



**JU Služba za zapošljavanje
Unsko-sanskog kantona**

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ANALYSIS OF VACANCIES COLLECTED THROUGH THE EMPLOYMENT SERVICES OF UNA-SANA CANTON DURING 2020



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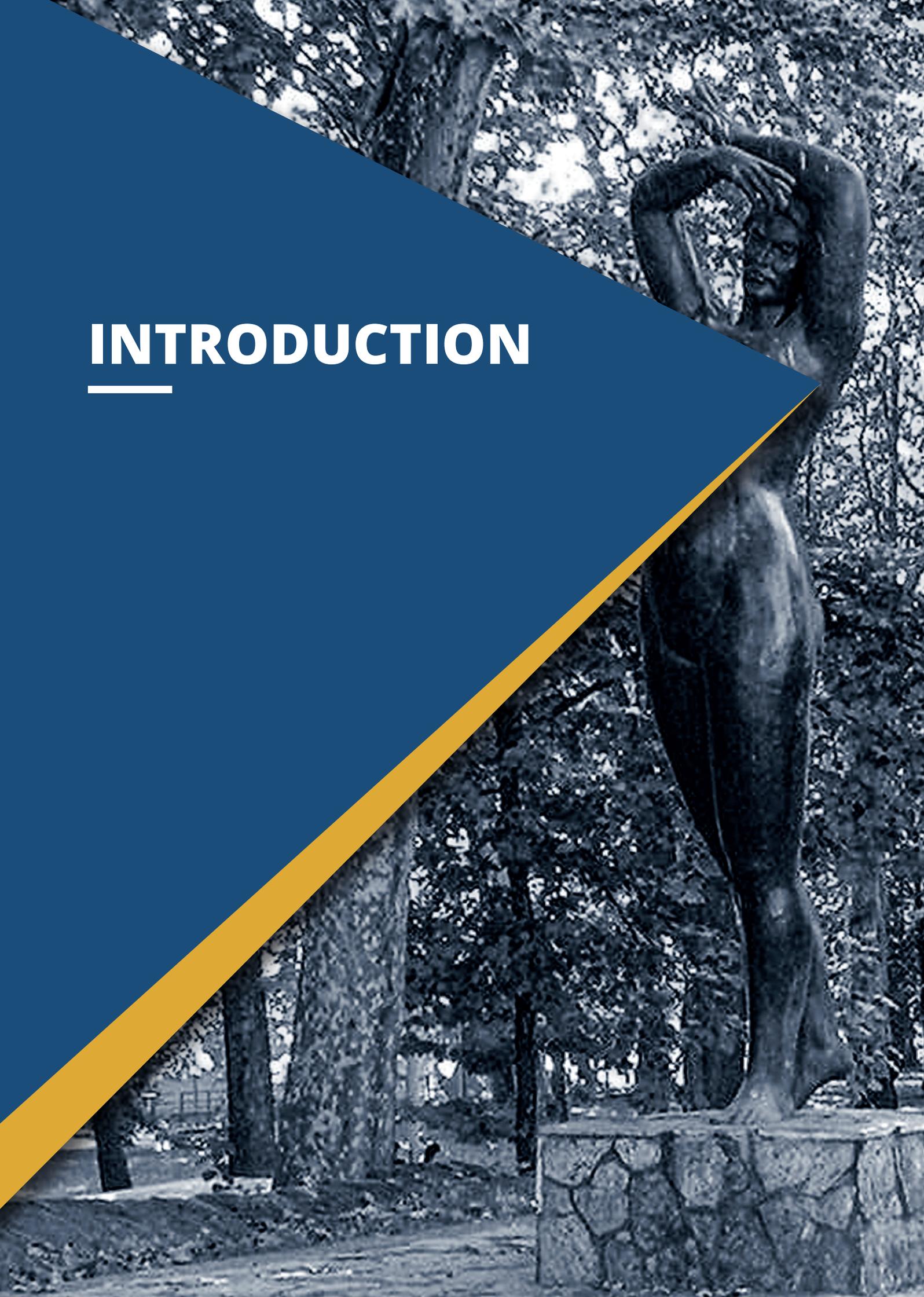


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INTRODUCTION



Introduction

The need to consolidate information on published jobs has been cited as a priority of the European Union for Bosnia and Herzegovina in the last few years.

The Report on Bosnia and Herzegovina for 2019¹ states that BiH does not have a central database as a precondition for joining EURES - the European Network for Cooperation of Employment Services. It is stated that it is necessary to consolidate the data with the information published through public employment services, i.e. to create one point where all that information would be available. In this way, data on labour demand would be consolidated.

In the Report on Bosnia and Herzegovina for 2020 and 2021, accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (Communication on the EU Enlargement Policy)², in Chapter 5, ABILITY TO ASSUME THE OBLIGATIONS OF MEMBERSHIP, relating to Chapter 2 „Freedom of movement for workers“, it is stated that in the reporting period no progress was made regarding the development of a nationwide database of vacancies.

This issue remained one of the few non-harmonised issues within the Working Group on Free Movement of Workers (Acquis Chapter 2).

In order to implement this task, the project team, in cooperation with the employment services, collected available data on vacancies that employers submitted to the public employment services. Only a few services that able to submit an overview of published job vacancies for the specified period, while others were not able to do so, mainly due to technical problems encountered in the process of collection, processing and storage of published vacancies. This analysis focuses on one cantonal service - the Employment Service of Una-Sana Canton, which can be used as an example of good practice in the Federation of BiH.

Unlike Republika Srpska, there is no consolidated database of advertised jobs in the Federation of BiH, so in order to make progress towards the EURES platform and EU recommendations, it is primarily necessary to consolidate advertised jobs at the level of the Federation of BiH. Technical preconditions for consolidation exist, i.e. a single information system has been established, in which advertisements are still not entered or they are not entered to an adequate extent.

The main goal of this analysis is to review the real situation in the Federation of BiH, in order to create preconditions for creating a single database on vacancies, which is a preliminary work to achieve the final goal - a nationwide database on vacancies.

1 COMMISSION STAFF WORKING DOCUMENT Analytical Report Accompanying the document Communication from the Commission to the European Parliament and the Council Commission Opinion on Bosnia and Herzegovina's application for membership of the European Union

2 RADNI DOKUMENT OSOBLJA KOMISIJE Izvještaj o Bosni i Hercegovini za 2020. uz dokument Saopštenje Komisije Evropskom parlamentu, Vijeću, Evropskom ekonomskom i socijalnom odboru i Odboru regija Saopštenje o politici proširenja EU-a za 2020.

The structure of the economy of Una-Sana Canton

As of 31/12/2020, 13,517 business entities were registered in the Una-Sana Canton. Their structure is as follows¹:

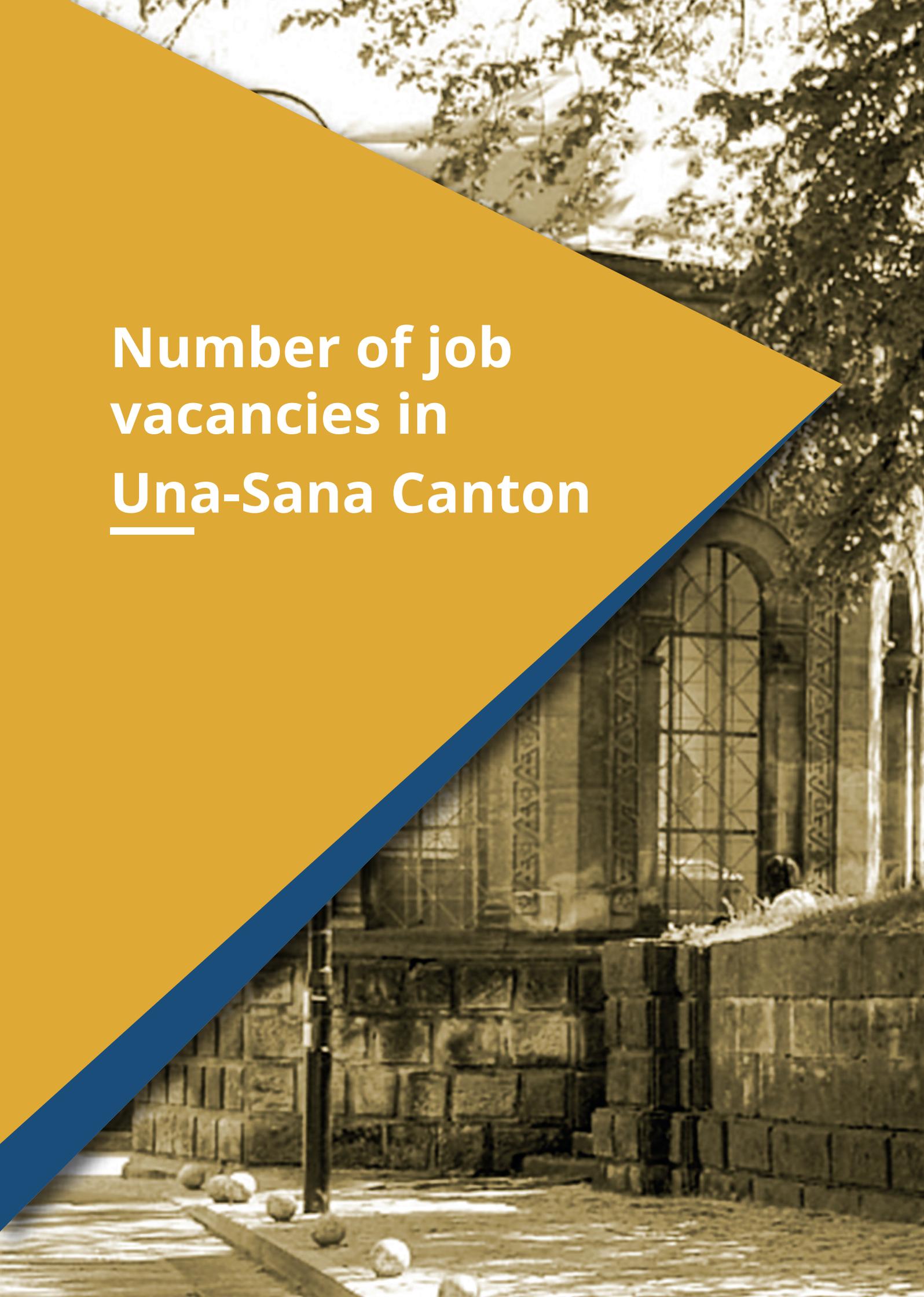
- 3998 crafts,
- 5684 independent legal entities,
- 3835 units within legal entities.

Despite the crisis caused by the pandemic, there are no changes in the list of TOP 20 companies in 2020 when it comes to the first place in terms of revenue. The total income of this Canton in 2020 was 1,822,690,689 KM and is lower by 134,942,894 KM compared to 2019. The companies' profit is higher by 72,713,805 KM than in 2019 and it amounts to 138,945,057 KM. Compared to 2019, the number of companies that submitted financial reports is higher. In 2019, the financial report was submitted by 1886 companies, while in 2020, a total of 1920 of them. The companies that submitted the financial reports employ 18,772 employees. Bearing in mind that the average number of employees in 2020 was 37,085, this means that these companies employ slightly more than 50% of the total number of employees. The total number of employees was reduced by 961 during 2020².

Meggle Mljekara d.o.o. Bihać takes the first place in terms of revenue in the Una-Sana Canton, with 68,925,138 KM of income. According to the profit earned, PIRNAR Bosanski Petrovac d.o.o. is still in the first place, with 14,858,134 KM of profit. The largest number of employees in 2020 was in the Cantonal Hospital Dr. Irfan Ljubijankić Bihać. This hospital employs 892 staff.

1 USC in numbers, 2021 - fzs.ba

2 This is the TOP 20 company in Una-Sana Canton - manager.ba



Number of job vacancies in Una-Sana Canton

Number of job vacancies and distribution by months

In 2020, a total of 1,324 vacancies were announced for which employees were sought through the USC Employment Service, with 316 legal entities (companies, institutions, institutions or associations) looking for 2,448 workers. Taking all months into account, an average of approximately 204 workers were sought per month. The average number of job vacancies is approximately 110 per month.

Table 1. Total and average number of vacancies and employees in demand

Category	Vacancies	Number of employees
Total	1.324	2.448
Monthly average	110	204
Daily average	3,6	6,7

Most vacancies were published in September 2020 (20.9%). A significant drop in reports is noticeable after the declaration of the COVID-19 pandemic. The largest number of sought-after workers was in June 2020 (34.5%), when a large competition was announced for seven faculties, with 670 employees sought.

Table 2. Total and average number of vacancies published and employees in demand

Month	No. of vacancies	Percent	Number of workers in demand	Percent
1	168	12.7%	191	7.8%
2	127	9.6%	161	6.6%
3	69	5.2%	118	4.8%
4	11	0.8%	15	0.6%
5	50	3.8%	76	3.1%
6	60	4.5%	845	34.5%
7	77	5.8%	141	5.8%
8	86	6.5%	120	4.9%
9	277	20.9%	323	13.2%
10	55	4.2%	67	2.7%
11	230	17.4%	269	11.0%
12	114	8.6%	122	5.0%
Total	1,324	100.0%	2,448	100.0%

Number of announced vacancies and number of employees in demand in USC

All companies that had d.d., d.o.o. or trades in their name were classified as private, while companies that had the addition of public institutions, public companies, preschools, municipalities and the like in their name were classified as public. For companies where a description of this nature was lacking, the Bisnode web service was used with the aim of identifying the legal status. As can be seen, the largest number of job vacancies and the number of required workers refers to the public sector.

Another problem in the analysis was that there was no one row in the database with comprehensive information; instead, cells were merged in order to classify applications by employers. However, such an approach complicates the analysis because it is necessary to associate a company name to each application. In addition, there were many employers with similar names. For example, in some cases the names of the institution were given in quotation marks, while in other cases the quotation marks were not used, or in certain names permutations were made, with or without an appendix and place where the employer operates. Such entries had to be sorted out so that an analysis of the number of employers could be performed, and sorted by type (public or private).

Table 3. Number of published vacancies and employees in demand according to the type of legal entity

Type of company	No. of vacancies	Percent	Number of employees in demand	Percent
Public	1,159	87.5%	2,162	88.3%
Private	165	12.5%	286	11.7%
Total	1,324	100.0%	2,448	100.0%

As can be seen from the analysis, the largest number of job vacancies and the number of required workers refers to the public sector (87.5%), which are obliged to advertise their applications through the Employment Service, while 165 private sector employers sought 286 workers. The analysis is significantly complicated by the previously mentioned application for the admission of 670 workers at 7 faculties of the University of Bihać:

1. 1. Biotechnical Faculty; 1st and 2nd cycle
2. 2. Faculty of Economics, 1st and 2nd cycle
3. 3. Faculty of Health Studies
4. 4. Islamic Pedagogical Faculty
5. 5. Faculty of Pedagogy
6. 6. Faculty of Law
7. 7. Technical Faculty

The University of Bihać is a public institution, founded by the Government of Una-Sana Canton, and it is divided into 7 faculties. The university was founded in 1997, and has been in operation since its establishment. Analysts assume that these applications, or at least the vast majority of them, are published only to satisfy the form, and if this assumption is correct, the application structure itself would be completely different.

Required level of education in job vacancies

Analogous to the structure of job vacancies, the most sought-after jobs are those with a university degree (62.2% of all required jobs), followed by two-year post-secondary education (12.9%).

Given the significant participation of educational institutions in the applications published by the USC Employment Service, and bearing in mind that professorships and teaching professions are the most sought-after occupations, it is understandable that there is such a high percentage of sought-after workers with a university degree.

Table 4. Number of sought employees by education level

Lowest demanded level of education	No. of vacancies	Percent	Number of employees in demand	Percent
Skilled	90	6.8%	160	6.5%
Non-skilled	87	6.6%	139	5.7%
Basic education level	2	0.2%	2	0.1%
Medium-skilled	7	0.5%	14	0.6%
Secondary education	159	12.0%	270	11.0%
University education	668	50.5%	1,523	62.2%
Two-year post-secondary education	295	22.3%	315	12.9%
Not stated	16	1.2%	25	1.0%
Total	1,324	100.0%	2,448	100.0%

Structure of job vacancies with public companies and institutions

Analyzing incoming job vacancies, and the challenges faced by analysts, it is not surprising that when it comes to public companies and institutions, university education appears as the most required level of education and accounts for 54.5% of all announcements and 68.6% of all required employees.

Table 5. Number of required employees according to education level for public companies and institutions

Lowest requested education level	No. of vacancies	Percent	Number of employees in demand	Percent
Skilled	53	4.6%	62	2.9%
Non-skilled	73	6.3%	112	5.2%
Basic education level	2	0.2%	2	0.1%
Medium-skilled	3	0.3%	6	0.3%
Secondary education	102	8.8%	184	8.5%
University education	632	54.5%	1,483	68.6%
Two-year post-secondary education	288	24.8%	308	14.2%
Not stated	6	0.5%	5	0.2%
Total	1,159	100.0%	2,162	100.0%

Structure of job vacancies with private companies

Among private companies (d.o.o., d.d. and crafts), the most dominant are job vacancies requiring secondary education, namely 34.5% of announcements and 30.1% of required employees. The problem in the analysis was that several levels of education were defined for one job (e.g. skilled, medium-skilled, and non-qualified), and in that case it was necessary to make a new variable that would reflect the lowest required level of education acceptable for employer.

Table 6. Number of required employees according to education level for private companies

Lowest requested education level	No. of vacancies	Percent	Number of employees in demand	Percent
Skilled	37	22.4%	98	34.3%
Non-skilled	14	8.5%	27	9.4%
Basic education level	4	2.4%	8	2.8%
Medium-skilled	57	34.5%	86	30.1%
Secondary education	36	21.8%	40	14.0%
University education	7	4.2%	7	2.4%
Two-year post-secondary education	10	6.1%	20	7.0%
Not stated	165	100.0%	286	100.0%

Occupations in highest demand in job vacancy announcements

In the analysis of occupations, it is evident that occupations related to the education sector are dominant, so when the staff required by the University of Bihać is taken into account, and teaching occupations (teachers, professors, etc.) are added, in the overall structure those occupations make up over half of the required occupations, i.e. 52.39% of all required employees.

Table 7. Occupations in highest demand

Occupations required	Number of required employees	Percent
Biotechnical Faculty; 1st and 2nd cycle	670	28,53%
Faculty of Economics, 1st and 2nd cycle		
Faculty of Health Studies		
Islamic Pedagogical Faculty		
Faculty of Pedagogy		
Faculty of Law		
Technical Faculty		
Teacher	345	14,69%
Professor	215	9,16%
Nurse	85	3,62%
Bookkeeper	64	2,73%
Manager	49	2,09%
Medical doctor	42	1,79%
Driver	34	1,45%
Cleaner	31	1,32%
Builder	30	1,28%
Auxiliary worker	27	1,15%
Other occupations	756	32,20%
Total	2.348	100%



Occupations in highest demand in job vacancies in the public sector

As the structure of job vacancies is dominated by those published by public companies or institutions, in the total number of most sought-after occupations, as well as in the analysis of all announcements in total, the predominant ones are those with more higher percentages for individual occupations. The most sought-after occupations among public legal entities are teachers (teachers, professors) and they make up 56.8% of all occupations among public companies.

Table 8. Occupations in highest demand with public companies

Required occupation	Number of required employees	Percent	Cummulative
Biotechnical Faculty; 1st and 2nd cycle			
Faculty of Economics, 1st and 2nd cycle			
Faculty of Health Studies	670	31,0%	31,0%
Islamic Pedagogical Faculty			
Faculty of Pedagogy			
Faculty of Law			
Technical Faculty			
Teacher	343	15,9%	46,9%
Professor	214	9,9%	56,8%

Occupations in highest demand in job vacancies in the private sector

In private companies, the demand for workers follows the structure of the private sector, but also the needs of the surrounding countries, especially Slovenia. The most sought-after are workers in the construction and transport sectors, followed by the manufacturing industry. Following the previous, the most-sought after are builders, welders and drivers, who make up 22.0% of all required workers.

Table 9. Occupations in highest demand with private companies

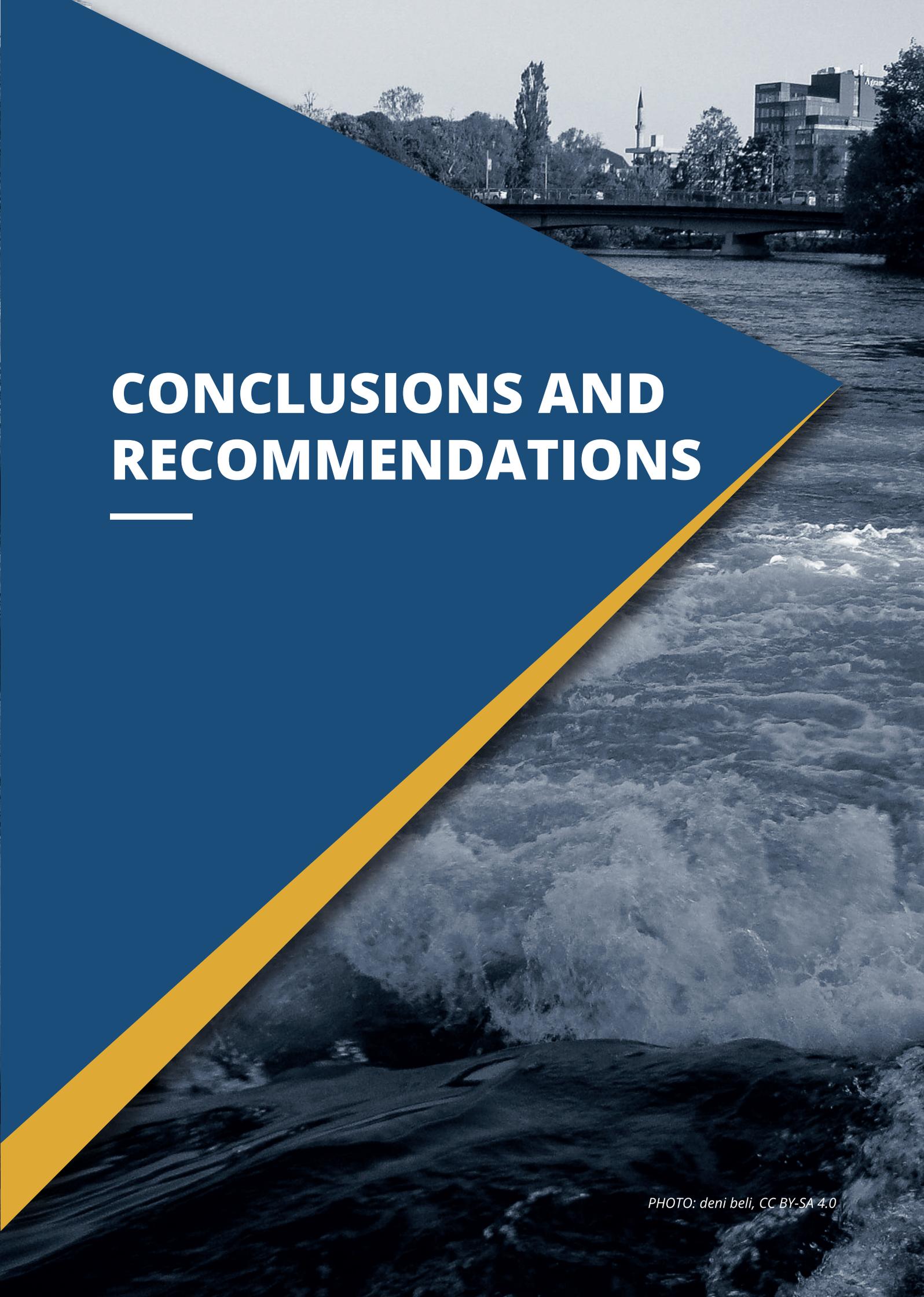
Required occupation	Number of required employees	Percent	Cummulative
Builder	25	8.7%	8.7%
Welder	21	7.3%	16.1%
Driver	17	5.9%	22.0%
Concrete mixer	10	3,5%	25,5%
Building worker	10	3.5%	29.0%
Auxiliary worker	8	2.8%	31.8%
Locksmith	7	2.4%	34.3%
Loading worker	6	2.1%	36.4%

Number of job vacancies and number of required workers by municipalities

When analyzing job announcements, it was difficult to determine the number of announcements and required employees by municipalities, due to the fact that several municipalities were specified for a significant number of announcements. However, given that the share of such required workers is 1.96%, it is possible to conclude that most announcements were published for the needs of Bihać (30.14%), where 50.33% of the required workforce is located.

Table 10. Number of job vacancies and number of required employees by municipalities / areas

Municipality / area	No. of vacancies	Percent	Number of required employees	Percent
Bihać	399	30.14%	1,232	50.33%
Not stated	159	12.01%	263	10.74%
Cazin	201	15.18%	235	9.60%
Velika Kladuša	153	11.56%	173	7.07%
Bosanska Krupa	112	8.46%	131	5.35%
Sanski Most	82	6.19%	92	3.75%
Bosanski Petrovac	69	5.21%	85	3.47%
Slovenija	28	2.11%	83	3.39%
Ključ	52	3.93%	59	2.41%
Various municipalities	23	1.74%	48	1.96%
Bužim	45	3.40%	46	1.88%
Bosanska Otoka	1	0.08%	1	0.04%
Total	1,324	100.00%	2,448	100.00%



CONCLUSIONS AND RECOMMENDATIONS

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Conclusions and recommendations

In 2020, there was a total of 1,324 vacancies, for which employees were sought through the USC Employment Service, with 316 legal entities (companies, institutions, institutions or associations) looking for 2,448 workers. Taking all months into account, an average of about 204 workers were sought per month. The average number of job vacancies is approximately 110 per month.

The largest number of job vacancies was published in September 2020 (20.9%). A significant drop in job vacancies is noticeable after the declaration of the COVID-19 pandemic. The largest number of sought-after workers was in June 2020 (34.5%), when a large competition was announced for seven faculties, with 670 workers being sought.

What requires special attention is the structure of advertisements published by public and private employers. In this respect, the public sector dominates, with 87.5%.

Bearing in mind that there is a significant number of companies with great development potential in the canton (e.g. Pirnar Bosanski Petrovac, Prevent Home Ključ, Farmacija 2011 Bihać, Meggle Mljekara Bihać, KOV_GRAD Bužim, Halko Cazin, Akrobat Velika Kladuša, I-Selimović Cazin, Bosna Car Bosanska Krupa, etc.), it is necessary for the Service to develop a strategy for joining the accessing the private sector – large as well as medium and small enterprises.

During the analysis, it was estimated that the database could be improved in the following aspects:

- Follow the principle “one line in the database - one ad”. Although merging cells in budget software such as Excel can facilitate visual tracking (in cases where an employer has multiple ads), such an approach complicates the analysis that follows.
- Standardize entries via drop-down menus to avoid giving similar names. For example, in addition to some ads, the municipality “BOSANSKA KRUPA” is entered, while next to another there is “77240 BOSANSKA KRUPA”. A similar problem was observed in occupations, where there were many of the same occupations that are conducted under a similar name, and in the name of the employer. Standardizing the list of occupations using the drop-down menu would facilitate the analysis process itself, as well as the list of employers that would be created before entering the database.
- Classify companies into public and private immediately upon entry, as well as by size (small, medium and large) and activities (KD 2010) so that useful analyzes can be made based on these important parameters.
- When defining the level of education (skilled, non-skilled, university), different combinations were used, e.g. high school / university or skilled / high school. Assuming that this combination implies that the required job can be filled with employees of different degrees of education, it would be desirable to define two variables: the lowest degree and the highest degree, in order to facilitate the analysis. A similar problem is present with the entry of municipalities, where one advertisement has more than one selected municipality. The solution should make it possible to state all municipalities to which the advertisement refers through several variables: primary municipality, secondary and tertiary.
- Cancellations of competitions should be recorded in the table in a different way and not as a separate entry. That is, a new variable (column) should be added next to each ad to indicate whether the ad was finalised (YES / NO) or canceled (YES / NO).