

РЕПУБЛИКА СРПСКА ЈУ ЗАВОД ЗА ЗАПОШЉАВАЊЕ РЕПУБЛИКЕ СРПСКЕ

Пале

LABOUR MARKET RESEARCH IN REPUBLIKA SRPSKA 2021/2022.

- THEMATIC REPORT -

LABOUR MARKET AND EDUCATION



УНАПРЕЂЕЊЕ ИСТРАЖИВАЊА ТРЖИШТА РАДА

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INTRODUCTION

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INTRODUCTION

In ideal conditions on the labour market, the employer is familiar with all information on labour market developments and has defined criteria for the selection of workers, but this is not the case in practice.

In order to understand the trends in the labour market, the Employment Service of Republika Srpska prepared the main report Labour Market Research in Republika Srpska 2021/2022, after which thematic reports were prepared based on data obtained by surveying employers.

The aim of this thematic report is to offer useful information to support labour market policy design in the context of understanding the role and importance of education for labour market development. The thematic report analyses the situation in the records of the Public Employment Service, the needs of employers, but also their willingness to participate in the process of labour force development in terms of acquiring the missing knowledge and skills needed in the labour market. Due to its structure, data and conclusions, this report is unique and especially important for the future activities of the PES, educational institutions, and employers in Republika Srpska.

One of the main users of the Report on the Results of the Research is the education sector, because through the survey of employers, short-term forecasts of the market on the needs of employers are obtained. The report is important for:

- Individuals, institutions or organizations involved in shaping broader education policies;
- Individuals, institutions or organizations involved in the development or modification of curricula;

Individuals, institutions, or involved organizations creating in education development strategies schools. (universities, vocational adult institutions and centres for education and training, etc.).

The importance of forecasting skills needed in the labour market is constantly growing due to the connection with human capital as a key resource for growth. This is especially important at a time when workers are increasingly in short supply in the labour market, given that there is still a shortage of workers in many developed economies. That is why it is crucial to achieve better harmonization of supply and demand for skills on the labour market, which is also supported by the Employment Strategy of Republika Srpska 2021-2027. Forecasting skills needed in the labour market allows analysts and decision makers not only to have insight into skills needs in today's job market, but also to predict what skills will be needed in the future to plan and implement strategies to address these potential shortcomings. This specifically helps in the following:

- reducing skills shortages and labour market mismatches;
- 2. lower losses of development opportunities due to lack of necessary skills on the labour market;
- 3. better harmonization of the offer of existing educational programs with the needs of the labour market and the possibilities of financing them through active employment measures, but also regular financing of the educational system; and
- better counselling of young people on choosing a future career, but also of unemployed people while looking for a job.

BASIC INDICATORS, CHANGES AND CHARACTERISTICS OF THE LABOUR MARKET IN REPUBLIKA SRPSKA

PART ONE: ANALYSIS OF SECONDARY DATA FROM THE DATABASE OF THE PUBLIC EMPLOYMENT SERVICE OF REPUBLIKA SRPSKA

BASIC INDICATORS, CHANGES AND CHARACTERISTICS OF THE LABOUR MARKET IN REPUBLIKA SRPSKA

EMPLOYMENT IN REPUBLIKA SRPSKA

The total number of employees in Republika Srpska by groups of activities in 2020 was 274,227. The highest percentage of employees is in subgroup C (Manufacturing industry) with 20.8% of total employees, followed by subgroup G (Wholesale and retail trade, repair of motor vehicles and motorcycles) with 17.7% of employees.

Compared to 2019, the number of employees increased by 1,861 (0.68%). The largest increase occurred in the following activities: C. Manufacturing, F. Construction Q. Health and social work activities and O. Public administration and defence, compulsory social security.

The decrease in the number of employees was recorded by the following activities: B. Mining and quarrying, D. Production and supply of electricity, gas, steam and air conditioning and P. Education.

Table 1: Total number of employees in Republika Srpska in 2020 by activities

Subgroup	Number of employees	Percentage
A Agriculture, forestry and fishing	8,473	3%
B Mining and quarrying	4,731	2%
C Manufacturing industry	58,013	21%
D Production and supply of electricity, gas, steam, and air conditioning	8,385	3%
E Water supply; sewerage, waste management and remediation activities	5,026	2%
F Construction	13,342	5%
G Wholesale and retail trade; repair of motor vehicles and motorcycles	48,247	18%
H Transport and storage	12,257	4%
l Accommodation and food service activities - hotel and catering	13,523	5%
J Information and Communications	6,342	2%
K Financial and insurance activities	5,831	2%
L Real estate	640	0%
M Professional, scientific, and technical activities	7,929	3%
N Administrative and support service activities	3,320	1%
O Public administration and defence, compulsory social security	25,887	9%
P Education	22,996	8%
Q Health and social work activities	19,448	7%
R (Arts, entertainment, and recreation	4,380	2%
S (Other service activities)	5,457	2%
TOTAL	274,227	100%

Data source: Statistical Office of Republika Srpska (data for 2020 available at the time of writing)

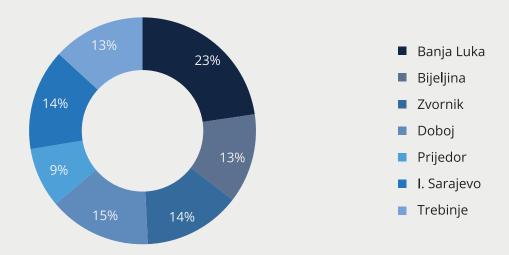
UNEMPLOYMENT IN REPUBLIKA SRPSKA

On December 31, 2021, there were 69,987 unemployed persons registered on the records of the Public Employment Service of Republika Srpska. Compared to the same period last year, when 83,164 unemployed persons were registered, this number is lower by 13,177 persons or by 15.8%. Compared to January 2021 (82,898), this number is lower by 12,911 persons or by 15.6%.

Table 2: Situation				Branch of		,		
Description	Banja Luka	Bijeljina	Zvornik	Doboj	Prijedor	lstočno Sarajevo	Trebinje	RS PES
Situation on the unemployment register:	15,864	8,907	9,697	10,229	5,990	10,078	9,222	69,987
Women	8,024	5,234	5,164	5,353	2,751	5,474	5,148	37,148
<u>% of women</u>	51%	59%	53%	52%	46%	54%	56%	53,0%
1 – NK	2,953	1,397	2,834	2,284	1,256	1,237	1,289	13,250
(women):	1,311	707	1,310	987	446	617	718	6,096
2 – PK - NSS	212	352	157	184	64	89	58	1,116
(women):	78	219	103	92	25	69	30	616
3 – KV	5,342	2,619	2,801	3,416	2,070	2,933	3,076	22,257
(women):	2,055	1,114	1,150	1,368	745	1,147	1,503	9,082
4 – SSS	4,621	2,810	2,881	3,249	1,912	3,805	3,320	22,598
(women):	2,748	1,950	1,922	2,206	1,082	2,279	1,959	14,146
5 – VKV	98	65	25	68	20	74	48	398
(women):	19	10	5	10	3	6	4	57
6-1 VŠS	174	129	96	80	73	129	160	841
(women):	80	82	62	52	45	77	107	505
6-2 VŠS sp	0	1	1	0	2	3	8	15
(women):	0	1	0	0	0	2	5	8
7-1 VSS	2,304	1,417	826	898	564	1,708	1,158	8,875
(women):	1,621	1,063	562	603	388	1,206	757	6,200
7-3 master's degree	111	110	69	41	22	83	97	533
(women):	83	85	46	32	15	60	61	382
7-4 M.Sc.	24	3	2	2	3	11	4	49
(women):	17	2	1	0	0	8	1	29
7-5 University degree 360 ECTS	10	4	1	7	2	4	3	31
(women):	5	1	1	3	1	2	3	16
8 - PhD	15	0	4	0	2	2	1	24
(women):	7	0	2	0	1	1	0	11
TOTAL:	15,864	8,907	9,697	10,229	5,990	10,078	9,222	69,987

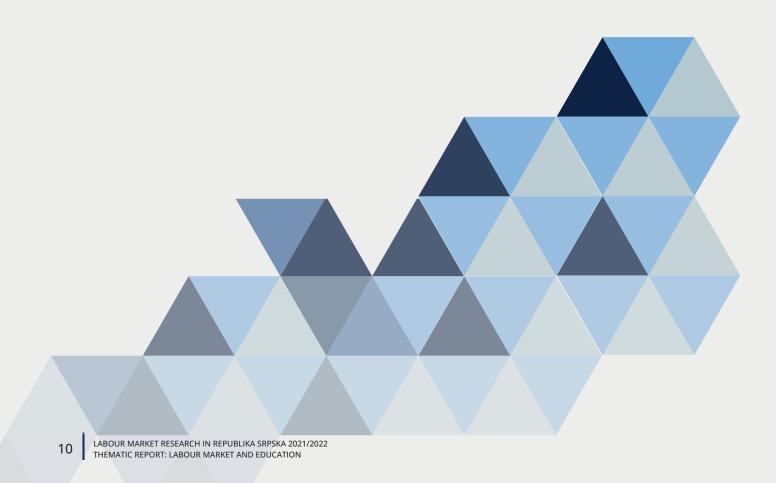
Data source: Public Employment Service of Republika Srpska

[Qualifications in the table: NK – unskilled, PK – semi-qualified, NSS – primary school level qualifications, KV/VKV (qualified, highly qualified), SSS (secondary school qualifications), VŠS – two-year post-secondary education, VŠS – University level qualifications]



Percentage share of the number of unemployed by branches in the total number

Data source: Public Employment Service of Republika Srpska



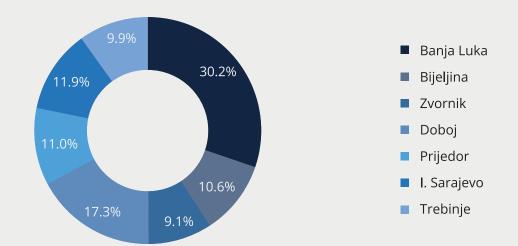
Out of the total number of unemployed (69,987), the largest number is in Banja Luka 15,864 (22.6%), followed by Doboj 10,229 (14.6%), Istočno Sarajevo 10,078 (14.3%), Zvornik 9,697 (13.8%), Trebinje 9,222 (13.1%), Bijeljina 8,907 (12.7%), and Prijedor 5,990 (8.5%). With the exception of Prijedor, in all branches women make up over 50% of registered unemployed persons.

Joiner

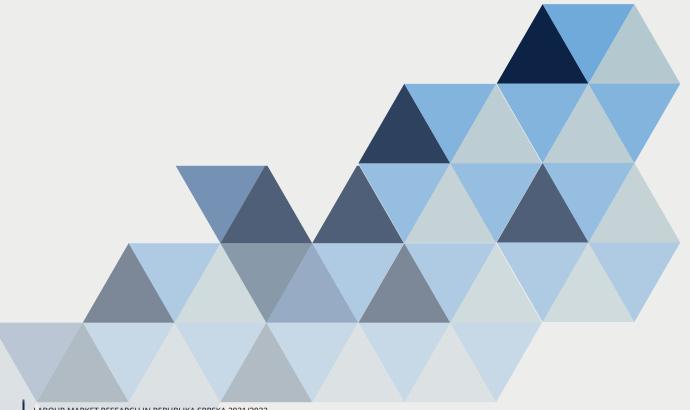
Trade technician

Table 4: Overview of the 20 most numerous occupations on the records of the PublicEmployment Service as of December 31, 2021

The analysis of applicants according to previous work experience indicates that in 2021, a total of 10,466 persons without work experience were registered, which is 22.6% less than in the previous year, when 13,517 persons without work experience were registered. Also, in 2021, there will be a decrease in the number of registered persons with work experience by 20.3% compared to the previous year. In 2021, a total of 32,692 people with work experience were registered, and in 2020, 41,013 people.

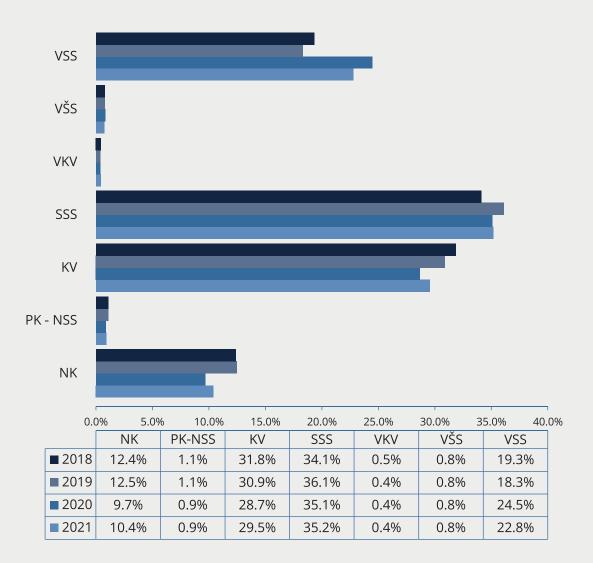


Graph 2: Percentage of persons deleted from the records due to their employment in 2021, by branches



"Persons deleted from the records" are persons who were deregistered during the observed period due to some of the reasons prescribed by law. From the perspective of this analysis, only persons who have been deregistered due to finding a job are observed. In 2021, 31,289 persons were deleted from the register of unemployed due to their employment, i.e., 1,410 or 4.7% more than in 2020. Due to employment in 2021, an average of 2,607 persons were deleted from the register on a monthly basis.

Graph 3: Employees on the record, by qualifications



Employees on the record, by qualifications

Qualifications: NK – unskilled, PK – semi-qualified, NSS – primary school level qualifications, KV/ VKV (qualified, highly qualified), SSS (secondary school qualifications), VŠS – two-year post-secondary education, VŠS – University level qualifications

OVERVIEW OF OCCUPATIONS IN DEMAND ACCORDING TO THE RECORDS OF THE RS PES

In 2021, employers have expressed a need for 15,134 workers. For the sake of comparison, 13,196 workers were demanded in 2020 (data from the Labour Market Research in Republika Srpska 2020/2021), so it can be concluded that the demand reflected in the report on the need for workers in 2021 increased by 1,938 or 14.7%. The occupations that are most in demand are shown in Table 5. Ten occupations that are most in demand are: unqualified workers - 1886, shoemaker - 836, salesperson - 772, primary school teacher - 745, graduated economist - 445, waiter - 340, law graduate - 308, mathematics teacher, preschool teacher - 239, freight vehicle driver - 220. Thirty occupations shown in Table 5 represent 56.7% of the total required workers according to the records of the RS PES.





Interpretation of demand in terms of the most demanded occupations shows an increase in demand for: unqualified workers (they still represent the largest number of demanded workers in the RS PES), shoemakers, salespersons, primary school teachers, waiters, auxiliary workers, freight vehicle drivers. Also, in 2021, welders were included on that list (they were not on the list for 2020). There was a significant reduction in demand among nurses, economic technicians, and carpenters. Furthermore, in the list in 2021, there are no more medical doctors, masons, and reinforcement workers, for whom the demand was significant in the previous year.

No	Occupation	Number	Percentage	Cumulative
1	Unqualified workers	1886	8.2%	8.2%
2	Shoemaker	836	4.7%	12.9%
3	Salesperson	772	3.8%	16.7%
4	Primary school teacher	745	3.5%	20.2%
5	Graduate economist	445	2.6%	22.8%
5	Waiter	340	2.3%	25.1%
7	Law graduate	308	2.3%	27.4%
8	Auxiliary worker	301	2.2%	29.6%
9	Mathematics teacher	255	1.7%	31.3%
10	Preschool teacher	239	1.7%	33.0%
11	Freight vehicle driver	220	1.7%	34.6%
12	Cook	216	1.6%	36.2%
13	Locksmith	213	1.6%	37.8%
14	Nurse	210	1.5%	39.2%
15	Medical doctor	207	1.5%	40.7%
16	Economic technician	175	1.4%	42.1%
17	Physics teacher	169	1.4%	43.6%
18	Serbian language teacher	153	1.3%	44,8%
19	English language teacher	142	1.2%	46.1%
20	German language teacher and related	141	1.2%	47.2%
21	Graduate mechanical engineer	139	1.2%	48.4%
22	Mechanical technician	128	1.1%	49.5%
23	Farmer	122	1.1%	50.5%
24	Chemistry teacher	121	1.0%	51.6%
25	Carpenter	120	1.0%	52.5%
26	Computer science teacher	118	0.9%	53.5%
27	Graduate electrical engineer	118	0.9%	54.4%
28	Tailor	114	0.8%	55.2%
29	Welder	113	0.8%	55.9%
30	Biology teacher	93	0.8%	56.7%

Table 5: Review of workers in demand according to the records from the RS PESfor 2021

METHODOLOGY AND SAMPLE

PART 2: ANALYSIS OF EMPLOYER SURVEY DATA

Labour market research is conducted in accordance with the Law on Employment Mediation and Unemployment Rights ("Official Gazette of Republika Srpska", No. 30/10, 102/12 and 94/19), and the annual work programs of the RS Public Employment Service. The RS PES independently and in cooperation with the competent bodies and organizations researches the labour market and, on that basis, directs its activities, publishes information on the situation and phenomena of importance for the implementation of employment policy.



METHODOLOGY AND SAMPLE

The sampling method used in this study is a stratified approach to sampling, with key stratification variables being the sector and size of the company. A total of 1,100 employers from the Republika Srpska were surveyed, making the sample representative in relation to the database of employers.

Labour market research began in November 2021, starting with the sampling of employers, followed by testing of questionnaires, and training of regional coordinators and interviewers to conduct the survey. Data were collected from 1 December to 31 December 2022.

Table 6. Basic characteristics of the sample	Table 6.	Basic	characteristics	of the	sample
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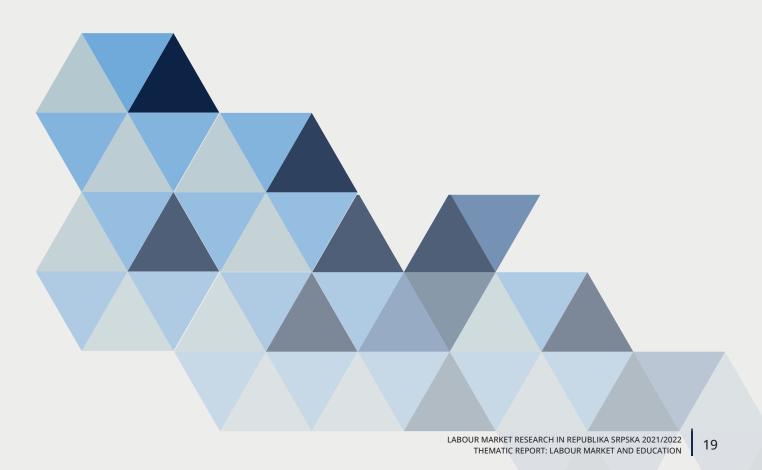
Total employers	1100	100.0%
Number and percentage of employers by size		
Small (up to 50 employees)	925	84.1%
Medium (from 50 to 250 employees)	89	8.1%
Large (over 250 employees)	86	7.8%
By activity		
B (Mining and quarrying)	9	0.8%
C (Manufacturing)	310	28.2%
D (Production and supply of electricity, gas, steam and air conditioning)	14	1.3%
E (Water supply; sewerage, waste management and remediation activities)	22	2.0%
F (Construction)	77	7.0%
G (Wholesale and retail trade; repair of motor vehicles and motorcycles)	311	28.3%
H (Transport and storage)	67	6.1%
I (Accommodation and food service activities - hotels and restaurants)	109	9.9%
J (Information and communication)	29	2.6%
K (Financial and insurance activities)	17	1.5%
L (Real estate activities)	5	0.5%
M (Professional, scientific, and technical activities)	65	5.9%
N (Administrative and support service activities)	20	1.8%
R (Arts, Entertainment & Recreation)	24	2.2%
S (Other service activities)	21	1.9%

The most represented companies in the survey are limited liability companies (62.1%), followed by sole proprietors (23.9%), while joint stock companies account for 5.1%. The remaining number of survey participants is mostly related to public institutions (2.5%). Observed by form of ownership, the largest percentage refers to private ownership (90.64%), which is in line with expectations, because when choosing the sample, most employers were taken from the economy where private ownership dominates. Public enterprises, the health system, the education system, agricultural activities, and forestry were excluded from the research.

The largest percentage of employers in the sample belongs to the activity G – trade 28.3%, followed by C – manufacturing 28.2%, while in third place are employers in area I – catering, 9.9%. This research finding is in line with the sampling frame, which confirms that this is a representative sample.

Observed by size, out of 1,100 employers covered by the survey, most are small enterprises (84.1%), followed by medium-sized enterprises (8.1%), while large employers make up 7.8% of the total number of surveyed employers.

According to the year of establishment, most companies that were surveyed have been operating for over three years, i.e., 89% of them. 4.9% of employers did not answer this question, and 6.1% of the total number of respondents have been operating for less than three years.



ANALYSIS OF EMPLOYEES WORKING FOR SURVEYED EMPLOYERS

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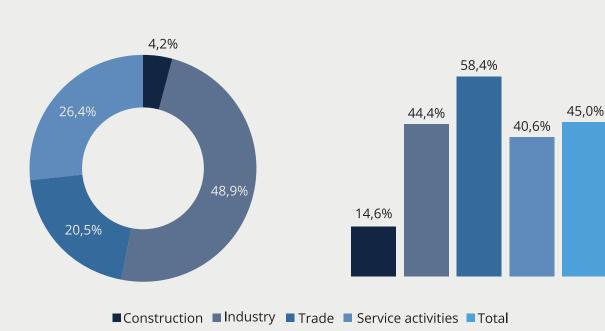
ANALYSIS OF EMPLOYEES WORKING FOR SURVEYED EMPLOYERS

Out of a total of 68,580 workers employed by the surveyed employers, 33,546 (48.9%) are employed in industrial activities. Thus, almost half of the employed workers belong to industrial activities.

Table 7. Number of workers by general activities

Activity	Number of employees	Number of employed women	Share of women in total number of employees
Construction	2,871	418	14.6%
Industry	33,546	14,891	44.4%
Trade	14,066	8,215	58.4%
Service activities	18,097	7,352	40.6%
Total	68,580	30,876	45.0%

Graph 4. Percentage of employees by activities



Percentage of employed workers

Percentage of employed women

Table 8. Age structure of workers

Activity	1	2	3	4	5	6	7	8
Construction	476	55	16.6%	11.6%	322	39	11.2%	12.1%
Industry	6,201	2,654	18.5%	42.8%	1,863	557	5.6%	29.9%
Trade	3,523	1,982	25.0%	56.3%	485	222	3.4%	45.8%
Service activities	3,591	1,495	19.8%	41.6%	1,127	316	6.2%	28.0%
Total	13,791	6,186	20.1%	44.9%	3,797	1,134	5.5%	29.9%

1 - Number of employees under 30 years of age

2 - Number of employees under 30 (women)

3 - Share of persons under 30 in the total number of employees

4 - Share of women in the total number of employees under 30

- 5 Number of workers older than 60
- 6 Number of employees over 60 (women)
- 7 Share of persons over 60 in the total number of employees

8 - Share of women in the total number of employees over 60

65,100 workers were employed by 1,100 surveyed employers, of which 30,876 or 45% were women. Of the mentioned number of employees, 13,791 are younger than 30 or 20.1% of which 6,186 are women (44.89), while 3,797 workers are older than 60 or 5.5%, of which 1,134 are women (29.9%).



SATISFACTION WITH THE COMPETENCIES OF THE LABOUR FORCE

In order to analyse the possibility of training employees to develop missing competencies – internally in the company or in cooperation with publicly recognized organizers of adult education, employers assessed the extent to which they are satisfied with the competencies of employees, on a scale from 1 (completely dissatisfied) to 5 (fully satisfied).

The largest percentage of employers rated communication in a foreign language as unsatisfactory (16.2%), entrepreneurship and self-initiative (7.2%), digital competences (5.9%) and mathematical literacy and basic competencies (5.0%). A significant percentage of employers rated almost all competencies as neither satisfactory nor unsatisfactory: entrepreneurship and self-initiative (25.9%), communication in a foreign language (25.3%), mathematical literacy and basic competencies in science and technology (23.8%), digital competencies (22.7%), a sense of culture and research through culture (20.1%), and the ability to learn (19.4%). When the percentage of employers who are dissatisfied is combined with the percentage of employers who are satisfied, there is room for improvement in almost all areas of competencies.

Table 9: Satisfaction of employers with the abilities, knowledge, and skills of
workers they currently employ according to the EU competence framework

EU competence framework	No response	Not applicable/ relevant	Unsatisfactory (1 or 2)	3 (neither satisfactory nor unsatisfactory)	Satisfactory (4 or 5)
Communication in the mother tongue	0.5%	2.5%	0.4%	5.8%	90.8%
Communication in a foreign language	1.2%	25.0%	16.2%	25.3%	32.4%
Mathematical literacy and basic competencies in science and technology	1.5%	16.7%	5.0%	23.8%	53.0%
Digital competences	1.5%	16.0%	5.9%	22.7%	53.8%
Ability to learn	1.7%	3.4%	3.5%	19.4%	72.1%
Interpersonal and social competencies	1.5%	2.8%	1.2%	11.6%	82.8%
Entrepreneurship and self-initiative	2.2%	16.6%	7.2%	25.9%	48.1%
"Sense" for culture and expression through culture	2.6%	21.5%	3.5%	20.1%	52.2%

EMPLOYMENT OF PERSONS COMING DIRECTLY FROM THE EDUCATIONAL SYSTEM

Out of the total number of surveyed employers (1100), on average 850 of them did not employ workers who come directly from general schools, vocational and technical schools, or universities in 2021.

Only 97 (8.8%) of the employers that hired new workers did hire job seekers coming directly from general secondary school, 181 (16.5%) hired job seekers coming from technical and vocational schools, and 122 (11.1%) hired job seekers who come directly from the university.

Employment of persons who came directly from the education system		%	Technical and vocational schools	%	Universities	%
Yes	97	8.8%	181	16.5%	122	11.1%
No	873	79.4%	835	75.9%	856	77.8%
No response	130	11.8%	84	7.6%	122	11.1%
Total	1100	100.0%	1100	100.0%	1100	100.0%

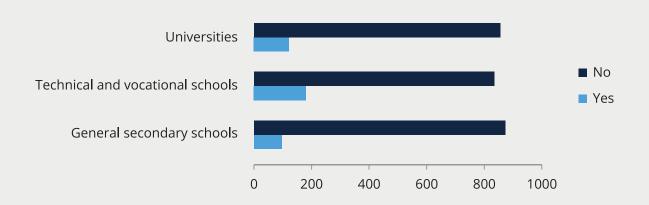
Table 10: Has your company hired job seekers who came directly from theeducation system in the last 12 months?

These responses may indicate either the lack of interest of employers in hiring people coming directly from the education system, the mismatch of supply and demand, or as a result of negative demographic changes. This information should be taken into account when creating future policies that link education and the labour market.

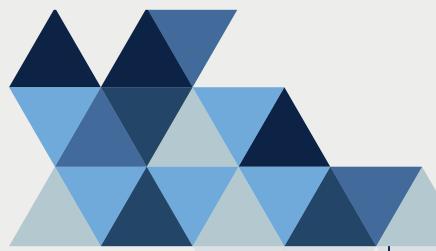
Table 11: An overview of employers that have hired job seekers directly from the education system, by branches

Has your company hired job seekers who came directly from the education system in the last 12 months?	General secondary schools	%	Technical and vocational schools	%	Universities	%
Banja Luka	41	8.3%	83	16.8%	62	12.5%
Bijeljina	13	10.2%	26	20.3%	18	14.1%
Doboj	22	13.5%	31	19.0%	10	6.1%
Istočno Sarajevo	3	2.8%	8	7.5%	17	16.0%
Prijedor	15	13.8%	19	17.4%	4	3.7%
Trebinje	2	3.0%	10	14.9%	10	14.9%
Zvornik	1	3.1%	4	12.5%	1	3.1%
Total	97	8.8%	181	16.5%	122	11.1%

Employers surveyed on the territory of the Banja Luka branch, compared to other branches, in absolute amounts employed more people who come directly from the education system, which is expected given the development of the market by region. However, when observed in relative amounts, 20.3% of employers from Prijedor employed persons coming directly from technical and vocational schools, compared to only 7.5% of employers from Istočno Sarajevo. When looking at general schools, 13.8% of employers from Prijedor employed persons directly from the education system, and only 2.8% in Istočno Sarajevo. However, 16.0% of employers in Istočno Sarajevo employed graduate students from the University.



Graph 5. Employment of persons from the education system



SHORTCOMINGS OBSERVED IN FIRST JOB APPLICANTS

When it comes to shortcomings of first-time job seekers, employers have identified the following: 50 employers (51.5% of the total number of employers who employed this category of workers) assessed that the biggest shortcoming for persons coming directly from general schools is the lack of work and life experience or maturity. When it comes to technical schools, 99 employers (54.7%) cited the lack of necessary technical skills as well as job-specific skills as the biggest shortcoming, and when it comes to universities, 69 (56.6%) employers identified the biggest shortcoming also being the lack of experience. The answers of the largest number of employers out of the total number of those who answered this survey question are highlighted here.

talen tifte die bescher weite werde finde		of employ d the shor		Percentage of employers in relation to the total number of employers who employed jobseekers from the education system			
Identified shortcomings of job seekers coming from the education system	General secondary schools	Technical and vocational schools	Universities	General secondary schools	Technical and vocational schools	Universities	
The necessary technical or job- specific skills are missing	47	99	59	48.5%	54.7%	48.4%	
Lacks the necessary skills related to personality, attitude, and behaviour (communication, interpersonal, stress and time management)	30	37	22	30.9%	20.4%	18.0%	
Literacy / numeracy skills	7	10	3	7.2%	5.5%	2.5%	
Unadjusted education system	20	51	32	20.6%	28.2%	26.2%	
Poor attitude towards work or lack of motivation (e.g., poor work ethic, accuracy, manners)	29	49	16	29.9%	27.1%	13.1%	
Lack of work experience / life experience or maturity (including general knowledge)	50	90	69	51.5%	49.7%	56.6%	
Other (specify)	0	3	6	0.0%	1.7%	4.9%	

Table 12: Assessment of the shortcomings of the first job seeker

Note: Percentage represents the number of employers who chose the stated cause in relation to the total number of employers who hired job seekers who came directly from the education system - general secondary school

PLANNING THE EMPLOYMENT OF NEW WORKERS IN 2022

PLANNING THE EMPLOYMENT OF NEW WORKERS IN 2022

Of the total number of employers who participated in the survey (1,100), 676 plan to hire new workers in 2022 (61.5%). Observed by branches, the lowest percentage of employers planning new employment is in Trebinje (53.6%), and the highest in Bijeljina (69.5%).

The following 20 occupations represent 71.5% of the total employment plans for workers in 2022: simple worker, salesperson, seamster/seamstress, waiter, vehicle body repairer, shoemaker, locksmith, auxiliary production worker, joiner, truck driver, cook, welder, shoemaker - maker of upper parts of footwear, electronic mechanics - mechatronics - CNC operator, carpenter, freight vehicle driver, electrical engineer, bricklayer, electrical technician, and reinforcement worker.

Table 13: Employment plans in 2022 by occupation

Occupation	Number of workers	%
Simple worker	1410	24.45%
Salesperson	379	6.57%
Seamstress	325	5.64%
Waiter	226	3.92%
Vehicle body repairer	200	3.47%
Shoemaker	170	2.95%
Locksmith	167	2.90%
Auxiliary worker in production	163	2.83%
Joiner	158	2.74%
Truck driver	119	2.06%
Cook	112	1.94%
Welder	107	1.86%
Shoemaker – maker of upper parts of footwear	100	1.73%
Electronic mechanic - mechatronic - CNC operator	93	1.61%
Carpenter	82	1.42%
Freight vehicle driver	70	1.21%
Electrical engineer	70	1.21%
Bricklayer	62	1.08%
Electrical technician	56	0.97%
Reinforcement worker	55	0.95%
Other occupations	1,643	28.49%
Total	5,767	100.00%

Surveyed employers from the Banja Luka region plan to employ over 3,000 workers in 2022, and the occupations most in demand are simple worker, seamstress, salesperson, joiner, shoemaker, while employers from the Doboj region plan to employ about 1,000 workers, and among the most sought-after occupations are employers, salesperson, shoemaker, waiter, driver, seamstress, locksmith. Employers from the Bijeljina branch plan to employ about 800 workers in 2022 in the following occupations: vehicle body repairers, simple worker, locksmith, salesperson, waiter, processor, seamstress.

When it comes to the Istočno Sarajevo branch, the most demanded occupations in 2022 that employers plan to hire are seamstresses, plastics processors, waiters, salespersons, carpenters, while in the Prijedor branch, employers will have the greatest need for seamstresses, waiters, and production workers. In the Trebinje branch, employers will have the greatest need for simple workers, waiters, and metal grinders, while employers from the Zvornik branch will have the greatest need for salespersons, production workers, cooks, and the like.

EMPLOYMENT OF WORKERS WITH ADVANCED IT SKILLS

Today, the role of information technology in business is becoming increasingly important. There are many reasons for incorporating information technology into one's business as well as hiring workers with advanced IT skills.

When asked if they plan to hire workers with advanced IT skills, 23.1% of employers said they plan to, while 75.1% of employers do not plan to hire workers with advanced IT skills.

	Yes	<i>,</i>	No		
Are you planning to hire workers with advanced IT skills?	Number of employers	%	Number of employers	%	
Banja Luka	70	23.5%	218	73.2%	
Bijeljina	27	30.3%	62	69.7%	
Doboj	31	29.5%	74	70.5%	
Istočno Sarajevo	9	13.8%	56	86.2%	
Prijedor	9	14.5%	52	83.9%	
Trebinje	8	22.2%	28	77.8%	
Zvornik	2	10.0%	17	85.0%	
Total	156	23.1%	507	75.1%	

Table 14: Hiring workers with advanced IT skills

Hiring workers with advanced IT skills

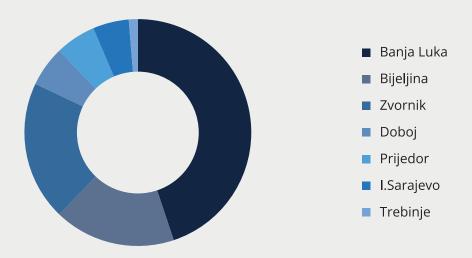


Table 15: Employment of workers with advanced IT skills by activities

Are you planning to hire workers with advanced IT skills?	Number of employers	%
Construction	57	8.4%
Yes	9	15.8%
No	47	82.5%
No response	1	1.8%
Industry	257	38.1%
Yes	55	21.4%
No	196	76.3%
No response	6	2.3%
Trade	151	22.4%
Yes	28	18.5%
No	120	79.5%
No response	3	2.0%
Service activities	210	31.1%
Yes	64	30.5%
No	144	68.6%
No response	2	1.0%
Total	675	100.0%

The plan is to employ 346 workers with advanced IT skills, of which more than half, more precisely 51.45%, in service activities.

Table 16: Planned employment of workers with advanced I	T skills by activity
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Business activity	Number of workers with advanced IT skills	%
Construction	17	4.91%
Industry	110	31.79%
Trade	41	11.85%
Service activities	178	51.45%
Total	346	100.00%

The largest number of employers (38.1% of the total of 675 who answered this question) plan to hire workers with advanced IT skills in industrial activities.



PRACTICAL TRAINING FOR SECONDARY SCHOOL AND UNIVERSITY STUDENTS

PRACTICAL TRAINING FOR SECONDARY SCHOOL AND UNIVERSITY STUDENTS

Out of the total number of surveyed employers (1,100), 661 or 60.1% do not have any opportunities (mentors, equipment, materials, or space) to offer practical classes for pupils and students, while 39.9% of them have such opportunities.

What employers can offer also varies by branch, but 36.7% can provide a mentor, 32.5% can provide equipment, 31% materials, and 32.3% of employers have the conditions to provide space.

Table 17: Conditions for conducting practical training

Do you have the opportunity to admit students to practical training? (select the last option if not having the opportunities, and move on to the next question). If so, what can you provide from the following:	We can provide a mentor for practical training	We can provide equipment for practical training	We can provide material for practical training	We can provide space for practical training	No, we do not have such opportunities
Number of employers	404	358	341	355	661
Percentage	36.7%	32.5%	31.0%	32.3%	60.1%



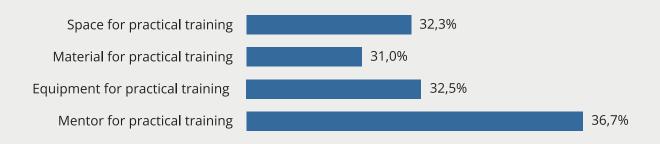
When we look at the labour market research for 2020/2021, the total number of employers who were willing to offer practical training for pupils and students was 29.4% of the total number of surveyed employers in the sample, so this year there are employers who can offer conditions for conducting practical training increased by 10.5% percentage points. Most employers are ready to offer a mentor for practical training. Employers from the region of Bijeljina and Doboj are mostly able to provide conditions for organizing practical training.

a annual secondary sensor and aniversity stadents, by sr	1	1	1	1	
Do you have the opportunity to admit students to practical training? (select the last option if not having the opportunities, and move on to the next question). If so, what can you provide from the following:	1	2	3	4	5
Banja Luka	36.4%	31.7%	30.7%	30.7%	61.6%
Bijeljina	47.7%	35.9%	33.6%	39.8%	46.9%
Doboj	42.3%	41.7%	40.5%	38.0%	55.8%
Istočno Sarajevo	33.0%	28.3%	27.4%	30.2%	65.1%
Prijedor	24.8%	33.0%	31.2%	33.9%	64.2%
Trebinje	37.3%	28.4%	25.4%	29.9%	62.7%
Zvornik	21.9%	6.3%	0.0%	3.1%	75.0%
Total	36.7%	32.5%	31.0%	32.3%	60.1%

Table 18: Number of employers who have the opportunity to offer practicaltraining for secondary school and university students, by branches

- 1 We can provide a mentor for practical training
- 2 We can provide equipment for practical training
- 3 We can provide material for practical training
- 4 We can provide space for practical training
- 5 No, we do not have such opportunities

Graph 7: Percentage of employers who can provide conditions for practical training



According to the expressed needs, employers have the opportunity to organize practical classes or training for 3,642 pupils or students for the following occupations: textile technician 1200 (32.5% of all expressed opportunities), salesperson 183 (5.02%), electrical technician 121 (3.32%), cook 121 (3.32%), waiter 111 (3.05%), seamstress 108 (2.97%), locksmith 106 (2.91%), joiner 92 (2.55%), electrical engineering 83 (2.28%), and welder 71 (1.95%). These 10 occupations make up 60.32% of the expressed opportunities for the organization of practical classes or training.

Occupation	Number of students	Percentage
Textile technician	1200	32.95%
Salesperson	183	5.02%
Electrical technician	121	3.32%
Cook	121	3.32%
Waiter	111	3.05%
Seamstress	108	2.97%
Locksmith	106	2.91%
Joiner	93	2.55%
Electrical Engineer	83	2.28%
Welder	71	1.95%
Mathematician	70	1.92%
Mechanical technician	65	1.78%
Economist	62	1.70%
Electronic mechanic - mechatronic - CNC operator	62	1.70%
IT Officer	48	1.32%
Shoe designer and mould-maker	45	1.24%
Shoemaker	41	1.13%
Shoemaker - maker of upper parts of footwear	40	1.10%
Butcher	39	1.07%
Maintenance electrician	37	1.02%
Other various occupations	936	25.70%
Total	3642	100.00%

Table 19: An overview of occupations for which employers have the opportunity to organize practical classes or training for pupils and students



ORGANIZATION OF TRAINING, VOCATIONAL TRAINING AND ADVANCED TRAINING FOR UNEMPLOYED PERSONS

Also, 888 or 80.7% of employers in the total sample do not have the opportunity to organize trainings for vocational training and advanced training of unemployed persons. A mentor can be provided by 16.9% of employers, 15.4% can provide equipment, 14.5% can provide materials for practical classes, and 15.2% have space for practical classes.

Table 20: Opportunities for organizing trainings, vocational training, and advancedtraining for the unemployed

Do you have the opportunity to organize trainings, vocational training, and advanced training for the unemployed (mentor, equipment, space, materials)?	1	2	3	4	5
Number of employers	186	169	160	167	888
Percentage	16.9%	15.4%	14.5%	15.2%	80.7%

- 1 We can provide a mentor for practical training
- 2 We can provide equipment for practical training
- 3 We can provide material for practical training
- 4 We can provide space for practical training
- 5 No, we do not have such opportunities

Table 21: Opportunities for organizing trainings, vocational training, and advancedtraining for unemployed persons by branches

Do you have the opportunity to organize trainings, vocational training, and advanced training for the unemployed (mentor, equipment, space, materials)?	We can provide a mentor for practical training	We can provide equipment for practical training	We can provide material for practical training	We can provide space for practical training	No, we do not have such opportunities
Banja Luka	14,7%	13,3%	12,3%	12,7%	81,2%
Bijeljina	24,2%	21,9%	22,7%	23,4%	73,4%
Doboj	18,4%	17,8%	17,8%	18,4%	82,8%
Istočno Sarajevo	18,9%	18,9%	17,9%	17,9%	79,2%
Prijedor	10,1%	10,1%	9,2%	9,2%	87,2%
Trebinje	22,4%	17,9%	16,4%	20,9%	77,6%
Zvornik	18,8%	9,4%	3,1%	3,1%	81,3%
Total	16.9%	15.4%	14.5%	15.2%	80.7%

The most common occupations for which employers have the opportunity to organize training for the unemployed: seamstress, shoemaker, salesperson, shoemaker, mechanic, electrical technician, waiter, tailor, vehicle body repairer, carpenter and cook. These 10 occupations account for 54.9% of employers' opportunities to organize practical classes or training for the unemployed.

Occupation	Number of persons	%
Seamstress	128	10.13%
Shoemaker	95	7.52%
Salesperson	91	7.20%
Shoemaker - maker of upper parts of footwear	75	5.93%
Electronic mechanic - mechatronic - CNC operator	59	4.67%
Waiter	54	4.27%
Tailor	54	4.27%
Vehicle body repairer	50	3.96%
Joiner	44	3.48%
Cook	44	3.48%
Welder	41	3.24%
Locksmith	35	2.77%
IT Officer	23	1.82%
Auxiliary worker in production	21	1.66%
Freight vehicle driver	21	1.66%
Electrical technician	20	1.58%
Warehouse worker	17	1.34%
Auto mechanic	17	1.34%
Pharmacy technician	16	1.27%
Textile technician	15	1.19%
Various occupations	344	27.22%
Total	1264	100.00%

Table 22: Occupations for which employers have the opportunity to organize
 training, vocational training, and advanced training for the unemployed



EXPECTED REDUNDANT EMPLOYEES, BY OCCUPATION

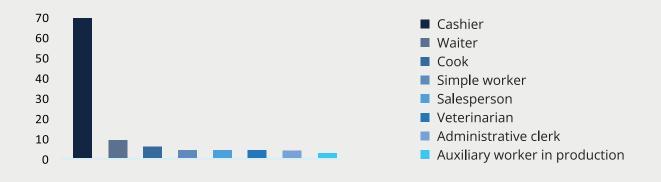
Only a small number of employers expect to have redundancy in employment in 2022, which indicates that employers are facing an increased need for labour. However, according to employers who expect to have redundancy in employment in 2022 (14), the following five occupations will be most affected: cashier, waiter, cook, simple worker, salespersons, veterinarian. A small number of employers have announced redundancy in employment, so this data is not relevant when it comes to the impact on these occupations, except for cashiers, in which case it was announced that 68 cashiers will be redundant.

Also, in their answers to the question about difficulties they are facing when hiring certain occupations, employers, in fact, mentioned waiters, salespersons, and cooks as occupations where they had the most difficulties in hiring, which may indicate the retirement of existing workers, or workers who lack adequate knowledge and skills.

Occupation	Number of persons	%
Cashier	68	64.2%
Waiter	9	8.5%
Cook	6	5.7%
Simple worker	4	3.8%
Salesperson	4	3.8%
Veterinarian	4	3.8%
Administrative worker	4	3.8%
Auxiliary worker in production	3	2.8%
Bus driver	1	0.9%
Administrative and technical affairs clerk	1	0.9%
Economic technician	1	0.9%
Baker	1	0.9%
Total	106	100.0%

Table 23: Occupations that will lose their jobs in 2022 due to redundancies

Graph 8. Occupations that will be in redundant in 2022



CONCLUSIONS

Interpretation of **demand in terms of most demanded occupations** shows an increase in demand for: workers without occupation - unskilled labour (they still represent the largest number of demanded workers in the RS PES), shoemakers, salespersons, grade teachers, waiters, auxiliary workers, truck drivers. Also, in 2021, welders were included on that list (they were not on the list for 2020).

There was a significant **reduction in demand** among nurses, economic technicians, and carpenters. Furthermore, in the list in 2021, there are no more medical doctors, bricklayers, and reinforcement workers, for whom the demand was significant in the previous year.

Out of a total of 68,580 **employees** employed by the surveyed employers, 33,546 (48.9%) are employed in industrial activities. Thus, almost half of the employed workers belong to industrial activities.

When it comes to the analysis of training opportunities for employees to develop **missing competencies** - internally in the company or in cooperation with publicly recognized organizers of adult education, employers assessed the extent to which they are satisfied with the competencies of employees. A significant percentage of employers rated almost all competencies as neither satisfactory nor unsatisfactory. When the percentage of employers who are dissatisfied is combined with the percentage of employers who are satisfied, there is room for improvement in almost all areas of competence.

A small number of surveyed employers employed **persons coming directly from the education system.** Therefore, these results should be taken into account when designing future policies that link education and the labour market.

When it comes to **shortcomings of first-time job seekers**, employers have recognized the following: For people who come directly from general schools, the biggest lack is work and life experience or maturity. When it comes to technical schools, there is a lack of necessary technical skills as well as skills specific to a given job, and when it comes to universities, first-time job seekers also lack experience. These responses from employers need to be taken into account when it comes to training pupils and students to do their jobs independently.

The next 20 occupations represent 71.5% of the total plans of surveyed employers when it comes to **hiring new workers in 2022**: simple worker, salesperson, seamstress, waiter, vehicle body repairer, shoemaker, locksmith, auxiliary production worker, joiner, truck driver, cook, welder, shoemaker - maker of upper parts of footwear, electronic mechanic - mechatronic - CNC operator, carpenter, freight vehicle driver, electrical engineer, bricklayer, electrical technician, and reinforcement worker.

The majority of employers (75.1%) do not plan **to hire workers with advanced IT skills**. This data can be observed in relation to occupations where new employment is planned in 2022. Job descriptions of these occupations probably imply basic IT skills, which does not imply that other employers do not need workers with more advanced IT skills.

Compared to the labour market research 2020/2021, this year there are 10.5% more percentage points of employers who can offer conditions for conducting **practical training for pupils and students.** Most employers are ready to offer a mentor for practical training. Employers from the region of Bijeljina and Doboj are mostly able to provide conditions for organizing practical classes.

The most common occupations for which employers have the opportunity to organize **training**, **vocational training**, **and advanced training** for the unemployed: seamstress, shoemaker, salesperson, mechanic, electric technician, waiter, tailor, vehicle body repairer, joiner and cook. These 10 occupations account for 54.9% of employers' opportunities to organize practical classes or training for the unemployed.

Only a small number of employers expect to have redundant employees in 2022, which indicates that employers are facing an increased need for labour. **The redundancy of employees in 2022** is mostly related to cashiers, where a redundancy of 68 cashiers has been announced. This information should be taken into account and timely measures prepared for the reintegration of this occupation into the labour market.

The focus of the employer survey is on identifying short-term needs of employers, while (quantitative) information, which is collected by answering the questions in the questionnaire, primarily serves to anticipate job creation and closing rates by region, economic sector, or size of economic entities. A system for anticipating future needs has been developed through the questionnaire, relying only on short-term perspectives, i.e., it identifies expectations for a period of one to a maximum of three years, because the employers are asked about their expectations in the coming period.

On the basis of this survey, it is possible to identify the most promising occupations, as well as the needs for skills, but also to gain knowledge about "bottlenecks" when it comes to filling vacancies. A similar instrument for observing short-term labour market trends is used by employment services in the region.

This survey as a source of information on labour market needs is a positive example, as it is conducted continuously and as it serves for creation of a large database that could be used to make forecasts based on one-dimensional models and complex multidimensional time series models. However, it also has its drawbacks. One of them stems from inconsistencies in the implementation of the instrument. If there is even a slight modification of the question, continuity in data tracking is lost.

Deficiencies were also discovered in one-sidedness in the sense that information on the offer formed by persons leaving the education system was most often omitted. Combining the data available in the information system of the Public Employment Service and the systems of other relevant institutions, would allow forecasts to be formed for a longer period of time. It is necessary to strive to ensure that the questions from the questionnaire do not change, as well as that the data are used in policy development, primarily by creating multi-year trends and projections.

RECOMMENDATIONS

• Based on the identified difficulties that employers face during the process of employment, the following measures are needed: (1) retraining, additional training, (2) on-the-job training, (3) gaining appropriate work experience (subsidy).

• Through joint action of all competent institutions ensure the development of nonformal forms of education that should be a part of the development of the overall education system. Ensure the development of a lifelong learning system and the implementation of measures for additional training and preparation of both employed and unemployed persons. On these issues, achieve concrete cooperation with the Institute for Adult Education and make a plan of activities for adult education.

• Engage in harmonizing the education system with the needs of the labour market, and continuously adjust the curricula for each of the educational levels to specific economic trends. Actively engage in the creation of enrolment policy in order to meet the needs of the labour market and take measures to establish a modern, flexible, and creative education system.

• Encourage the creation of evidence-based policies, through the promotion of labour market research results, and the distribution of research to a wider group of stakeholders. Research indicators as well as market characteristics and needs must form the bases for planning and creating enrolment policy.

• Conduct additional training of staff working directly with the unemployed and within these measures use the assistance and support of all projects funded by the international community, as they relate to an active labour market and strengthening job search skills.

