Education Institute are running the project “Career Day” in order to promote most promising future professions to pupils and their parents. Pupils and their parents are invited to visit different organisations and learn about the occupations. The project was piloted at the end of 2014. After good feedback and major organisational improvements to the online platform, it is being adopted as the part of the guidance system for students choosing their future career (European Commission, 2023).

Career orientation tools and questionnaires

In Slovenia, various tools are available to help students with career orientation, such as the Multifactorial Battery of Tests (MFBT). The eMFBT is an online tool to help students in the final years of primary school to make decisions about further education and subsequent career choices. The test results help individuals to learn about their own abilities and help them to build a realistic self-image. The eMFBT helps students to identify their areas of strength and to understand how certain abilities relate to educational programmes and occupations. Up to and including 2012/13, the MFBT was administered to all pupils in the penultimate year of primary school, so testing was generational. Until 2007/8, the system of awarding Zois scholarships for gifted pupils was based on the results of the MFBT test. Today, the MFBT and eMFBT tests are used to a lesser extent (VKO točka, 2020).

Students are also provided with various questionnaires, such as the Decision Styles Questionnaire, the Career Decision Difficulties Questionnaire (Rupar et al., 2021), and the Where and How Questionnaire, which is a tool for exploring, developing and refining career paths. A list of suitable professions is generated based on the answers to the interest-related questions. The Where and How also allows exploring different professions, obtaining additional information, comparing the proposed professions and drawing up a career plan (Euroguidance, n.d.).

4. Strengths, Weaknesses, Challenges, and Barriers in National Career Orientation Systems

Strengths:

Slovenia has developed a robust **framework for career orientation**, supported by **policies** and **diverse stakeholders**. The integration of services under the Ministry of Labour, Family, Social Affairs and Equal Opportunities, and the Ministry of Education ensures a consistent and accessible approach. Key institutions like the National Education Institute, the Employment Service of Slovenia, and regional adult education guidance centres actively contribute to career orientation efforts.

Tools such as the Multifactorial Battery of Tests (MFBT) and the "Where and How Questionnaire" provide personalized guidance, helping students understand their strengths and make informed decisions.

Career counsellors in adult education guidance centres have undergone specific training to provide guidance in the field of adult education. The Employment Service of Slovenia provides multidisciplinary 160-hour modular **training for career counsellors** in lifelong career orientation from employment and education sectors in order to provide career counsellors with the needed knowledge on useful working methods and their theoretical background. It is divided into four modules (career orientation, guidance, lifelong guidance career tools and working with group in career orientation) for four different fields of practice (employment counsellors, education counsellors, human resources and NGO) (Euroguidance, n.d.).

Project-based initiatives, such as "Career Day" and regional career centres like Karierni plac, offer students **practical exposure to diverse career opportunities**. Pupils can explore various career paths during career days, where secondary and tertiary schools showcase their programs, either at dedicated events or directly in primary schools. In addition to educational institutions, employers also participate, presenting career opportunities and professions available in their industries.

Weaknesses:

Lifelong career orientation **is not systematically included in the curricula of primary schools** (Sentočnik, 2012; and Rupar et al., 2021). An analysis of the curricula of compulsory subjects in both primary and secondary schools shows that there is very little teaching content in the field of lifelong career orientation. Various projects address this topic, but the **project-based** way of carrying out the various activities does not necessarily

address the systemic regulation of the field itself. It is noted that **school counsellors have less and less time to provide quality career counselling**, as they are more concerned with educational problems, learning difficulties and special needs. Gabor (2011; in Gregorčič Mrvar et al., 2021) notes that career orientation in primary schools is **limited to a narrow range of activities**. The curricula of primary schools do not systematically include lifelong career orientation. Thus, pupils are not systematically introduced to career development in the first two triads of primary school, and data suggest that it is more difficult to get their attention to lifelong career orientation content in the last triad (Štremfel, 2016).

Slovenia **does not have an official educational programme at undergraduate (bachelor) and master's level for career counsellors**, as many other countries do (Rupar et al., 2021). Career counsellors have university degree in relevant field (psychology, social work, pedagogy, etc.) with additional professional training leading to a professional exam in lifelong career orientation (employment sector) or a professional exam in education (education sector).

Challenges and Barriers:

The effectiveness of Slovenia's career orientation system is hindered by several challenges and barriers that impact its accessibility, inclusivity, and alignment with evolving societal and labour market needs. One significant challenge is the **inconsistency in terminology and objectives among various stakeholders**. The lack of uniform definitions and goals creates confusion in the implementation of programs, reducing their overall effectiveness and coherence.

Resource disparities between urban and rural areas further exacerbate inequities in access to career orientation services. Students in less developed or remote regions have **limited access** to career counselling, widening the gap between urban and rural youth in career preparation. Addressing this imbalance remains a critical challenge for ensuring equal opportunities for all.

Finally, the **systemic exclusion of lifelong career orientation from primary and secondary school curricula** diminishes the long-term impact of career guidance. Students are often introduced to career planning too late in their educational journey, reducing its effectiveness in shaping their aspirations and decision-making skills. Combined with the **lack of specialized degree programs for career counsellors**, this gap highlights the need for systemic improvements to better equip both students and professionals in navigating modern career landscapes.

5. Opportunities for synergy and improvement

The Slovenian career orientation system presents numerous opportunities for enhancing collaboration, inclusivity, and alignment with modern labour market demands. **Strengthening international partnerships**, particularly within the framework of Erasmus+ and Euroguidance, offers avenues for resource sharing and the exchange of best practices with other EU countries. These partnerships can facilitate the development of joint training programs and access to innovative tools and methodologies.

Leveraging EU funding, particularly from programs like the European Social Fund, can further support the expansion and modernization of career orientation services. This funding can be directed toward developing digital platforms, integrating AI-driven technologies, and creating **mobile career counselling units** to improve accessibility in rural and underserved areas.

Collaboration with private sector stakeholders, including industry leaders and professional associations, holds potential to better align career orientation efforts with labour market needs. Such partnerships can enhance the relevance of guidance programs, introduce mentorship opportunities, and provide students with real-world insights into emerging professions.

The inclusion of targeted initiatives to **address gender disparities** is another critical opportunity. Developing campaigns and programs that encourage girls and young women to pursue careers in underrepresented fields, such as forestry, STEM, and technology, can contribute to greater inclusivity. These initiatives should challenge traditional societal norms and empower students to explore diverse career paths.

Lastly, the **integration of lifelong career orientation into school curricula** and adult education systems can ensure a more systematic and holistic approach. By introducing **specialized undergraduate and master's degree programs in career counselling**, Slovenia can build a well-trained workforce capable of addressing the evolving needs of students and adults. Emphasizing lifelong learning opportunities will also allow individuals to navigate career transitions and skill development effectively, supporting both personal growth and economic resilience.

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Annex 9:

Description of the structure of the national career orientation system in Ukraine

1. Career orientation-related terminology used at country level

Professional orientation is complex scientifically justified system of forms, methods and tools, aimed at assisting to the person in active conscious professional self-identification in labour development.

Professional orientation consists of *professional information, professional consultation, professional identification, professional selection* and *professional adaptation*.

Career consultation (rather new term): professional (licensed) activity to help (young) people understand their preferences for future studies or career path.

Mentorship system – involving experienced employees as mentors for young people to develop professional skills (for example, this system operates within the internship program "*Academy of First Opportunities*" at the Lviv Regional Military Administration, Lviv region). **Practical internship** – short-term employment of young people to gain experience and understand the specifics of work in the field chosen by the youth.

Non-formal learning – the process of education, usually done following educational programs but does not foresee awarding of state-recognized educational qualifications at the level of education, however may end with the awarding of professional and/or partial educational qualifications. Non-formal learning can be obtained via such formats as trainings, master-classes, courses, workshops, webinars etc.

Informal learning (self-education) – the process of education, based on self organized obtaining of certain competences, particularly during daily activities, connected to professional, civil society or other activity, family or leisure.

1.3.1 Key terms of modern education (source <https://osvita.diia.gov.ua/en/about>)

Lifelong learning – continuous acquisition of new knowledge and the development of new skills. The modern world is changing too fast for what you learn at school or university to remain relevant for long

Upskilling/Reskilling – improving/getting new skills.

Simulators – an innovative method in education, allowing experiencing the features of different professions.

IT-Studios – computer science educational courses for different target groups, in case of Diia.Education – for schoolchildren. The subject now covers digital literacy, media creativity, programming, and data analysis, and includes elements of gamification, research and project-based approaches, question-based learning, and the use of various types of information resources to solve problems.

Digigram – comprehensive digital literacy test. The tasks are based on European standards and adapted by Ukrainian experts. The certificate of completion of the Digigram has already become an important addition to a professional's resume as proof of digital literacy. To prove your English skills, an employer needs you to pass IELTS or TOEFL. And to prove your digital skills, it's enough to take the Digigram.

2. Policy framework on career orientation

List of normative documents, which regulate professional orientation in the educational institutions in Ukraine is derived from (in Ukrainian): <https://www.zpl.zt.ua/holovna/struktura/center-for-professional-karri/normative-documents-which-regulate-the-implementation-of-the-proforma-tion-in-the-light/>.

- Constitution of Ukraine. *Конституція України*.
- Law of Ukraine "On the education". *Закон України «Про освіту»*.
- Law of Ukraine "On the professional-technical education". *Закон України «Про професійно-технічну освіту»*.
- Concept of the state system of professional orientation of the population. *Про затвердження Концепції державної системи професійної орієнтації населення*.
- Concept of specialized (thematic) education in high school. *Концепція профільного навчання у старшій школі*.
- Regulations on professional orientation of young people in school studies. *Положення про професійну орієнтацію молоді, яка навчається*.
- Regulations on the professional orientation premise. *Положення про кабінет профорієнтації*.
- Law of Ukraine "On the assistance of social establishment and development of youth in Ukraine". *Закон України «Про сприяння соціальному становленню та розвитку молоді в Україні»*.
- Resolution of the Cabinet of Ministers of Ukraine of April 15, 2013 No. 306 "On approval of the Procedure for forming a state order for the training of specialists, scientific, scientific-pedagogical and labor personnel, advanced training and retraining of personnel". *Постанова Кабінету Міністрів України від 15 квітня 2013 р. № 306 «Про затвердження Порядку формування державного замовлення на підготовку фахівців, наукових, науково-педагогічних та робітничих кадрів, підвищення кваліфікації та перепідготовку кадрів»*.
- Resolution of the Cabinet of Ministers of Ukraine dated May 20, 2013 No. 363 "On approval of the Procedure for placing state orders for the training of specialists, scientific, scientific-pedagogical and labor personnel, advanced training and retraining of personnel". *Постанова Кабінету Міністрів України від 20 травня 2013 р. № 363*

«Про затвердження Порядку розміщення державного замовлення на підготовку фахівців, наукових, науково-педагогічних та робітничих кадрів, підвищення кваліфікації та перепідготовку кадрів».

- Ministry of Education and Science of Ukraine. Education in Ukraine under martial law. Міністерство освіти і науки України. Освіта України в умовах воєнного стану.
- Law of Ukraine "On employment" - <https://zakon.rada.gov.ua/laws/show/5067-17#Text>.
- Order of the Ministry of Social Affairs "On Approval of the State Standard of Social Support Services During Inclusive Education" - <https://zakon.rada.gov.ua/laws/show/z0072-22#Text>.

3. Career orientation delivery and stakeholder involvement

Interventions of the professional orientation system:

Most of the activities within the professional and career orientation system in Ukraine are rather optional, rooted in the open market competition among the educational institutions for future students. Therefore, very often some of the career opportunities are simply not known to the school students and profession seekers due to their low prestige, low salary level, or low activeness of the educational institutions in attracting potential students.

It is important to note that the Ministry of Education and Science of Ukraine and other players in the field of informal education during the last several years intensified their efforts in creating innovative materials that might help high school students consciously choose their dream profession, become successful in life and fulfill themselves in Ukraine. However, in our opinion, for the time being, they are not yet widely used and applied.

At the level of schools: pupils are exposed to the professional orientation and career advertisement, promoted by certain educational institution, e.g. culinary professional school or polytechnic college, or, in our case: forestry college or university.

Activities, used as professional orientation in schools or outside of schools, include:

1. Personality tests; interests, skills and predisposition tests etc.
2. Career fairs, open days in colleges and at enterprises, and professional orientation forums. Such activities provide the possibility for direct contact with representatives

of different fields, and companies, to see the profession from the inside and better understand career opportunities. Can be both online and face-to-face.

3. Thematic classes, interactive games and meetings with professionals. Usually such activities are held at the early education stage, also including kindergartens (meetings with firefighters, policemen, doctors etc.)
4. Career days, similar to thematic classes.
5. Career consultations (mostly paid services), usually for high school students.
6. Meetings with role models or professional school and university alumnis.

Regarding forestry professional orientation, there are practices, that are used as extra-curricular activities, called **“School Forestries”**, which are actually inter-school and forestry courses, with learning program and hours of theoretical and practical work about the forest (usually attended by pupils of 5th-10th grades).

Another example of environmental and forestry professional orientation, which to our knowledge is a single case, is the extra-curricular Sustainability course in one of the schools in Lviv region, explaining throughout one year of learning various issues of environmental values, types of environmental protection, sustainability practices etc.

At the level of professional/vocational schools and university the career orientation is carried out in 2 main ways:

- information is placed on the websites of most of the universities, colleges, and vocational schools under the sub-section “Admission” or “For Entrants” addressing various aspects of the issue. E.g.: National University of Life and Environmental Sciences, <https://nubip.edu.ua/entrant> Zakarpattia Forestry Professional College, <https://zltk.com.ua/>
- institutions provide information about the professions and qualifications for which they provide education and organize activities, events, and promotional infrastructure for potential students in order to inform the wider public about these opportunities. For this they organize events, also described in the **“At the level of schools”** subsection at the p. 3, such as open days, career days, and meetings with professionals, but also use such activities as regular master classes, e.g. in the case of culinary schools (<https://www.facebook.com/BPLSP1/posts/pfbid03x49p34CwB4NZs1quGvbMSzohtZJbqMLqs4Y8iXyA27QBPPRtdrfxVEbUpnCRWMcl>); or demonstration of products made by students of the schools, as in case of polytechnic college (Mukachevo), where they installed the bench with solar panels, chargers and LED, completely produced by the students to show opportunities provided and professions taught at the college.

At the level of the Ministry of Education and Science of Ukraine: The Ministry's website, in the sub-section "For Students and Parents", has a tab "Choose Your Dream Career", which links to the website of the All-Ukrainian Project on Career Guidance and Development <https://hryoutest.in.ua/>. It contains several online tools for vocational orientation (all free of charge, open to students of grades 7-11, teachers and practical psychologists of general secondary schools): TEST YOURSELF: a vocational guidance test to determine aptitude for different areas of professional activity.

GET A CONSULTATION FROM A CAREER COUNSELLOR: innovative technology of the flipped call centre, personalised advice from a professional career counsellor.

GET TRAINED: video lectures and multimedia courses in SCORM format about labour market trends in Ukraine and the world, one's personality type, and much more.

'CAREER ANXIETY STOP!': A SCORM course on choosing a profession without gender stereotypes designed to expand knowledge of the world of professions and help to choose the dream profession, breaking down traditional thinking and gender stereotypes.

VISIT SUCCESSFUL COMPANIES: an opportunity to learn more about the most powerful Ukrainian companies and various professions from the best specialists by 'visiting' online tours. Among many videos, only one is relatively tangential to the forestry industry, it is about the БіЯр company – a furniture manufacturer in Ukraine (<https://www.youtube.com/watch?v=QsDMRZP1VM0>).

WATCH A CAREER GUIDANCE LESSON: the career guidance lesson with the participation of famous Ukrainians, watched live by more than half a million students, entered the National Book of Records.

SCHOOL OF CAREER COUNSELLOR: training for teachers, lecturers, school psychologists and those who want to master the profession of career counsellor.

Other professional orientation sources and actors:

Diia.Education (Diia.Osvita) - Ukrainian **Edutainment** Platform for Reskilling and Digital Literacy where everyone can gain important knowledge free of charge for their success. The great goal of Diia.Education is not only to make a breakthrough in digital knowledge but in skills and abilities relevant to the modern world in general.

Diia.Education proposes a Career orientation test (<https://osvita.diia.gov.ua/en/prof-orientation-quiz>) to find out which professions suit the person best (94 questions, an estimated duration of 30 minutes); career simulators in Ukrainian and English

(<https://osvita.diia.gov.ua/en/simulators>) with 64 professions to choose from, however no simulators found related the profession of forester.

MOOCs and Online education platforms (Prometheus, Golt, EdEra, Laba, Beetroot Academy, VUMonline etc.)

Online education platforms allow access to instruments, such as professional orientation, tests, courses and virtual tours into the profession. It helps understand own preferences and get an idea about conditions of work, tasks which should be performed, organization of the process, access to educational courses, meetings with professionals, instruments for the personalized career plans.

The State Employment Service of Ukraine created the Career Guidance and Development Platform (online, <https://profi.dcz.gov.ua/about/>) on its official website to provide career guidance services remotely.

Also, there is the **system of education grants from the Employment Service** in place in order to attract people to the professions, which currently lack labour force, or are not that popular.

A registered user is given the opportunity to receive free career guidance services in an online format without visiting the employment centre and to make their own career guidance, if there is a need for: choosing (changing) a profession; choosing the future direction of vocational training; determining the propensity for entrepreneurship; assessment of own abilities and skills (Soft Skills); self-development.

Gender-targeted interventions (mainly of re-training): At the moment there are quite a few initiatives aimed at professional trainings of women for traditionally “men” jobs, e.g.: agricultural machinery courses; Golt courses. To be mentioned, several programs that started during the Russian aggression to Ukraine that are aimed at building human capital resilience for Ukrainian recovery and growth: #Iron Women: training women to become wheel loader and excavator operators; #OnTrack: training women to become truck drivers; #BusDrive: training women to become public bus drivers, <https://reskillingukraine.professionalcenter.se/en>.

Involvement of other stakeholders and collaboration initiatives: We have selected few examples, related to our topic of forestry and wood sector:

- Cooperation between UNFU and Ukrainian Furniture Association.
- “School of furniture production”
- Furniture Cluster

Project on Developing Career Guidance and Counseling Education for Ukraine "CARE"

The project is aimed at developing a framework of competencies and a curriculum for the training of a career guidance counselor in Ukraine and introduction of a career and educational counselor into the Ukrainian education system by the end of 2025. It is implemented by the Boris Grinchenko Kyiv Metropolitan University in collaboration with Häme University of Applied Sciences (Finland).

4. Strengths, Weaknesses, Challenges, and Barriers in National Career Orientation Systems

We see the main strength of the professional orientation potential in Ukraine within the forest sector itself, being renewable source of timber and non-timber forest resources, with objectives of sustainability and ecosystem services provision, with a great role in future recovery of the country. At the same point, the weaknesses, related to stereotypes about forestry as "men's" work, bad image of the sector, *based on the criterion of "prestigious/non-prestigious"* low popularity, lack of knowledge about it, especially in urban schools, and relatively low salary level – all this should be addressed, along with utilization of initial strength, in order to create future opportunities.

Another important basic strength is generally wide and developed educational system and network of educational institutions at all levels (preschool, school, professional schools, and colleges, universities).

Currently Ministry of Education and Science is investing into the development of professional orientation system, particularly into the professional and career orientation officers in the educational institutions, equipping of the professional orientation classrooms etc.

At the moment in Ukraine there are several positive practices, aimed at improvement of the image of forestry and role of the sector in country economy.

1. Program "Forest in the smartphone" – digital initiative of the State Forest Resources Agency of Ukraine, which allows citizens to receive information about forest resources online. The aim is to ensure transparency, but for us it is important, that this source also provides information about details of the professions, related to forest management system.

2. National program “Green Country” – aimed at planting of 1 million trees in Ukraine by 2030 in order to increase forest cover area, climate change adaptation and improvement of ecosystem conditions. In our case it is important to popularize forestry and forest management and increase awareness about the forest management system.

3. Joint reforestation program in collaboration with local communities, which improves relations among foresters and local people, increases responsibility of local people for preservation and sustainable use of the resource, increase of knowledge about forest interventions.

4. “EnviroEducation” project” in the Carpathia region – focused on the increase of environmental awareness in the Carpathians via education of school children, students and community representatives.

5. School Forestries, described above, at p. 3.

6. United State Forest Service supported initiative “Young Forest Rangers” aimed at environmental education and forest management training for the school children in Ukraine.

All the above mentioned, in our opinion, works towards making an input in increasing the interest in studying forestry in Ukraine, for all genders.

At the moment main weakness of the professional orientation system lays within the absence of clear minimal professional orientation interventions needed and compulsory at the school level, thus occasional, ad-hock and “selective” character of the professional orientation, when children have a gap in understanding the variety of the professions and are often dependent on the opinion of the parents, activeness of school directors and mentors, local professional schools and universities offers.

Another weakness is related to the absence of modern technologies and online tools, both at school and professional education levels, which limits exposure to high-quality education and skilling.

Lack of youth support program financial resources in order to support professional education of schoolchildren and youth limits opportunities for further professional paths.

Low popularity of the forestry education due to the image of forestry and forest management as well as relatively low salaries and certain stereotypes about hardness of work.

Obviously, at the moment the main challenge for professional orientation and for the labour market in general is the ongoing Russian war against Ukraine. In situations where

long-term planning is challenging due to rapid changes, it is crucial to be adaptable and respond swiftly to unforeseen circumstances. However, maintaining this flexibility can be quite challenging.

However, the challenges and barriers that can be targeted are the following:

- i. Lack of knowledge and understanding among schoolchildren and young people on the careers related to forestry, along with misconceptions and stereotypes, that work against this understanding;
- ii. Low involvement of women in forestry professions that leads to low visibility of successful female professionals that might serve as role models;
- iii. Lack of youth support programs and targeted activities for the youth professional orientation;
- iv. Low level of direct career orientation intervention to the schools of the State Forest Resources Agency of Ukraine and State Enterprise “Forests of Ukraine” (besides the School Forestries).

5. Opportunities for synergy and improvement

In current situation of professional orientation in Ukraine, there definitely are good opportunities for improvement, both in general, and specifically in forestry professional field.

1. Integration of professional orientation activities and events, including innovative interventions, to the school program.
2. Introduction to the school system of the career counselor whos’ task will be accompanying pupils on their personal and professional growth, helping them to identify their interests and potential opportunities. Besides, they have to help a child choose a profession but also to provide them with the skills to plan their own career.
3. Cooperation between Employment service, industry representatives and professional and higher education institutions.
4. Support to women in forestry professions.
5. Adding promotional materials to the existing online platforms with information about forestry careers.

Resources:

1. <https://ips.ligazakon.net/document/REG734> On the approval of the Regulations on the professional orientation of youth in school studies. Про затвердження Положення про професійну орієнтацію молоді, яка навчається.
2. <https://osvita.diia.gov.ua/prof-orientation-quiz>. Professional orientation test, 94 questions.
3. <https://osvita.diia.gov.ua/en/tests>. Diia.Education
4. <https://www.zpl.zt.ua/holovna/struktura/center-for-professional-karri/normative-documents-which-regulate-the-implementation-of-the-proforma-tion-in-the-light/>. List of normative documents which regulate professional orientation in Ukraine.
5. https://uied.org.ua/wp-content/uploads/2020/12/konczepczya-profori%D1%94ntaczii%CC%88-dlya-gromadskogo-obgovorenniya-16_12_20-.pdf Professional Orientation in the New Ukrainian School. Професійна орієнтація у новій українській школі.
6. <https://profi.dcz.gov.ua/> Career Guidance and Development Platform, The official website of the State Employment Service of Ukraine. Платформа з профорієнтації та розвитку кар'єри, Офіційний Інтернет-портал Державної служби зайнятості України
7. <https://rise.articulate.com/share/8qG-O7eXx8ZKf5jwFWO3VkSalfRC9eBB#/> Ukraine - 2035: Human Capital and Labor Market, CHAPTER III. Professional orientation of the future.
8. <https://communities.org.ua/en/novyny/all-ukrainian-association-of-communities-together-with-the-ministry-of-education-and-science-discussed-the-reform-of-specialized-secondary-education-video/>
9. <https://imzo.gov.ua/2022/10/11/nakaz-mon-vid-17-03-2022-252-pro-orhanizatsiiu-ta-provedennia-u-2022-rotsi-komunikatsiynoi-kampanii-osvitnikh-reform-v-chastyni-proforiientatsiynoi-roboty/> Order of the Ministry of Education and Science of 17.03.2022 No. 252 'On organising and conducting a communication campaign of educational reforms in terms of career guidance in 2022'. Наказ МОН від 17.03.2022 №252 "Про організацію та проведення у 2022 році комунікаційної кампанії освітніх реформ в частині профорієнтаційної роботи"
10. <https://partner.kubg.edu.ua/partners2/projects/current-projects/1103-developing-career-guidance-and-counseling-education-for-ukraine-care.html> Developing Career Guidance and Counseling Education for Ukraine "CARE" project

11. <https://www.oin.com.ua/karyernyj-rozvytok-i-pidtrymka-u-shkolah-chomu-vazhlyva-rol-karyernih-radnykiv/> Career development and support in schools: why the role of career counselors is important. Кар'єрний розвиток і підтримка у школах: чому важлива роль кар'єрних радників.
12. <https://communities.org.ua/en/novyny/all-ukrainian-association-of-communities-together-with-the-ministry-of-education-and-science-discussed-the-reform-of-specialized-secondary-education-video/>. All-Ukrainian Association of Communities together with the Ministry of Education and Science discussed the reform of specialized secondary education
13. Meeting and discussion with the director of Uzhhorod Lyceum N 8
14. Meeting and discussion with the representative of the Department of Education of Uzhhorod City Council
15. Meeting and discussion with the representative of the Department of Education and Science, Youth and Sports of the Zakarpattia Regional State Administration