

# ESTABLISHMENT OF REGIONAL VET CENTRES IN NORTH MACEDONIA

**The cases of three regions: South West, Polog and North East**

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# PREFACE

The following assessment of the demand and supply of vocational skills in North Macedonia is intended to support analysis and decision making with respect to the establishment of three Regional Vocational Centres in the Polog, South West and North East regions. The approach has been to assess the character and volume of current skills provision and the potential for improvement and collaboration to meet better current and future skills needs. It should be emphasised that it has not been possible, in a relatively short period of time, to collect all of the data that, ideally, should be assembled and analysed. Nevertheless, this report does provide a strong evidence basis, upon which policy makers and stakeholders can draw. Where appropriate the report draws attention to gaps in knowledge and the need for consultation and further research.

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## ABBREVIATIONS

<b>AE</b>	Adult Education
<b>AEP</b>	Adult Education Provider
<b>ALE</b>	Adult Learning and Education
<b>BDE</b>	Bureau of Educational Development
<b>CAD/CAM</b>	Computer-Aided Design and Manufacturing
<b>CD</b>	Compact Disc
<b>CDI</b>	Community Development Institute
<b>CNC</b>	Computer Numerical Control
<b>CPD</b>	Continuous Professional Development
<b>ETF</b>	European Training Foundation
<b>GDP</b>	Gross Domestic Product
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit
<b>GVA</b>	Gross Value Added
<b>HACCP</b>	Hazard Analysis and Critical Control Points
<b>HGV</b>	Heavy Good Vehicles
<b>ICT</b>	Information and Communications Technologies
<b>IT</b>	Information Technologies
<b>LM</b>	Labour Market
<b>MKD</b>	Macedonian Denar
<b>MoES</b>	Ministry of Education and Science
<b>NEET</b>	Youth Not in Employment, Education or Training
<b>NGO</b>	Non-governmental organisation
<b>OEMUC</b>	Municipal Electro-mechanical Training Centre
<b>OGUDU</b>	Open Civic University for Lifelong Learning
<b>OSEU</b>	Municipal Secondary Economic School
<b>OSTU</b>	Municipal Secondary Technical School
<b>OSU</b>	Municipal Secondary School
<b>OUTU</b>	Municipal Catering and Tourism School
<b>PISA</b>	Programme for International Student Assessment
<b>RSG</b>	Research Steering Group
<b>RCVE</b>	Research Centre for Vocational Education
<b>RVC</b>	Regional Vocational Centre
<b>SDISP</b>	Skills Development and Innovation Support Project
<b>SEN</b>	Special Educational Needs
<b>SOEU</b>	Secondary Municipal Economic School
<b>SOMU</b>	Secondary Municipal Medical School
<b>SOSU</b>	Secondary Municipal Vocational School

<b>SOTU</b>	Secondary Municipal Technical School
<b>SOU</b>	Secondary Municipal School
<b>SUGS</b>	Secondary School of the City of Skopje
<b>USAID</b>	United States Agency of International Development
<b>USD</b>	United States Dollar
<b>VET</b>	Vocational Education and Training
<b>VNFIL</b>	Validation of Non-formal and Informal Learning
<b>WBL</b>	Work-Based Learning

# INTRODUCTION AND METHODOLOGY

1. The European Commission (DG NEAR) asked the ETF to support the Ministry of Education and Science of North Macedonia and other stakeholders with the conceptualisation of Regional VET Centres (RVC) and an assessment of the current provision and the future demand for persons who possess skills in three regions of the country. The new RVCs are foreseen by the new Education Strategy 2018-2025 of the country. Their establishment is expected to contribute to ensuring the efficiency of VET reforms through centralisation of investments and concentration of results, as well as to promotion and dissemination of VET innovations based on the best international practices<sup>1</sup>.
2. One strand of the research was designed to assess the current capacities and the potential of all VET providers (VET schools; providers of adult education) in South West, Polog and North East regions of the Republic of North Macedonia, where the Regional VET Centres will be established, to respond to economic and social needs. The second strand was concerned to investigate the socio-economic environment and to assess the current and future demand for the skills demanded by employers in the same regions.
3. This assessment collected data on enrolment, staffing, profiles, management, financing and needs among VET schools, AEPs and municipalities. The research provides an audit of the capacities of each VET school and AEP to successfully provide the occupational profiles that they currently offer. In addition, it explores the demand and supply of skills in relation to a sector to assess how effectively and responsively skills needs are being met regionally now and how well they will be met in the future.
4. In addition, the assessment sought to identify the developmental needs of VET schools and Adult Education Providers (AEPs) and to assess whether any organisations would be able and willing to take on additional functionalities such as continuous professional development (CPD) of teachers, curricula development, school-business cooperation or support to students with special educational needs (SEN) etc.
5. A mix of methods and tools was employed for carrying out this research. All of the schools and AEPs were requested (and reminded) to complete a set of questionnaires in order to collect factual information. 20 out of 21 VET schools completed at least some of the questionnaires whilst only 6 of the 24 AEPs chose to participate in the survey. 20 VET schools and 7 AEPs were visited and interviews and focus groups were conducted with managers, teachers and trainers, students and their parents. (Table 1). Interviews were conducted with educational administrators in all 9 municipalities. The research instruments were developed on the basis of tools developed by ETF in partnership with GIZ for a similar exercise in Albania. The instruments were validated by the Steering Group established within the Ministry of Education and Sciences (MoES). The final instruments can be found in Annex 1. In addition, some interviews and a focus group were conducted with some national stakeholders. Desk research included the collection of data from the State Statistical Office and data provided by the Ministry of Education and Sciences (MoES), as well as national and sector-related policy documents and a reports produced by international organisations.
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<sup>1</sup> Education Strategy 2018-2025 and Action Plan. <http://mrk.mk/wp-content/uploads/2018/10/Strategija-za-obrazovanie-ENG-WEB-1.pdf>.

**TABLE 1. DISTRIBUTION OF SECONDARY SCHOOLS BY REGIONS OF NORTH MACEDONIA**

Region <sup>2</sup>	North East	South West	Polog	Totals
Number of Vocational Schools (Participating)	5	8	8	21
Vocational Schools visited	5	7	8	20
Schools Completing Surveys	5	7	8	20
Focus Groups and Interviews	20	21	21	62
Teachers	25	29	23	77
Parents	18	15	20	53
Students & Trainees	38	44	38	120
Number of Adult Education Providers (AEPs)	9	3	12	24
Adult Education Providers visited	2	2	3	7
AEPs participating in Surveys (including partials)	2	2	2	6
Focus Groups/Interviews	1	2	3	6
Teachers	1	-	9	10
Trainees	-	-	9	9
Municipalities in Region	3	3	3	9
Municipalities participating	3	3	3	9

7. The report identifies issues and opportunities for every region and provides alternative scenarios of how the quality, quantity and mix of services provided by VET schools and providers of adult education may be better aligned with labour market and social needs. These scenarios include different options that propose different types of regional VET Centres (regional beacon, regional hub or hybrid) for each region.

8. On 9<sup>th</sup> July a consultation event was held in Skopje which permitted the Research Steering Group and representatives from education, business and government to review the findings of this assessment and to comment on key parts of the draft. Additionally, at the end of August, the report was further amended in line with the discussions with the representatives of the Employment Agency of the Republic of North Macedonia and the donors active in the VET sphere.

<sup>2</sup> For practical reasons the research activity is organised into three research zones which do not exactly correspond to the three administrative regions.

# 1. BACKGROUND. GENERAL ISSUES FACING VOCATIONAL PROVISION IN MACEDONIA

## 1.1. Population and Migration

9. In 2017, population of the Republic of North Macedonia reached 2,075.3 thousand people which was 0.46% more than in 2013 (2,065.8 thousand). At the same time, the share of the working age population dropped by 0.89 percent points for the same period (from 70.75% in 2013 to 69.86% in 2017)<sup>3</sup>. The share of youth population (15-24) within the working age population decreased even more considerably and in 2017 comprised 16.4% against 18.3% in 2013. The portion of NEET youth also grew – from 24.2% in 2013 to 24.9 in 2017<sup>4</sup>.

10. Between 2013 and 2017, a leap of immigration observed in 2015, resulted in a peak of net migration for this period – 2,860 people or 105.7% increase compared with 2013. In 2016, immigration dropped again (2,626 or by 32.3% less compared with 2015) and the next highest indicator of net migration (2,340) was registered in 2017. This, however, was due to a small number of those who left the country – only 424 (Table 2)<sup>5</sup>.

TABLE 2. MIGRATION DYNAMICS IN 2013-2017

Year	Immigration to the country	Emigration for the country	Net migration
2013	2,431	1,041	1,390
2014	2,538	839	1,699
2015	3,876	1,016	2,860
2016	2,626	630	1,996
2017	2,764	424	2,340

Source: "Analysis of Skills Demand and Supply at Regional and Local Level in North Macedonia". ETF, 2019;

11. According to 2017 data, average years of schooling was 9.6 and the expected years of schooling – 13.3. Adult literacy comprised 97.8% (2015 data)<sup>6</sup>.

## 1.2. Economy and Labour Market

12. Between 2010 and 2018, GDP of North Macedonia increased by 34.7% and GDP per capita by 33.7%. There were two dramatic declines in 2012 (by 7.1% and 7.2%, respectively) and in 2015 (by 11.4% and 11.5%, respectively). Both, however, recovered within a year. In 2018, GDP growth compared with the previous year comprised 12.4% and GDP per capita – 12.3%. The latter reached the amount of 6,084 USD<sup>7</sup> (Graph 1 and Graph 2).

<sup>3</sup> "Analysis of Skills Demand and Supply at Regional and Local Level in North Macedonia". ETF, 2019.

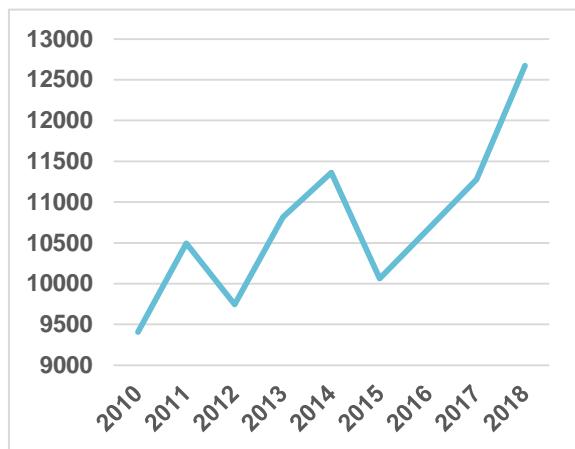
<sup>4</sup> Human Capital and Vocational Education and Training in North Macedonia. Policies, Challenges, Solutions. ETF, 2019.

<sup>5</sup> "Analysis of Skills Demand and Supply at Regional and Local Level in North Macedonia". ETF, 2019.

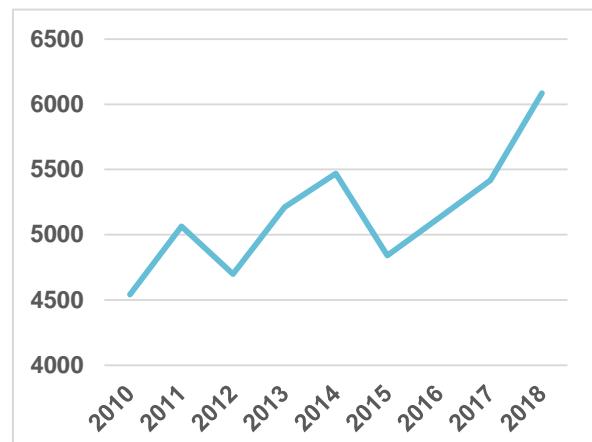
<sup>6</sup> Human Capital and Vocational Education and Training in North Macedonia. Policies, Challenges, Solutions. ETF, 2019.

<sup>7</sup> World Bank: <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?end=2018&locations=MK&start=2001&view=chart> and <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=MK>.

**GRAPH 1. DYNAMICS OF GDP IN 2010-2018 (MILLION USD)**



**GRAPH 2. DYNAMICS OF GDP PER CAPITA IN 2010-2018 (USD)**



13. The poverty indicators showed a slight improvement during the last years. Thus, the poverty headcount ratio at national poverty lines decreased from 27.0% of population in 2010 to 22.2% in 2014<sup>8</sup>. Average net wages in 2017 was 22,928 MKD, recording an increase of 1,783 MKD or by 8.4% compared with 2013<sup>9</sup>.

14. In 2013-2017, the activity rate of population fluctuated between 69.6% and 70.8%, peaking at 70.8% in 2014. Unemployment rate within the same period was decreasing on average by 1.65 p.p. and in 2017 comprised 22.4%.

15. Unemployment rate of the youth (15-24) comprised 46.7% in 2017. Youth not in employment, education or training (NEET) comprised 24.9%. As by the levels of education, the largest share among the unemployed people was of those with 4 year secondary education (49.0%) followed by the cohort with primary and lower secondary education (Table 3)<sup>10</sup>.

**TABLE 3. UNEMPLOYED PERSONS BY EDUCATIONAL ATTAINMENT, 2017**

Education level	Share within the unemployed population, %
Incomplete primary and lower secondary education	2.05
Primary and lower secondary education	20.49
3 years of secondary education	7.13
4 years of secondary education	49.01
Post-secondary vocational education	1.13
University education	19.76

Source: Labour Force Survey, 2017. State Statistical Office, 2018.

<sup>8</sup> World Bank. Country Profile North Macedonia:

[https://databank.worldbank.org/views/reports/reportwidget.aspx?Report\\_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&in\\_f=n&zm=n&country=AMD](https://databank.worldbank.org/views/reports/reportwidget.aspx?Report_Name=CountryProfile&Id=b450fd57&tbar=y&dd=y&in_f=n&zm=n&country=AMD).

<sup>9</sup> "Analysis of Skills Demand and Supply at Regional and Local Level in North Macedonia". ETF, 2019.

<sup>10</sup> Labour Force Survey, 2017. State Statistical Office, 2018: <http://www.stat.gov.mk/Publikacii/2.4.18.03.pdf>.

### 1.3. Challenges and Policy Priorities

16. The Education Strategy for 2018-2025, defines a number of challenges related to the system of Vocational Education and Training of the country:

- insufficient attractiveness of VET (except certain vocations in the field of healthcare, economics and law), particularly regarding 2-year and 3-year vocational education, and lack of modern post-secondary education system;
- extensive number of general subjects in the VET curricula (about 42%), domination of theoretical instruction, accompanied with small percentage of hours for practical training (20-30% on average) and low motivation of the employers to accept students for practical training in their companies;
- mismatch between the VET supply and the Labour Market demand, complicated by inflexibility and ineffectiveness of the new VET qualifications development system and procedures for adapting the VET curricula to the labour market requirements;
- serious deficiencies in the teachers' knowledge on the modern technologies related to the taught subjects, aggravated with the low motivation of teachers, and weak system of their professional development and career advancement;
- low effectiveness of management of the VET schools' (also due to insufficient professionalism of some principals), which suffer also from incomplete support staff and professional services' specialists (e.g. IT administrator, Career advisor, SEN specialists, etc.);
- limited capacities of VET system to ensure inclusive education, to accept and properly integrate the students with special educational needs.

17. All the above challenges were confirmed during this research and specific manifestations of them were identified in every of the three studied regions (see Section 2 of this report).

18. For overcoming the above challenges, four groups of priorities (23 in total) are defined in the Education Strategy 2018-2025, of which the following were specifically taken into consideration for carrying out this exercise related to the conceptualisation and establishment of Regional Vocational Education and Training Centres in the Republic of North Macedonia:

- Priority I. Harmonise Vocational Education and Training with the Labour Market Needs
  - 1.1. System of VET can be promptly adapted to the changing skill needs in the Labour Market;
  - 1.2. Learning within the VET system is organised in a more flexible and effective way in terms of competences acquisition and targeted to achieving the learning outcomes defined by the standards;
  - 1.4. VET system is continuously informed about the up-to-date demand on the work force and qualifications and skill needs to be used for VET policy development;
- Priority II. Improve Learning Environment and Quality of Vocational Education and Training
  - 2.1. Efficiency and effectiveness of the VET system are improved in terms of expenditures and relevance to the local, regional and national labour markets;
  - 2.2. Teaching and learning process is supported with all means necessary for achieving established learning outcomes;
  - 2.4. VET students acquire practical skills relevant to the real needs in working environments;

2.5. The business community actively participates in the VET implementation;

2.8. Efficiency of VET reforms is ensured through centralisation of investments and concentration of results;

2.9. Introduction and dissemination of VET innovations based on the best national and international practices is promoted.

- Priority IV. Improve Capacities of Human Resources
  - 4.1. Professional competences of teachers are continuously improved;
  - 4.2. Teachers are motivated to demonstrate better performance;
  - 4.4. Education and training is accompanied by those support services necessary for students' quality learning process.

19. In the field of Adult Education, the most recent policy document – Adult Education Strategy for 2016-2020, which was approved in 2016, identifies a wide scope of challenges for this system. These challenges are both external, e.g. Demographic and educational structure of the population, Economic situation in the country, and Financing, and also internal – Attractiveness and participation, Policies and Governance, Relevance and Quality, Human resources (Teachers / Trainers / Andragogues).

20. The Strategy defines the following priorities for the system improvement:

- Priority 1. Improvement of the attractiveness of and participation in adult education
- Priority 2. Establishment of a system for quality development in adult education
- Priority 3. Development of a system for validation of prior learning
- Priority 4. Improvement of the organisation, management and financing of adult education
- Priority 5. Establishment of a system for public adult education
- Priority 6. Strengthening of research and developmental projects in adult education
- Priority 7. Professionalisation of the staff in the field of adult education
- Priority 8. Monitoring and evaluation of adult education

21. The solutions proposed by this research for improving skill development in accordance with the labour market needs, particularly in the three target regions take account of these goals and priorities.

#### 1.4. School and AE providers Network

22. In the academic year 2017-2018, there were 131 secondary schools in the country, of which 77 provided VET (including both purely VET schools and mixed schools that offer both vocational and general education). Table 4 shows distribution of the secondary schools as by regions. There were also eight Art schools.

**TABLE 4. DISTRIBUTION OF SECONDARY SCHOOLS BY REGIONS OF NORTH MACEDONIA**

Region	Number of secondary schools	Of them, providing VET
Skopje region	36	19
Vardar region	11	8
Eastern region	14	10

Southeast region	9	7
Pelagonia region	20	12
Southwest region	14	8
Polog region	18	8
Northeast region	9	5
<b>Total</b>	<b>131</b>	<b>77</b>

Source: State Statistical Office (<http://www.stat.gov.mk/Publikacii/2.4.18.05.pdf>) and "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018.

23. According with the ETF data, the share of VET students in the cohort of those involved in secondary education, increased from 2013 to 2017 only by 0.2 percent points (from 59.4% to 59.6%). This indicator peaked at 58.9% in 2015<sup>11</sup>. The number of students, teachers and the student / teacher ratio are presented in the Table 5.

**TABLE 5. STUDENTS, TEACHERS AND THE STUDENT / TEACHER RATIO FOR VET SCHOOLS**

Region	No of students	No of teachers	Average No of students per institution	Student / teacher Ratio
Skopje region	16,323	1,336	859	12.2
Vardar region	4,035	435	504	9.3
Eastern region	4,698	498	470	9.4
Southeast region	4,659	433	665	10.8
Pelagonia region	5,662	623	472	9.1
Southwest region	4,150	476	519	8.7
Polog region	7,397	816	925	9.1
Northeast region	4,099	417	820	9.8
<b>Total / Average</b>	<b>51,023</b>	<b>5,034</b>	<b>662</b>	<b>10.1</b>

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, and own calculations.

24. It is important to mention, however, that the student/teacher ratio fluctuates strongly from to school to school. For the academic year 2017-2018, the highest ratio equal to 24.92 was registered in the VET school "Kocho Ratsin" in Skopje and the lowest – 5.11, in the VET school "Gostivar" in Polog region (for more details, see Annex 2).

25. During the last years, total enrolment of students demonstrated a slight increase, with variance by educational sector (Table 6). Moreover, there are considerable variations for different vocational qualifications/education profiles within the same sector (see Annex 3).

**TABLE 6. CHANGES IN VET ENROLMENT BY THE EDUCATION SECTORS**

Sector	2013/2014	2017/2018	+/- %
Health	2,934	3,791	29.2%
Personal Services	283	361	27.6%

<sup>11</sup> Human Capital and Vocational Education and Training in North Macedonia. Policies, Challenges, Solutions. ETF, 2019.

Forestry and wood processing	140	170	21.4%
Construction and geodesy	383	414	8.1%
Mechanical	1,258	1,211	-3.7%
Electro-technical	2,062	2,022	-1.9%
Textile and leather	332	294	-11.4%
Traffic	547	472	-13.7%
Economy, law and trade	2,827	2,427	-14.1%
Chemistry and technology	429	355	-17.2%
Agriculture-veterinary	331	266	-19.6%
Catering and tourism	303	235	-22.4%
Geology, mining and metallurgy	74	39	-47.3%
Graphical	58	20	-65.5%
<b>Total / Average</b>	<b>12,293</b>	<b>12,494</b>	<b>1.6%</b>

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018 and own calculations.

26. The above data show that growth in enrolment (from 8.1% to 29.2%) was recorded for 4 sectors, i.e. Health, Personal Services, Forestry and wood processing, and Construction and geodesy. The worst affected sectors are Geology, mining and metallurgy and Graphical: -47.3% and -65.5%, respectively.

## 1.5. Curriculum and Qualifications – relevance to Employment

27. As mentioned above, the Education Strategy 2018-2025 defines irrelevance of the VET content to the Labour Market demand as one of the challenges of the system. Many curricula are outdated and overloaded by general subjects, the number of hours for practical training is limited. Moreover, until recently there was no requirement that at least a part of the practical instruction should be conducted in the work place (or other corresponding organisations). From 2019/2020 work-based learning will become a compulsory part of all VET. Our research confirmed that most of the VET schools provide practical training of the students at their own premises, in workshops and/or laboratories (rather than in real workplaces) which are often equipped rather poorly.

28. In addition, the VET schools are not authorised to make any changes in the curricula received from the central bodies, in order to adapt them to the employers' needs. On the other hand, the private sector is hardly participating in development of the education content and it is not involved in its provision in any form. With some exceptions, employers are not very motivated to accept students for practical training, although certain fiscal incentives are established legislatively<sup>12</sup>.

## 1.6. Quality of Teacher Workforce and Teaching

29. Capacities of the VET schools' human resources including both managers and the teaching staff, is another challenge defined by the Education Strategy. The teachers are lacking knowledge of, and experience in, technologies related to the taught vocation, and also, as it was identified by our research, are often not competent in modern teaching methodologies and techniques. The School

<sup>12</sup> Human Capital and Vocational Education and Training in North Macedonia. Policies, Challenges, Solutions. ETF, 2019.

Directors interviewed during the study, commented that many teachers are not particularly motivated and this profession, due to low salaries and poor reputation, is not attractive for ambitious university graduates or for professionals from industries. The situation is complicated by the absence of a system for appraisal and rewards for good-quality work, in the form of career progression and/or better remuneration<sup>13</sup>.

30. Continuous professional development of the teachers exists but there is no systemic implementation. Only those teachers who are involved in specific projects, receive sporadic training. In a limited number of VET schools only, teacher training is organised on a regular base but on the own initiative of those institutions (see e.g. [Section 2.3.4.3](#) of this Report). There is little and only irregular funding for CPD focusing on the needs of vocational teachers.

## 1.7. Performance – Drop Out and PISA, Inclusion

31. The official data on the academic progression of the VET students, like data on the general education pupils, are not reliable. This is conditioned by the fact that the only regular evaluation of students' performance is the internal (classroom) assessment carried out by the teaching staff, who sometimes tend to manifest own 'better job performance' through demonstrating 'better achievements of the students', often spurious<sup>14</sup>.

32. Indeed, the PISA results show that less than 1% of 15-year-olds in North Macedonia achieve high and highest proficiency in mathematics and reading, while the share of high performers on the State Matura is about 70% (Table 7).

**TABLE 7. DISTRIBUTION OF STUDENTS BY PERFORMANCE IN PISA (MATHEMATICS, READING) AND AT THE STATE MATURA (AVERAGE FOR ALL SUBJECTS), SHARE OF ALL PARTICIPATING STUDENTS**

PISA		
	Proficiency Level 4 and below	Proficiency Level 5 and above
PISA average in mathematics	94.0	0.8
PISA average in reading	94.6	0.2
State Matura		
	Poor to satisfactory (grades 1 to 3)	Good to excellent (grades 4 to 5)
State Matura outcomes	30.0	70.0

Notes: PISA data from 2015. State Matura data from 2012.

Sources: Human Capital and VET in North Macedonia. Policies, Challenges, Solutions. ETF, 2019.

33. Information on drop-outs available from the State Statistical Office, relates to the entire secondary education and is not disaggregated by general and vocational streams. According to those data, 7.6% of the secondary education students (5.6% for female students) dropped out in 2016-2017 academic year (Table 8)<sup>15</sup>.

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

<sup>15</sup> State Statistical Office, 2018

**TABLE 8. UPPER SECONDARY STUDENTS WHO DROPPED OUT FROM SCHOOL DURING THE ACADEMIC YEAR 2016/2017**

	Students who dropped out	Students who left					Students who terminated their education				
		Total	of which left to:				Total	terminated their education in:			
			another school in the same place of residence	another school in the Republic of Macedonia	other countries	un-known		I year	II year	III year	IV year
<b>Total</b>	<b>1,642</b>	1,101	520	217	245	119	541	197	143	130	71
<b>Female</b>	<b>572</b>	365	171	70	91	33	207	73	51	57	26

Sources: State Statistical Office, 2018.

## 1.8. Lifelong Learning – Adult Skills Provision

34. In addition to the priorities established by the Adult Education Strategy for 2016-2020 (see Section 1.3), the Education Strategy also defines a number of outcomes to be reached in this sector. They related particularly to the improvement of the learning opportunities of adults including for those with special educational needs, increasing their motivation to participate in the courses, enhancement of the quality of Adult Learning and Education (ALE) provision, and increasing enrolment in ALE.

35. Considerable contributions to the improvement of adult education sectors in the Republic of North Macedonia have been made with the support of the donor community. However, adult participation remains very low and fragmentary. The ETF assessment suggests that only 3.5% of the country population aged 25–64, participated in lifelong learning in 2010 and 2.3% in 2017, while the corresponding indicators for the EU were 9.1% and 10.9% respectively<sup>16</sup>.

36. Distribution of the ALE participants by the educational attainment level shows that adults with lower educational level are almost totally excluded from the formal and non-formal training (Table 9).

**TABLE 9. POPULATION OF WORKING AGE WHICH PARTICIPATES IN ADULT EDUCATION, BY LEVEL OF EDUCATIONAL ATTAINMENT AND TYPE OF ADULT EDUCATION**

Educational attainment	Formal ALE	Non-formal ALE	Informal ALE
Incomplete basic or no education	0.0%	3.0%	20.6%
Secondary education	48.7%	36.4%	51.3%
Higher education	50.6%	60.6%	28.2%
No information	0.7%	0.0%	0.0%

Sources: Human Capital and VET in North Macedonia. Policies, Challenges, Solutions. ETF, 2019.

<sup>16</sup> Human Capital and Vocational Education and Training in North Macedonia. Policies, Challenges, Solutions. ETF, 2019.

## 2. STATE OF THE REGIONS

### 2.1. Souths-West Region

#### 2.1.1. Demography and Population

37. In 2017, population of the South-West region was 219.7 thousand people, which was less than in 2013 by 0.24%. The working age population was growing till 2016 but in 2017 it dropped by 0.12 percent points and returned to the level of 2013, comprising 73.27%

38. Within 4 years (2014-2017) the number of immigrants increased by about 11%. For the same period, the volume of emigration from South West to other regions was highest in 2015 (417 people). In 2017, 393 people migrated to other regions. Thus the negative net migration rate occurs during 2014-2017. Although the rate of immigration to South West from abroad decreased in 2017 (253) compared to 2013 (340), the emigration to abroad from this region decreased far more rapidly: from 596 in 2013 to 55 in 2017. There has been positive (198) migration net in 2017.

#### 2.1.2. Economy

39. The regional GDP has been constantly growing since 2012. In 2016 GDP was 222,133 million MKD.

40. According to the forecast Gross Value Added (GVA) will grow in this region and in 2030 it will be 86,026 million MKD. GVA of the most of the sectors activities are going to increase. Only 3 of them such as Arts, entertainment and recreation, repair of household goods and other services; Professional, scientific and technical activities; Administrative and support service activities, are projected to decrease and are assessed as "threatened". Wholesale and retail trade, repair of motor vehicles and motorcycles, transportation and storage; accommodation and food service activities has the highest GVA.

#### 2.1.3. Labour Market

41. In 2017 the unemployment rate dropped to 30.5 compared to 36.7 in 2013. The average net wage rose in 2017 by nearly 4.8 percent compared to 2013.

42. Data on employment for the South-West region of the North Macedonia as by sectors of economy<sup>17</sup> for 2016-2018 as well as projections for 2020, 2025 and 2030<sup>18</sup>, are demonstrated in the Table 10. It suggests that the largest and the most rapidly growing sector is *Wholesale and retail trade, repair of motor vehicles and motorcycles*, followed far behind by *Education; Human health and social work activities*; and *Manufacturing*. Other growing sectors such as *Mining and quarrying, Accommodation and food service activities, Water supply, sewerage, waste management and remediation activities*, absorb considerably less employees, however, some of them also will be in the focus of our study as the corresponding specialists are prepared by the VET schools in the region.

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<sup>17</sup> Sectors defined in line with the National Classification of Activities (NKA Rev. 2) of the SSO (Official Gazette of RM № 147/08).

<sup>18</sup> The projections are done solely by extrapolation of the recent years' dynamics, without considering any economic, social, political or other factors which could have impact on the sectors of economy in terms of growth or decline.

**TABLE 10. EMPLOYED BY SECTORS, SOUTH WEST REGION**

Sector/Year	2016	2017	2018	2020	2025	2030
<b>GROWING SECTORS</b>						
Wholesale and retail trade, repair of motor vehicles and motorcycles (G)	10,217	12,495	13,702	17,366	26,078	34,791
Education (P)	4,613	5,186	6,339	7,969	12,285	16,601
Human health and social work activities (Q)	3,323	4,186	5,014	6,712	10,942	15,171
Manufacturing (C)	8,897	9,355	9,702	10,527	12,541	14,555
Public administration and defence, compulsory social security (O)	4,912	5,951	5,731	6,759	8,805	10,852
Mining and quarrying (B)	(610)	1,074	1,673	2,714	5,372	8,031
Accommodation and food service activities (I)	4,629	5,410	4,898	5,383	6,056	6,729
Water supply, sewerage, waste management and remediation activities (E)	1,525	1,979	2,142	2,808	4,350	5,893
Financial and insurance activities (K)	(644)	1,261	(775)	1,090	1,417	1,745
Administrative and support service activities (N)	1,200	1,334	1,242	1,322	1,427	1,533
<b>DECLINING SECTORS</b>						
Construction (F)	7,298	7,273	7,274	7,244	7,182	7,120
Agriculture, forestry and fishing (A)	6,778	3,704	6,336	4,943	3,838	2,733
Arts, entertainment and recreation (R)	1,132	1,709	(936)	965	474	threatened
Other service activities (S)	1,641	1,634	1,340	1,087	333	threatened
Professional, scientific and technical activities (M)	13,01	1,083	1,031	732	55	threatened
Transportation and storage (H)	3,202	2,354	2,088	878	threatened	threatened
Information and communication (J)	(901)	(508)	(663)	334	threatened	threatened
Electricity, gas, steam and air conditioning supply (D)	2,038	1,360	(911)	threatened	threatened	threatened
Real estate activities (L)	:	:	:	NA	NA	NA
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use (T)	-	-	-	NA	NA	NA
Activities of extraterritorial organisations and bodies (U)	-	-	-	NA	NA	NA
<b>TOTAL</b>	<b>65,080</b>	<b>68,205</b>	<b>71,810</b>	<b>78,460</b>	<b>95,286</b>	<b>11,2111</b>

Note: - no occurrence; : too imprecise estimate to be published; () less precise estimate, to be used with caution; NA not available (of various reasons); **threatened** – rather rapid decrease (forecasted negative values).

Source: "Analysis of Skills Demand and Supply at Regional and Local Level in North Macedonia". ETF, 2019;

43. The sectors which are assessed as "threatened" will not necessarily disappear. Even where there is decline or little employment growth there will still be a replacement demand for workers as current

workers retire. Nevertheless, systematic preparation of VET specialists for those sectors may become not grounded.

#### 2.1.4. VET Provision by Employment Sectors

44. In the South-West region of the country, there are eight secondary schools, of which four provide only VET courses and three implement also general education.

45. Two schools (OUTU "V. Pitoshevski" in Ohrid and SOU "St. Naum Ohridski" in Makedonski Brod) are specialised in one profile, i.e. Catering and tourism, while the others offer a wider range of qualifications including engineering, services and trade, economics, healthcare. The largest institution, which is SOU "Niko Nestor" in Struga (more than 1,300 students), delivers VET in 7 different professions (education fields). The Table 11 shows distribution of the VET schools' students as by fields of education in the 2018-2019 academic year.

**TABLE 11. NUMBER OF STUDENTS AS BY INSTITUTIONS AND FIELDS, 2018-2018 ACADEMIC YEAR**

№	School	Educational sectors in VET (student numbers for 2018-19)										Secondary general education	
		Catering and tourism	Electro-technical	Mechanical	Traffic	Personal services	Economy, law and trade	Health	Construction and geodesy	Textile and leather	Chemistry and technology		
1	OUTU "V. Pitoshevski", Ohrid	193										193	-
2	OEMUC "Sv. Naum Ohridski", Ohrid		230	147	99	101						577	-
3	SOSU "Sv. Kiril i Metodij", Ohrid						316	133				449	-
4	OSU "Mirko Mileski", Kichevo		120	31			104	132				387	499
5	SOU "Drita", Kichevo		8	35			69	145				257	391
6	SOU "Niko Nestor", Struga	44	175				280	266	249	65	281	1,360	-
7	SOU "St. Naum Ohridski", M.Brod	62										62	80
8	SU "Zdravko Chochkovski", Debar <sup>19</sup>											-	593
<b>TOTAL</b>		<b>299</b>	<b>533</b>	<b>213</b>	<b>99</b>	<b>101</b>	<b>769</b>	<b>676</b>	<b>249</b>	<b>65</b>	<b>281</b>	<b>3,285</b>	<b>1,563</b>

Source: data collected from the institutions within this study.

46. In general, the qualifications offered in the VET schools are in line with the sectors of economy which are active in the region. However, for a number of growing sectors, i.e. Education; Public

<sup>19</sup> This school is not delivering VET for 4 years now. They are offering Construction and Geodesy every beginning of school year, but there is no interest from applicants. School is considering introducing Electro-technical sector for the future.

administration and defence, compulsory social security; Financial and insurance activities; and Administrative and support service activities, it would be expected that many posts will be filled by university graduates.

#### 2.1.4.1. Growing Sectors

47. The sectors of economy are discussed here from the VET provision point of view. As it was shown above, the education fields offered by the VET schools which correspond to the growing economic sectors are:

1. Catering and tourism;
2. Electro-technical;
3. Mechanical;
4. Economy, law and trade;
5. Health;
6. Textile and leather;
7. Chemistry and technology.

#### A. CATERING AND TOURISM

48. In the South-West region, three VET schools, namely OUTU "V. Pitoshevski" in Ohrid; SOU "Niko Nestor" in Struga and SOU "St. Naum Ohridski" in M.Brod, offer qualifications related to **Catering and tourism**: *Waiter, Cook, Hotel tourism technician, Catering Technician, and Rural tourism technician*. In total, almost 300 students learn in this field (Table 12).

**TABLE 12. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR SECTOR CATERING AND TOURISM**

School	TOTAL	Waiter (3y)	Cook (3y)	Hotel tourism technician (4y)	Catering technician (4y)	Rural tourism technician (4y)
OUTU "V. Pitoshevski", Ohrid	193	(MK) <sup>20</sup> 13	(MK) 29	(MK) 60	(MK) 75	(MK) 16
SOU "Niko Nestor", Struga	44	(ALB) 44				
SOU "St. Naum Ohridski", M.Brod	62			(MK) 35		(MK) 27
<b>TOTAL</b>	<b>299</b>	<b>57</b>	<b>29</b>	<b>95</b>	<b>75</b>	<b>43</b>

Source: data collected from the institutions within this study.

49. These qualifications relate to the sector of **Accommodation and food service activities (I)** where around 5,400 employees are projected to be occupied in 2020, more than 6 thousand in 2025 and around 6,700 in 2030. This means about 670 new job places every 5 years or more than 130 annually, while the above schools prepare in total no more than 80-90 specialists per year.

50. According to MoES's SDISP research there has been a steady decline in the number of young people following the qualification of Cook and Catering technician between 2013-2014 and 2017-2018, but due to introduction of new qualifications of Hotel tourism technician and Rural tourism technician, the total number of students of this profile increased (Table 13). The main challenge is that there is no

<sup>20</sup> Teaching language is presented in brackets. MK means teaching in Macedonian language; ALB – teaching in Albanian language; TUR – teaching in Turkish language.

formal diploma/certificate requirement for working in this sector. In Ohrid, it was reported that this results in decline of students' interest. However, in Makedonski Brod, the graduates from this sector find good jobs abroad and this is increasing attractiveness of the sector.

**TABLE 13. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, CATERING AND TOURISM**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b><i>OUTU "V. Pitoshevski", Ohrid</i></b>						
Waiter		13		5	5	3
Cook	n.a	n.a	18	8	9	12
Hotel tourism technician					7	9
Catering technician	25	15	31	17	15	17
Rural tourism technician					10	8
<b><i>SOU "Niko Nestor", Struga</i></b>						
Waiter				-	8	10
<b><i>SOU "St. Naum Ohridski", M.Brod</i></b>						
Hotel tourism technician	20	13	12	9	7	7
Rural tourism technician		11	12	0	8	7

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

51. According to the teachers, the graduates' pathways are as follows:

- ***OUTU "V. Pitoshevski", Ohrid***: those graduates that have decided not to continue to universities (no data on these graduates are available), are finding job relatively quickly. Ohrid, being a touristic centre, has a constant need for much more trained work force than this school is currently producing. The problem is that people without relevant qualifications are employed and are working in touristic sector. This is not regulated in any way and is affecting negatively the attractiveness of vocational training in this sector.
- ***SOU "Niko Nestor", Struga***: graduates of this field are well prepared to enter the Labour Market and in general, are not facing any difficulties for finding jobs if do not continue their education at university.
- ***SOU "St. Naum Ohridski", M.Brod***: larger portion of graduates (70-80%) from this school find jobs abroad, especially as seasonal workers, for few months during the summer periods. During the remaining period they are usually unemployed in their own city.

52. Practical training is a part of curricula. It is compulsory and can be delivered at the school workshop or in industry. In the schools "Niko Nestor" in Struga and "St. Naum Ohridski" in M.Brod, the students' practical training is organised in the kitchen and dining area of own dormitories, while in the school "V. Pitoshevski" in Ohrid – in the real restaurant which belongs to this institution. None of the schools has a Placement coordinator.

53. It can hardly be affirmed that the schools have appropriate and sufficient equipment, buildings and consumables to teach the qualifications. There is a need for renewal and continuous maintenance and updating of the equipment in all schools. This specifically relevant to the facilities where the students' practical training is supposed to be organised. All schools have identified a need of financial

means for provision of ingredients for food preparation, when the practical training is happening in school premises.

54. None of the schools has established any continuous partnership with employers. They do not have also an officer responsible for school-industry liaison. The teachers liaise with the industry on *ad hoc* base.

55. Pedagogy in the discussed institutions can be considered as only partly relevant to the learners' needs and to the vocational sector. Theoretical instruction is mainly teacher-centred but the practical training is organised based on the students' needs and abilities. During the 1<sup>st</sup> year of study, there are more theoretical instructions and more teacher-centred approach. During the following years, with introduction of more practical subjects, instruction methods become more and students-oriented.

56. More specific details about the organisation and provision of training in the schools are as follows:

- **OUTU "V. Pitoshevski", Ohrid and SOU "Niko Nestor", Struga:** the number of students in one class is large and this makes personalisation difficult. Practical training is organised in smaller groups. Nevertheless, according to the parents, there is a need to have even smaller groups in order to have effective practical training. Students were not very happy with the teaching methodologies and teachers' response to the learners needs. Students expressed their need for deeper and wider knowledge in IT, more communication and financial/economic skills.
- **SOU "St. Naum Ohridski", M.Brod:** due to the smaller number of students in a class or group, they can receive more attention from the teachers during the theoretical instruction. However, practical training is organised based on the students' needs and abilities. The students have expressed their satisfaction with the diverse teaching methodologies and teachers' response to the learners' needs, but they were dissatisfied with the use of IT for teaching and learning.

**Conclusion.** These profiles do support direct entry into an employment sector – which is currently recruiting. These Profiles are relatively well adapted to the current and future needs of the labour market although there is only limited collaboration with employers and relatively limited work-based learning. Nevertheless, there is a sharp decline in the number of learners opting for these profiles suggesting that currently they do not have very high value in the labour market.

## B. ELECTRO-TECHNICAL SECTOR

57. Four schools prepare specialists in the **Electro-technical sector**. These are: OEMUC "Sv. Naum Ohridski", Ohrid; SOU "Niko Nestor", Struga; OSU "Mirko Mlleski", Kichevo; and SOU "Drita", Kichevo. The offered qualifications are: Electrical technician for computer technology and automation; Electrical installer and mounter; Electrical engineering – energy technician; and Electrical engineer for electronics and telecommunications. The total number of students is more than 500 (Table 14).

**TABLE 14. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR ELECTRO-TECHNICAL SECTOR**

School	TOTAL	Electrical technician for computer technology and automation (4y)	Electrical installer and mounter (3y)	Electrical engineering – energy technician (4y)	Electrical engineer for electronics and telecommunications (4y)
OEMUC "Sv. Naum Ohridski", Ohrid	230	(MK) 153		(MK) 48	(MK) 29
SOU "Niko Nestor", Struga	175	(MK, ALB) 175			

OSU "Mirko Mlleski", Kichevo	120	(MK) 99	(MK) 21		
SOU "Drita", Kichevo	8			(ALB) 8	
<b>TOTAL</b>	<b>533</b>	<b>427</b>	<b>21</b>	<b>56</b>	<b>29</b>

Source: data collected from the institutions within this study.

58. These qualifications can be considered mainly relating to the sector of **Manufacturing (C)** which is growing very intensively (approximately 400 new work places are projected to be created annually) but the specialists with electro-technical qualifications, specifically those who are specialised in computers and electronics can be occupied in many other sectors<sup>21</sup>. It was reported during the consultation on 9<sup>th</sup> July 2019 that new investments will take place in this region (e.g. by LTK Tools) which are anticipated to generate additional employment relevant to this sector. Enrolment in all institutions, except SOU "Drita", Kichevo, in general is growing for this profile (Table 15).

**TABLE 15. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, ELECTRO-TECHNICAL SECTOR**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b><i>OEMUC "Sv. Naum Ohridski", Ohrid</i></b>						
Electrical technician for computer technology and automation	-	39	42	25	42	44
Electrical engineering – energy technician	-	14	10	9	19	10
Electrical engineer for electronics and telecommunications	-	13	6	4	9	10
<b><i>OSU "Mirko Mlleski", Kichevo</i></b>						
Electrical technician for computer technology and automation	16	20	22	20	16	36
Electrical installer and mounter	-	-	21	13	13	-
<b><i>SOU "Niko Nestor", Struga</i></b>						
Electrical technician for computer technology and automation	53	43	45	48	48	55
<b><i>SOU "Drita", Kichevo</i></b>						
Electrical engineering – energy technician	13	15	14	-	-	-

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

59. At the same time, although the schools reported about a stable interest of youth towards the education in this sector, the job placement rates of the graduates are rather low. Most of them prefer continuing education in universities:

- **OEMUC "Sv. Naum Ohridski", Ohrid:** according to the school Director, 70% of graduates are not interested in entering the Labour market and continue education in university. According to parents, 80% of those who do not continue their education at university, find job relatively quickly.
- **SOU "Niko Nestor", Struga:** according to the teachers, the graduates of electro-technical professions are not well prepared to enter the LM.

<sup>21</sup> Surprisingly, the sector of Information and communication is declining in the region: there were only around 660 employees in 2018 against 900 in 2016. The projection is that this sector is threatened.

- **OSU "Mirko Mileski", Kichevo:** according to school Director, very small percentage of graduates (3-5%) are finding job in period of up to 1 year after graduation. A large portion of graduates are continuing to university. According to parents, the students are not prepared enough for entering the LM.
- **SOU "Drita", Kichevo:** according to teachers, only around 10% of graduates find job within a year after graduation.

60. The quality of the students' practical training differs from school to school. Due to non-existence of a Placement coordinator in the schools, the teachers are dealing with finding, agreeing the conditions, contracting and organising the practical training at the companies. Only the OEMUC "Sv. Naum Ohridski" in Ohrid has established collaboration with local industry on a regular basis. Other schools cooperate with the companies *ad hoc* only.

- **OEMUC "Sv. Naum Ohridski", Ohrid:** companies accept students for practical training that usually is transformed into actual job after graduation. Introduction of dual education resulted in increase of the practical training hours to be implemented at the enterprises, up to 40%<sup>22</sup>. With the financial support of GIZ, the school was equipped with a modern training laboratory which will allow to increase the quality of the practical training also in the school.
- **SOU "Niko Nestor", Struga:** collaboration with the local industries is of a sporadic nature.
- **OSU "Mirko Mileski", Kichevo:** according to the students, organisation of practical training is average, in terms of both duration and the implementation quality.
- **SOU "Drita", Kichevo:** according to the students, organisation of practical training is not satisfactory. Moreover, the school is not well equipped for this profile.

61. The schools reported about a lack of interest of collaboration from the companies. They think the latter shall have incentives for cooperation. Introduction of tax privileges could be a solution.

62. In terms of material base, again only the **OEMUC "Sv. Naum Ohridski" in Ohrid** can be considered as having at least relatively appropriate equipment for practical work classes. However, the teachers see a need for the workshops to be maintained and updated on a regular basis. The students of this institution said that there was one computer room properly equipped with computers and other IT stuff. The **SOU "Niko Nestor" in Struga** has only a partly equipped workshop for practical work classes. Here, regular update of software and hardware was mentioned as a key need. Two other institutions – **OSU "Mirko Mileski"** and **SOU "Drita" in Kichevo** are equipped poorly for delivery of practical training in Electro-technical sector. Students and parents expressed their dissatisfaction with equipment in the school.

63. The students of all schools are only partly satisfied with the pedagogy relevance to their needs:

- **OEMUC "Sv. Naum Ohridski", Ohrid:** students and parents are average satisfied with teaching methodologies. Students expressed their need for widening their knowledge with larger number of classes for Mathematics and Physics.
- **SOU "Niko Nestor", Struga:** according to students, for increasing the effectiveness of practical training, it should be organised in even smaller groups. Students were not very happy with the teaching methodologies and teachers' response to the learners needs. Students expressed their

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<sup>22</sup> For comparison, in the previous 4-year curriculum practical training comprised 11% of all educational hours.

need for deeper and wider knowledge in IT, more communication and financial/economic skills. Specifically for this profile, the students demand learning of software development.

- **OSU "Mirko Mlleski" and SOU "Drita", Kichevo:** due to the smaller number of students in a class or group, they can receive more attention from the teacher during the theoretical instruction. Students have expressed average satisfaction with the teaching methodologies and teachers' response to the learners needs. They have expressed a need for improvement of their communication and IT skills, as well as for additional knowledge in IT (hardware and software).

**Conclusion:** In general, it appears that these profiles are preparing students to enter higher education rather than the labour market. There is some evidence that neither the curriculum nor the pedagogy is well suited to preparing students to enter the labour market directly. Only one school, "Sv. Naum Ohridski", has up to date equipment and sufficiently good links with local employers to support direct entry into the labour market, but even here only some 20% of the cohort enter the labour market.

### C. MECHANICAL SECTOR

64. Three schools prepare specialists in the **Mechanical sector**. These are: OEMUC "Sv. Naum Ohridski", Ohrid; OSU "Mirko Mlleski", Kichevo; and SOUBrenner "Drita", Kichevo. The offered qualifications are: Mechanical engineering – energy technician; Auto technician – mechatronic; Mechanical technician for computer management; Mechanical technician; and Technician for industrial mechatronics. The total number of students in the academic year 20018-2019 was over 200 (Table 16).

**TABLE 16. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR MECHANICAL SECTOR**

School	TOTAL	Mechanical engineering – energy technician (4y)	Auto technician – mechatronic (4y)	Mechanical technician for computer management (4y)	Mechanical technician (4y)	Technician for industrial mechatronics (4y)
OEMUC "Sv. Naum Ohridski", Ohrid	147		(MK) 69	(MK) 37	(MK) 23	(MK) new profile 18
OSU "Mirko Mlleski", Kichevo	31	(MK) 31				
SOU "Drita", Kichevo	35	(ALB) 35				
<b>TOTAL</b>	<b>213</b>	<b>66</b>	<b>69</b>	<b>37</b>	<b>23</b>	<b>18</b>

Source: data collected from the institutions within this study.

65. These profiles relate particularly to the skills needs of the auto servicing industry – a sector that is forecast to grow rapidly in this region. The introduction of a new qualification "Technician for industrial mechatronics" in 2018, in the, **OEMUC "Sv. Naum Ohridski" in Ohrid**, shows that VET is responding to the changing skills needs of the motor servicing industry. In two other institutions, enrolment is although stable but limited (Table 17).

**TABLE 17. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, MECHANICAL SECTOR**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
---------------	---------	---------	---------	---------	---------	---------

<b>OEMUC "Sv. Naum Ohridski", Ohrid</b>							
Mechanical technician	-	6	6	5	6	6	6
Mechanical technician for computer management	-	8	10	2	7	18	
Auto technician – mechatronic	-	14	14	19	22	14	
Technician for industrial mechatronics	-	-	-	-	-	-	18
<b>OSU "Mirko Mileski", Kichevo</b>							
Mechanic - energy technician	14	17	10	11	13	10	
<b>SOU "Drita", Kichevo</b>							
Mechanical engineering – energy technician	12	13	14	9	14	12	

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

66. Job placement rate of the graduates from this field of education is also rather low and is mainly comparable with the Electro-technical sector:

- **OEMUC "Sv. Naum Ohridski", Ohrid:** according to the school Director, 70% of graduates are not interested in entering the Labour market and continue education in university. According to parents, 80% of those who do not continue their education at university, find job relatively quickly.
- **OSU "Mirko Mileski", Kichevo:** according to school Director, very small percentage of graduates (3-5%) are finding job in period of up to 1 year after graduation. A large portion of graduates are continuing to university. According to parents, the students are not prepared enough for entering the LM.
- **SOU "Drita", Kichevo:** according to teachers, only around 10% of graduates find job within a year after graduation.

67. The quality of practical training organisations is average in the two of the three schools and low in the third one. It is closely connected with the situation with the training equipment in the schools:

- **OEMUC "Sv. Naum Ohridski", Ohrid:** according to teachers, school has a very old and outdated machinery for this sector. Due to this, all practical trainings have to be done at the companies. At the same time, the students expressed a demand of a computer room equipped with computers and other IT devices. The need of a laboratory with CNC machines was articulated.
- **OSU "Mirko Mileski", Kichevo:** although the teachers find that the school is equipped for delivery of practical training in Mechanical sector, according to students, organisation of practical training is average.
- **SOU "Drita", Kichevo:** school is not equipped for this profile. According to students, organisation of practical training is not satisfactory.

68. The key needs also coincide with those for the previous sector: establishment of better partnership with the private sector and incentives for employers to cooperate with VET. Only two schools have regular partnership with the companies: **OEMUC "Sv. Naum Ohridski" in Ohrid** with KOSTAL Group, LTH Lerarnica LLC, ODV Electric, and the **OSU "Mirko Mileski" in Kichevo** with the REK Oslomej. The **SOU "Drita" in Kichevo** has no any collaboration with the employers.

69. In terms of pedagogy, the students of **OSU "Mirko Mileski" in Kichevo**, expressed their satisfaction with diverse teaching methodologies and teachers' respond to the learners needs. At the

same time, they wish for improvement of their communication and IT skills, as well as additional knowledge of German language and different software that can be applicable in the mechanical engineering. The students of the **SOU "Drita" in Kichevo**, assessed the teaching methodologies and teachers' respond to learners needs as average. They expressed a need for improving their IT skills and expanding the duration of the practical training.

**Conclusion:** These profiles, for the most part, are currently preparing learners to enter higher education rather than the labour market. The employment forecasts suggest a growing need for skills from employers in this sector. Much better cooperation with employers, more work-based learning and adaptation of the pedagogy and the curriculum might support successful transition into the labour market.

#### D. ECONOMY, LAW AND TRADE

70. Within this field of education, only one qualification, i.e. "Economic technician" with 4-year VET is offered in four institutions, namely: SOSU "Sv. Kiril i Metodij", Ohrid; SOU "Niko Nestor", Struga; OSU "Mirko Mlleski", Kichevo; and SOU "Drita", Kichevo. The number of students is over 760. Enrolment data fluctuate from year to year but for the last four years the aggregate enrolment is around 200 students annually (Table 18).

**TABLE 18. STUDENTS ENROLMENT BY INSTITUTIONS AND YEARS, ECONOMY, LAW AND TRADE**

Institution	Number of students	Enrolment					
		2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
SOSU "St. Kiril i Metodij", Ohrid	(MK) 316		33	56	63	113	86
SOU "Niko Nestor", Struga	(MK, ALB) 280	82	81	92	71	68	63
OSU "Mirko Mlleski", Kichevo	(MK) 104	34	24	16	34	25	32
SOU "Drita", Kichevo	(ALB) 69	31	22	32	12	16	23
<b>TOTAL</b>	<b>769</b>	<b>147</b>	<b>160</b>	<b>196</b>	<b>180</b>	<b>222</b>	<b>204</b>

Source: data collected from the institutions within this study.

71. Graduates from this profile may expect to work in the sector of **Wholesale and retail trade (G)**, which is the most rapidly growing in the region (more than 1,700 projected new work places every year), but also in almost all other sectors, executing business, administrative or sales functions. However, according to the data received from the schools, the graduates prefer to continue their education in universities. Their job placement rate is again low: between 3% to 10% within a year after graduation.

72. Provision of practical training in this profile was not judged to be good: for the **SOSU "Sv. Kiril i Metodij" in Ohrid** and **SOU "Niko Nestor" in Struga** it was assessed as average and for **OSU "Mirko Mlleski"** and **SOU "Drita" in Kichevo**, as poor. This is a result of not only by the very weak links with the companies, where the practical training should be organised but, according to the teachers, also by the curricula *per se*, where the theoretical training is strongly dominating.

73. The use of training equipment for provision of practical training was also assessed as inadequate. Again, the situation was worse in both schools in Kichevo. Only the **SOSU "Sv. Kiril i Metodij" in Ohrid**, has some links established with employers, some of whom are graduates of this institution and support with procurement or construction services to the school.

74. In all schools, the students expressed a need for deeper studying IT related to the qualification (economy, finances). In general, this was supported also by the teachers. Satisfaction by the teaching methods was low in the larger institutions, i.e. **SOSU "Sv. Kiril i Metodij" in Ohrid** and **SOU "Niko Nestor" in Struga**, where the groups are also big and this does not support the quality of learning. In two other, smaller institutions where the students' groups are divided into smaller subgroups, the satisfaction was average.

**Conclusion:** This profile is popular with students and it corresponds to a growing employment sector. However, it does not currently support direct entry into employment.

## E. HEALTH

75. In the field of **Health**, qualification of Nurse is offered by four institutions: SOSU "Sv. Kiril i Metodij", Ohrid; SOU "Niko Nestor", Struga; OSU "Mirko Mlleski", Kichevo; and SOU "Drita", Kichevo. The latter prepares also Pharmaceutical laboratory technicians. The number of students is over 670 (Table 19).

**TABLE 19. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR HEALTH**

School	Total	Nurse (4y)	Pharmaceutical laboratory technician (4y)
SOSU "Sv. Kiril i Metodij", Ohrid	133	(MK) 133	
SOU "Niko Nestor", Struga	266	(MK, ALB) 266	
OSU "Mirko Mlleski", Kichevo	132	(MK) 132	
SOU "Drita", Kichevo	145	(ALB) 59	(ALB) 86
<b>TOTAL</b>	<b>676</b>	<b>590</b>	<b>86</b>

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

76. The sector of **Human health and social work activities (Q)** is the 3<sup>rd</sup> largest in the region in terms of employment. Our projections suggest that annually around 850 new workers in the sector will be demanded. The available data do not allow to specify more precisely what level of specialist will be needed, e.g. medical doctors with higher education or nurses and laboratory technicians.

77. Enrolment in all four institutions seems relatively stable; in 2018 no new students entered to SOU "Drita", Kichevo for Nurses (Table 20).

**TABLE 20. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, HUMAN HEALTH AND SOCIAL SERVICES**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
---------------	---------	---------	---------	---------	---------	---------

<b>SOU "Drita", Kichevo</b>						
Nurse	30	34	31	21	25	-
Pharmaceutical laboratory technician	-	-	-	21	24	41
<b>SOU "Niko Nestor", Struga</b>						
Nurse	-	66	68	62	68	62
<b>SOSU "St. Kiril i Metodij", Ohrid</b>						
Nurse	-	73	29	34	35	36
<b>OSU "Mirko Mlleski", Kichevo</b>						
Nurse	40	34	36	33	30	34

Source: data collected from the institutions within this study.

78. Surprisingly, the graduates of this field of education, also prioritise continuation of education in the universities. At the same time, the schools report that those who decide to enter the labour market, are well prepared for professional work. Nevertheless, no more than 10% find job within a year after graduation. The situation is slightly more difficult in **Kichevo** where two institutions prepare nurses, one with instruction in Macedonian, another in Albanian language. The **SOSU "Sv. Kiril i Metodij" in Ohrid** reported that their graduates find job also abroad (more precise data on the numbers and/or countries are unavailable).

79. All schools closely cooperate with the local hospitals and medical centres, where the students' practical training is organised. The latter is assessed as good by the learners.

80. According to teachers, equipment of **SOSU "Sv. Kiril i Metodij" in Ohrid** and **SOU "Niko Nestor" in Struga** is inadequate, and these institutions rely mainly on the medical institutions for provision of practical training. They both expressed a need of improved facilities and equipment for the schools. The **institutions in Kichevo** consider that they are well equipped for delivery of practical training in for this field of education. The students and parents also expressed their satisfaction in this regard. Nevertheless, maintenance and delivery of new equipment and tools was requested.

81. The situation with satisfaction by the training delivery methods is very similar to that for other qualifications: in the large institutions, the groups are too big and it is difficult to ensure the quality of learning. Therefore, the students in **SOSU "Sv. Kiril i Metodij" in Ohrid** and **SOU "Niko Nestor" in Struga** were less satisfied by the teaching methods than the students of the schools in **Kichevo**. The latter expressed a need for better learning of Pharmacology, Latin and other foreign language, as well as Philosophy in addition to the common need of all students related to better IT, communication and financial/economic skills.

**Conclusion:** Collaboration with the world of work is relatively strong and there is some evidence of growth in demand for skills in this profile. However, this profile does not prepare students to enter the labour market. Schools in Kichevo seem to be relatively strong.

## F. TEXTILE AND LEATHER

82. In this field, only one institution, i.e. SOU "Niko Nestor" in Struga offers the qualification of Clothing technician with 4-year VET. The number of students is 65, and instruction is provided in Macedonian and Albanian languages. This profile relates to the sector of **Manufacturing (C)**. Enrolment data by years are presented in the Table 21.

**TABLE 21. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, TEXTILE AND LEATHER**

2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
31	22	19	-	23	31

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

83. Unfortunately, there are no data on the graduates' placement but the teachers state that they are not well prepared to the labour market. This probably is a result of weak or almost no cooperation with companies. Practical training of the students is mainly organised in the school workshop which is poorly equipped. Only a limited renewal of equipment became possible due to an *ad hoc* support of the private sector.

84. The students did not express satisfaction by the teaching methodologies and the teachers' response to their needs. Although the practical training is organised in smaller groups nonetheless, it was not assessed as effective.

**Conclusion:** This is a profile with low enrolment, which is implemented in rather poor conditions, without established cooperation with employers. No strong potential for development seems in place but more in-depth study of the labour force demand could be useful for understanding the value of any investment in this field of education.

## G. CHEMISTRY AND TECHNOLOGY

85. This field of education also relates to the sector of **Manufacturing (C)**. Training is provided by only one school which is the SOU "Niko Nestor" in Struga but the offered qualifications have rather different nature. They concern the chemical industry – *Chemical technician* and *Manufacturer of chemical and cosmetic products*, and the food industry – *Baker* and *Meat processor*. The specialists with the latter two qualifications may be engaged also in the sector of **Accommodation and food service activities**, e.g. in restaurants (including those of the hotels) and other catering companies. In total, over 280 students are involved in this field (Table 22).

**TABLE 22. STUDENTS DISTRIBUTION BY QUALIFICATIONS FOR CHEMISTRY AND TECHNOLOGY**

Qualification	Number of students	Enrolment					
		2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Chemical technician	(MK, ALB) 218	63	49	63	62	64	62
Manufacturer of chemical and cosmetic products	(MK, ALB) 25	-	-	20	-	-	-
Baker	(MK, ALB) 20	-	-	-	-	-	20
Meat processor	(MK, ALB) 18	-	-	-	-	-	18

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

86. According to the school teachers, the graduates with the qualification of *Chemical technician* are not well prepared for employment, while the other graduates find job easily and quickly. Collaboration with the local industry is sporadic and the practical training of the students is provided mainly at the school's workshop, which has a strong need of modern machinery and utensils.

87. Satisfaction of the students by the teaching methodologies and teachers' response to their needs, is low. Particularly, they would like to pass the practical training in a smaller groups and to enjoy more individualised approach.

**Conclusion:** Chemical Technician is a relatively popular profile but it appears to be mainly serving as preparation for the study of science at university.

#### 2.1.4.2. Declining Sectors

88. The following education field relate to the sectors which were identified as declining in terms of employment:

1. Traffic;
2. Personal services;
3. Construction and geodesy.

#### H. TRAFFIC

89. The education field **Traffic** relates to the sector of **Transportation and storage (H)** which according with our analysis, is declining. Thus, it is projected that in 2020 there will be only around 880 work places in this sector, against slightly more than 2 thousand in 2018. After 2020, this sector will be threatened and only a very limited number of employees will be occupied here.

90. Only one institution in the region, namely OEMUC "Sv. Naum Ohridski" in Ohrid, prepares specialist with the qualification of Road transport technician. Duration of education is 4 years and the instruction language is Macedonian. In the 2018-2019 academic year, around 100 students were involved.

91. According to the School Director, 70% of graduates continue their education in university; 80% of the remaining graduates find job relatively quickly.

92. The school has established regular contacts with several local transportation and other companies and the students are passing their practical training with those employers. According to the teachers, the equipment for practical work classes available at this institution, is not completely adequate. Satisfaction of the students and parents with the teaching methodologies is average.

**Conclusion:** this profile does not offer great potential for the development of a centre of excellence. There may be scope to provide adult training as the acquisition of a HGV licence is a high value credential in the labour market.

#### I. PERSONAL SERVICES

93. Again only one qualification – Cosmetic Technician is offered in one school, i.e. OEMUC "Sv. Naum Ohridski" in Ohrid. This is 4-year VET, where about 100 students are involved. The instruction language is Macedonian.

94. This qualification of Cosmetic Technician relates to the **Other service activities (S)** which is also a declining sector in the region. Nevertheless, the decline rate is lower for this sector, and it is projected that in 2020, over one thousand job places (against 1,340 in 2018) will still exist. By 2025, more than 300 employees will be engaged but after that the sector may become threatened.

95. The situation with the graduates' further pathways is similar to the field of Traffic: 70% of graduates continue in university, and 80% of the remaining find job easily. The difference is that the practical training of the students is organised both at the school, in a workshop which reportedly is equipped semi-adequately, and at the companies, with some of which the school has a stable

partnership. Satisfaction of the students and parents with the teaching methodologies is also average here.

**Conclusion:** this profile does not offer great potential for the development of a centre of excellence. However, there is evidence, in some regions, of a demand for adult training in this sector. There may be scope to provide adult training at OEMUC "Sv. Naum Ohridski" to make additional use of specialist resources.

## J. CONSTRUCTION AND GEODESY

96. The SOU "Niko Nestor" in Struga provides three qualifications in the field of **Construction and geodesy**: Architectural Technician; Construction Technician and Geodetic Technician. The total number of students is around 250 (Table 23).

**TABLE 23. STUDENTS DISTRIBUTION PER QUALIFICATION FOR CONSTRUCTION AND GEODESY**

Qualification	Number of students	Enrolment					
		2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Architectural technician (4y)	(MK, ALB) 146	30	17	38	22	53	42
Construction technician (4y)	(MK) 29	-	-	12	-	-	19
Geodetic technician (4y)	(MK, ALB) 74	26	27	11	19	33	16

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

97. In the projection of employment shown in the Table 11 above, **Construction (F)** is among the declining sectors, however, decrease in the projected number of employees is insignificant, and considerable number of workers in this sector will be necessary: over 7 thousand at least till 2030.

98. There are no data on the job placements of the graduates but according to the teachers, they are not well prepared to employment. Both the teachers and the students report a well-equipped workshop for practical training in the school but there is no partnership or collaboration with employers and no work-based learning in real construction sites or contexts takes place. It is important to mention that particularly the qualification Construction technician is foreseen to provide general construction work competences and also so managerial skill but not specific skills in e.g. carpentry, brick laying, plumbing etc.

99. The students are not highly satisfied with the teaching methodologies and organisation of the practical training. Some expressed a need for introducing learning of AUTOCAD for this profile.

**Conclusion:** this profile does not offer great potential for the development of a centre of excellence. On the other hand, it is surprising that there are not better opportunities for young people to acquire specialist skills in such trades as bricklaying, roofing, carpentry, plastering since there are national and international opportunities for employment.

### 2.1.4.3. Outstanding specifics of the schools

100. The following outstanding specifics of the VET schools of the South-West region were identified:

- **OUTU "V. Pitoshevski", Ohrid:** the school has a long lasting and extensive institutional experience in Catering and Tourism sector. The number of students is declining in recent years. However, this school still has experience and potential to provide skills to a growing employment

sector. The total number of staff in the institution is 49, of which 33 are teachers who were assessed as proficient.

- **SOU "Niko Nestor", Struga:** this large school offers an extensive number of qualifications (12) relating to 7 employment sectors. Only in the fields of Tourism and Textile, the number of students is relatively small. Other profiles attract extensive number of enrollees. It has recently initiated a new profile which compensates for the decline in demand in some profiles. This school's wide experience could permit it to provide support to other schools in the region. The staff is also rather large: 174 people, including 160 teachers.
- **SOU "St. Naum Ohridski", M.Brod:** this school has some unused space in school and in the dormitory. They have ideas how to use them, but some support and financial help can be useful. The number of students attending the school has fallen steadily over the last 6 years. By 2020 it is likely to fall to below 100 students with a student/staff ratio of 5.3!
- **OEMUC "Sv. Naum Ohridski", Ohrid:** this school has a long institutional experience in Electro-technical, Traffic and Mechanical sectors. They have well equipped laboratory donated by GIZ. They are starting profile with dual education from the 2019-2020 academic year. The school has up to date equipment and sufficiently good links with local employers to support direct entry into the Electro-technical employment sector, but even here only some 20% of the cohort enter the labour market. In total around 70 people are working in this school, of which 56 are teaching staff.
- **OSU "Mirko Mlleski", Kichevo and SOU "Drita", Kichevo** were established by splitting one school and still are sharing the same building and most of the spaces. They have a good collaboration with each other. These schools have strength in the preparing Nurses and Pharmaceutical laboratory technicians. In aggregate, they have over 190 staff, including around 160 teachers.

### 2.1.5. Adult Education Provision

101. For identifying Adult Education provision in the South-West region, 9 AEP were contacted and asked for data about their activities, of which 2 were interviewed. Only one AEP, namely **AEP OURU Krste Misirkov, Kichevo**, provided relatively concrete and detailed information. It seems that other providers are not actually functioning in the region.

102. The only activity implemented by the mentioned AEP, is certification for specific crafts. They are conducting examination of applicants and provide certificate. The procedure is as follows:

- Applicant attends practical training somewhere in the industry (hair/cosmetic salon, or a company) and submits a certificate on 6-month practical work to AEP;
- AEP establishes an assessment commission from the own database of the relevant field experts;
- Assessment commission conducts assessment consisting of two parts: written exam (several MCQ) and oral exam where applicant explains verbally processes of work (without any practical performance/demonstration).

103. The other AEP, which is under Ministry of Culture, had 3 trainees in 2018, but none at present. They are having database of trainers that can be called if there is an interest. Since there is no training currently, no trainees or trainers could be made available for any discussion.

104. Both AEPs have some unused space, but until their status is not clarified, nothing can be used, renewed, rented, etc.

## 2.2. Polog Region

### 2.2.1. Demography and Population

105. In 2017, population of the region increased by 3,115 people compared with 2013. Correspondingly, the percentage of the working age population also rose to 74.16% compared with 73.74% in 2013.

106. The number of immigrants from other regions increased from 2013 to 2017 by 18 people, but compare to the previous years, there has been a decrease of their number. The rate of emigration increased by 62 people within 4 years (2014-2017). Thus, there was a negative net migration (-115) in 2017. The immigration was highest in 2015 (512). In 2017 it decreased by 94 people. However positive net migration rate occurs in 2017 (241), as only 121 people emigrated from the Polog region.

### 2.2.2. Economy

107. The regional GDP has been constantly growing since 2012. In 2016 GDP was 132,538 million MKD.

108. The regional GVA is forecast to grow and in 2030 be 67,044 million MKD. Two sectors of activities with most rapidly growing GVA are *Wholesale and retail trade, repair of motor vehicles and motorcycles, transportation and storage, accommodation and Public administration and defence; compulsory social security; education; human health and social work activities* – 17,608 and 19,877, respectively. The sectors that are projected to decline these are: Arts, entertainment and recreation, repair of household good; and Financial and insurance activities, Agriculture, forestry and fishing. Information and communication sector is foreseen to have negative GVA in 2020.

### 2.2.3. Labour Market

109. In 2017, unemployment rate was 29% or by 14.6 percent points less than in 2013. Average net wages increased by 1,553 MKD compared with 2013, and reached 21,809 MKD.

110. Analysis pf the data on employment for the Polog region of the North Macedonia as by sectors of economy for 2016-2018 as well as projections for 2020, 2025 and 2030 (Table 24), suggests that the largest and the most rapidly growing sector is *Manufacturing* followed by *Accommodation and food service activities*, and far behind by *Professional, scientific and technical activities, Transportation and storage, Arts, entertainment and recreation, and Information and communication*. Two other sectors, i.e. *Administrative and support service activities* and *Financial and insurance activities*, are rather small and the growth is also minor.

**TABLE 24. EMPLOYED BY SECTORS, POLOG REGION**

Sector/Year	2016	2017	2018	2020	2025	2030
<b>GROWING SECTORS</b>						
Manufacturing (C)	12,112	15,960	16,909	22,189	34,182	46,175
Accommodation and food service activities (I)	4,100	5,433	7,270	10,356	18,282	26,208
Professional, scientific and technical activities (M)	(910)	1,452	2,083	3,241	6,173	9,105
Transportation and storage (H)	3,014	3,371	3,783	4,542	6,464	8,385
Arts, entertainment and recreation (R)	1,243	1,550	1,992	2,718	4,591	6,463

Information and communication (J)	(574)	:	1,268	1,962	3,696	5,431
Administrative and support service activities (N)	1,030	1,044	1,277	1,487	2,104	2,721
Financial and insurance activities (K)	(836)	(839)	(966)	1,075	1,400	1,725

#### DECLINING SECTORS

Wholesale and retail trade, repair of motor vehicles and motorcycles (G)	15,382	15,567	14,622	14,051	12,152	10,254
Construction (F)	11,748	11,311	11,439	11,037	10,267	9,496
Human health and social work activities (Q)	4,806	4,493	4,707	4,521	4,275	4,029
Public administration and defence, compulsory social security (O)	8,721	7,927	7,987	7,111	5,276	3,441
Other service activities (S)	2,247	1,968	2,169	2,011	1,815	1,620
Water supply, sewerage, waste management and remediation activities (E)	1,103	(618)	:	threatened	threatened	threatened
Agriculture, forestry and fishing (A)	12,413	10,119	9,205	5,766	threatened	threatened
Education (P)	9,228	8,284	7,065	4,947	threatened	threatened
Electricity, gas, steam and air conditioning supply (D)	1,567	1,477	1,197	859	threatened	threatened
Real estate activities (L)	-	:	:	NA	NA	NA
Mining and quarrying (B)	:	(641)	:	NA	NA	NA
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use (T)	-	:	:	NA	NA	NA
Activities of extraterritorial organisations and bodies (U)	-	-	-	NA	NA	NA
<b>Total</b>	<b>91,169</b>	<b>92,546</b>	<b>94,898</b>	<b>98,464</b>	<b>107,786</b>	<b>117,107</b>

Note: - no occurrence; : too imprecise estimate to be published; () less precise estimate, to be used with caution; NA not available (of various reasons); threatened – rather rapid decrease (forecasted negative values).

Source: "Analysis of Skills Demand and Supply at Regional and Local Level in North Macedonia". ETF, 2019;

#### 2.2.4. VET Provision by Employment Sectors

111. There are eight secondary schools providing VET in the Polog region of North Macedonia. Of them, only one (SOU "Negotino" in Vrapchishte) offers also general education. This institution, along with other two (SEOU "Gostivar" in Gostivar and OSEU "8 Septemvri" in Tetovo) is specialised only in Economy, law and trade. The SOMU in Gostivar is purely medical, while the SOMU "Nikola Shtejn" in Tetovo which is the largest in the region, along with the Healthcare qualifications offers also Personal services. The other school in Tetovo, SOTU "Gjoce Stojceski" is specialised in Textile and leather, Chemistry and technology, and Arts. Two institutions, namely SOSU "Mosha Pijade" in Tetovo and OSTU Gostivar in Gostivar, are multi-profile and provide VET in the fields related to Catering and tourism, different industries, construction, agriculture, etc. The Table 25 shows distribution of the VET schools' students as by fields of education in the 2018-2019 academic year.

**TABLE 25. NUMBER OF STUDENTS AS BY INSTITUTIONS AND FIELDS, 2018-2019 ACADEMIC YEAR**

№	School	Educational sectors in VET (student numbers for 2018-19)													Secondary general education	
		Catering and tourism	Electro-technical	Mechanical	Traffic	Personal services	Economy, law and trade	Health	Construction and geodesy	Textile and leather	Chemistry and technology	Agricultural-veterinary	Forestry and wood processing	Art		
1	SOSU "Mosha Pijade", Tetovo	107	225	256	187				21			105	7		908	
2	SOTU "Gjoce Stojceski", Tetovo								337	333			75		745	
3	OSEU "8 Septemvri", Tetovo						1,026								1,026	
4	SOMU "Nikola Shtejn", Tetovo					203		1,847							2,050	
5	SEOU "Gostivar", Gostivar						419								419	
6	SOMU Gostivar, Gostivar							977							977	
7	OSTU Gostivar, Gostivar	368	136		65				58	5					632	
8	SOU "Negotino", Vrapchishte						21							21	164	
<b>TOTAL</b>		<b>107</b>	<b>593</b>	<b>392</b>	<b>187</b>	<b>268</b>	<b>1,466</b>	<b>2,824</b>	<b>79</b>	<b>337</b>	<b>338</b>	<b>105</b>	<b>7</b>	<b>75</b>	<b>6,778</b>	<b>164</b>

Source: data collected from the institutions within this study.

112. Generally, the offered fields of education are in line with the economy of the region but here are more profiles related to the declining sectors, i.e. Construction, Human health and social work activities, Other service activities, Agriculture, forestry and fishing. At the same time, among the growing sectors, there are three – Professional, scientific and technical activities Administrative and support service activities, Financial and insurance activities, where mainly specialist with higher education are expected to be engaged.

#### 2.2.4.1. Growing Sectors

113. The education fields offered by the VET schools which correspond to the growing sectors in the Polog region are:

1. Catering and tourism;
2. Electro-technical;
3. Mechanical;
4. Traffic;
5. Economy, law and trade;
6. Textile and leather;
7. Chemistry and technology.

#### A. CATERING AND TOURISM

114. In the Polog region, only the SOSU "Mosha Pijade" in Tetovo prepares specialists in the field of **Catering and tourism**. Two qualifications are offered there: Cook and Hotel and tourism technician. The total number of students is over 100 (Table 26).

**TABLE 26. STUDENTS DISTRIBUTION PER QUALIFICATION FOR CATERING AND TOURISM**

<b>TOTAL</b>	<b>Cook (3y)</b>	<b>Hotel and tourism technician (4y)</b>
<b>107</b>	(ALB) 33	(MK, ALB) 74

Source: data collected from the institutions within this study.

115. The sector of **Accommodation and food service activities (I)** to which this field of education relates, is the second largest in the region and in 2018 had more than 7 thousand employees. It is projected that by 2030 their number may exceed 26 thousand which means annual growth by over 1,500 persons.

116. The available data suggest that during the recent years the interest to the qualification of Hotel and tourism technician remained mainly unchanged, while the profile of Cook has become slightly less attractive. The school plans further promotion of this profession, particularly opening a café, modernising the kitchen and expanding the variety of the offered meals. This should at least preserve the attractiveness of this profile (Table 27).

**TABLE 27. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS**

<b>Qualification</b>	<b>2013/14</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>
Hotel and tourism technician	30	41	27	26	30	18
Cook	20	9	12	11	8	13

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

117. According to the assessment of the School Director, 40% of graduates (average for all qualification) find job within 6 months after graduation, and 60% within the period from 6 months to one year. For the graduates with the qualification of Hotel tourism technician, it is very common to be employed as waiters the demand of which is very high in the city. All those who accept this position, are 100% job placed.

118. Practical training of the students takes place in private companies (hotels, restaurants). The school has two Practice Coordinators who establish contacts with the business community in regard to accepting the students for practical training and then supervise this process in cooperation with the teachers. Thus, the students get completely involved in real work processes, and due to the large demand of labour force in this sector, some of them receive job offers before they complete their four-year education. According to the teachers' opinion, there are no unemployed students from this profession.

119. Starting from the next academic year of 2019/2020, the school plans to appoint a person who will be responsible for contacts with the business community.

120. The school has 209 teaching staff and according to the Director, they are properly qualified. Although the profession of the VET teachers is not attractive and it is permanently challenging to recruit highly qualified specialists, in this school, there are those with Master and Doctoral degree among the teaching staff. Both, interviewed students and parents, assessed the competence of the teachers with a grade 4 out of 5<sup>23</sup>.

<sup>23</sup> Here and below, a grading scale where "5" is the highest grade, is applied.

121. The school reports appropriate equipment and facilities available for meeting the requirements of this qualification. It has its own kitchen where the students participate in production of pastries and other food products. The key needs are: refrigerator, freezer, fan, fryer, a professional kitchen panel, as well as other small tools and consumables. It is important to mention that the school does not have a dormitory.

122. There is a lack of professional literature for the offered qualifications. In order to overcome it, the teachers use their participations in various projects as well as electronic resources for ensuring transfer of relevant knowledge to the students. They proposed that in the future, the textbooks provided by MoES are accompanied also with a CD for ensuring a more effective learning process.

123. The students within the focus group expressed satisfaction by the involvement in project work, as well as by the support and attention to their individual needs. Most of the students and the parents involved in the focus group, gave grade 4 to this aspect.

124. According to the teachers, there are students with special needs (with minor mental disabilities) in the school, who have not been categorised by the Institute of Mental Health. The teachers need to be trained to work with this category of students, and a SEN specialist<sup>24</sup> needs to be employed in the school. No special procedures for admission of the students with special needs or students from vulnerable groups do exist. These to latter statements are relevant to all institutions.

**Conclusion:** This profile is not as attractive for the youth as the growing need of employees in the corresponding sector of economy would suggests. Some graduates are underemployed in terms of their qualification level (the Hotel and tourism technicians are often employed as waiters) but this field of education can be considered as one of those with potential of further development.

## B. ELECTRO-TECHNICAL SECTOR

125. Specialists of **Electro-technical** profile are prepared by two institutions: SOSU "Mosha Pijade" in Tetovo and OSTU in Gostivar. The qualifications are the same like in the South-West Region: Electrical technician for computer technology and automation; Electrical installer and mounter; Electrical technician – energy technician; and Electrical technician for electronics and telecommunications. The total number of students is around 600 (Table 28).

**TABLE 28. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR ELECTRO-TECHNICAL SECTOR**

School	Total	Electrical technician for computer technology and automation (4y)	Electrical installer and mounter (3y)	Electrical technician – energy technician (4y)	Electrical technician for electronics and telecommunications (4y)
SOSU "Mosha Pijade", Tetovo	225	(MK, ALB) 173	(ALB) 52		
OSTU Gostivar, Gostivar	368	(MK, ALB, TUR) 170		(MK, ALB, TUR) 135	(MK, ALB) 63
<b>TOTAL</b>	<b>593</b>	<b>343</b>	<b>52</b>	<b>135</b>	<b>63</b>

<sup>24</sup> In the country they are formally called "Defectologist".

Source: data collected from the institutions within this study.

126. In Polog region, the sector of **Manufacturing (C)** where graduates of this field of education can expect to find jobs, is the largest and the most rapidly growing. In 2018, the number of employees was almost 17 thousand and every year on average around 2.4 thousand new work places can be created. In 2030, if the current growth rate sustains, the number of people engaged in this sector may exceed 46 thousand. At the same time, the graduates of this profile can be employed also in a number of other sectors which are growing in the region too, e.g. Accommodation and food service activities, Transportation and storage, Information and communication.

127. Interest of youth towards this profile differs depending on the qualification. Unsurprisingly, the qualification related to computers is the most attractive (Table 29).

**TABLE 29. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, ELECTRO-TECHNICAL SECTOR**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b><i>SOSU "Mosha Pijade", Tetovo</i></b>						
Electrical technician for computer technology and automation	63	61	70	39	37	43
Electrical installer and mounter	-	16	21	14	8	20
<b><i>OSTU Gostivar, Gostivar</i></b>						
Electrical technician for computer technology and automation	19	19	21	31	21	63
Electrical technician – energy technician	23	21	16	27	11	41
Electrical technician for electronics and telecommunications	-	12	17	10	19	17

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

128. Interviewed staffs and management of the schools estimate the pathways of graduates as follows:

- ***SOSU "Mosha Pijade", Tetovo:*** 40% find job within 6 months after graduation, and up to 60% within the period from 6 months to one year. These data, however, relate to the entire cohort of the school graduates but not specifically to this profile, and the percentages largely depend on the qualifications. According to the Director, the specialists with the qualification of *Electrical technician for computer technology and automation* expectedly find job much easier. There are no exact data on those who continue their education in universities but according to the teachers, their number is tangible;
- ***OSTU Gostivar, Gostivar:*** 40% find job within 6 months, and other 40% within a year. And again these are aggregated average indicators for all profiles. Up to 60% of the graduates with the qualification of *Electrical technician for computer technology and automation* continue their education at university.

129. Practical training of the students is organised differently in these institutions:

- ***SOSU "Mosha Pijade", Tetovo:*** practical training takes place in companies. The two Practice Coordinators of the school establish contacts with the business community and supervise the students' practice in cooperation with the teachers. At companies, the students are involved in

the work processes, and according to the teachers' opinion, they benefit of the practice depending on their own level of commitment and interest.

- **OSTU Gostivar, Gostivar:** the practical training is provided at the school. Any opportunities for cooperation with the local business sector regarding practical work are left to the initiative of the teachers. The school is initiating collaboration with the electrical company EVN Macedonia which in the future is expected to result in improved conditions for WBL.

130. In OSTU Gostivar, Gostivar, there are some challenges with recruitment of needed teaching staff for the Electrical engineering - energy technician profile, due to the low attractiveness of the teaching salaries as well as migration.

131. Both schools are only partly provided with appropriate equipment, buildings and consumables to teach the profile:

- **SOSU "Mosha Pijade", Tetovo:** the school has the equipment and the facilities for respond to the requirements of this profile but due to the rapid development of the technologies, modernisation is necessary. The key needs are: computers for executing the programming classes, printer-scanner, smart board, programming software, compressor with the required equipment for the automation classes and practice, and other small tools and consumables for classes and practice in electronics, electro-technics, automation.
- **OSTU Gostivar, Gostivar:** the school building needs renovation (some renovation is underway); equipment/tools for practical work with the students are insufficient; textbooks for some qualifications are completely lacking.

132. The students of **SOSU "Mosha Pijade" in Tetovo** expressed satisfaction by the involvement in project works, as well as by the attention and the support for their individual needs. Both the students and the parents gave grade 4 to this aspect. **OSTU Gostivar in Gostivar**, plans to start a cooperation with a private electrical company and enhance the quality of practical training of the students, and the need of improvement thereof was mentioned by all key stakeholders.

133. In **SOSU "Mosha Pijade" in Tetovo**, similar to the Tourism profile, students with special needs and those from minority groups participate. In **OSTU Gostivar**, the students with SEN enjoy services of a specialist. Enrolment of Roma is supported by an affirmative action policy adopted at national level (they can enrol with lower scores than children from other communities). All Roma candidates that have applied have been admitted to the school, and those who demonstrate academic progression, receive scholarship provided by third parties.

**Conclusion:** It seems that some graduates find employment according with their qualification. Nevertheless, the equipment of the schools needs modernisation. Cooperation with employers is limited but considering the growing nature of the corresponding sector of economy in the region, there are rooms for improvement and further development.

## C. MECHANICAL SECTOR AND TRAFFIC

134. These two profiles are discussed here jointly due to the following reason. **Mechanical** which is mainly targeted at the vehicles repair, maintenance and exploitation relates to the sector of **Wholesale and retail trade; repair of motor vehicles and motorcycles (G)** but also to the **Transportation and storage (H)**. The latter covers the profile of **Traffic**, too.

135. The sector "H" is the 4<sup>th</sup> growing in the region, where around 7,800 people were employed in 2018. The projected demand of new workforce is around 400 annually. The sector "G" is categorised

as declining but in 2018 it was the 2<sup>nd</sup> largest with 14,622 employees and it is projected that by 2030 it will remain the 3<sup>rd</sup> largest where more than 10 thousand people will be busy.

136. Specialists are prepared by the same institutions as for the Electro-technical profile, i.e. SOSU "Mosha Pijade" in Tetovo and OSTU in Gostivar. The students can acquire there qualifications of Auto technician – mechatronic, Auto-mechanic, Mechanical technician, Road transport technician and Transport and shipping technician, and their total number is around 580 (Table 30).

**TABLE 30. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR MECHANICAL AND TRAFFIC**

School	Total	Auto technician – mechatronic (4y)	Auto-mechanic (3y)	Mechanical technician (4y)	Road transport technician (4y)	Transport and shipping technician (4y)
SOSU "Mosha Pijade", Tetovo	443	(ALB) 80	(ALB) 72	(MK, ALB) 104	(MK, ALB) 109	(MK, ALB) 78
OSTU Gostivar, Gostivar	136		(MK) 57	(MK, ALB) 79		
<b>TOTAL</b>	<b>579</b>	<b>80</b>	<b>129</b>	<b>183</b>	<b>109</b>	<b>78</b>

Source: data collected from the institutions within this study.

137. The enrolment data show that only for the qualifications of Auto technician – mechatronic and Technician for transport and shipping, the interest was growing, while for the other qualifications the number of enrollees remained at the same level or even decreased. At the same time, the situation was slightly different for the enrolment of 2018. In **SOSU "Mosha Pijade" in Tetovo**, the interest to the qualification of Mechanical technician increased compared to 2017 by 44%, to the Auto-mechanic by 47% and to the Auto technician – mechatronic by 32%. In parallel, the number of applicants for Technician for road traffic decreased almost by 50%. In order to improve the quality of teaching and increase attractiveness of this profile, the school plans to open an auto-mechanical repair shop within own premises. In **OSTU Gostivar, Gostivar**, there was a steady increase of students enrolled in the programme of Mechanical technician, and introduction of the qualification of Auto-mechanic helped to attract even more students (Table 31).

**TABLE 31. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, MECHANICAL AND TRAFFIC**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>SOSU "Mosha Pijade", Tetovo</b>						
Mechanical technician	40	42	37	22	23	33
Auto technician – mechatronic	9	18	17	21	22	29
Auto-mechanic	15	28	32	29	17	25
Technician for road traffic	46	64	63	21	39	20
Technician for transport and shipping	10	17	14	18	18	29
<b>OSTU Gostivar, Gostivar</b>						
Mechanical technician	9	9	19	14	20	26
Auto-mechanic	-	-	-	11	22	24

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

138. There is no data about the job placement of the graduates from this profile. According to the school teachers, those with the qualification of Auto-mechanic (in the **OSTU Gostivar, Gostivar** the first graduation will be in 2021) are expected to find employment easily due to high demand in the labour market.

139. In both institutions, practical training of the students is organised at the schools. The **SOSU "Mosha Pijade" in Tetovo** has a park for mechanical engineering which however, needs a certain improvement. There is also a properly equipped cabinet for practice in the field of traffic, and a Driving School is functioning in this institution. Here the key needs particularly are: vehicle lift, battery (accumulator) tester, automatic charger for batteries, simulators, samples of a hydraulic pump, pressure and flow valves, set of different types of electrodes and other consumables for the mechanical professions and a model of a traffic lights, training simulator for driving, as well as different types of software for the traffic sector. A special programme CAD/CAM and software simulators are also required. The **OSTU Gostivar, Gostivar** also reported insufficient equipment/tools for practical work with the students

140. No stable contacts with employers seem established in any of the schools. According to the Director of the **OSTU Gostivar**, many members of the teaching staff maintain connections with the business community or are involved in the business sector in some way. Nevertheless, there are no signs that this results in constant cooperation with companies.

141. For this profile too, students and parents from **SOSU "Mosha Pijade" in Tetovo** were satisfied by the teaching and learning methodologies. In **OSTU Gostivar**, no indications of individualised approach to students or a variety of teaching methodologies were identified.

**Conclusion:** Although the labour market data suggest high demand of specialist of this profile, cooperation of the schools with employers is almost non-existent. Specifically for the SOSU "Mosha Pijade" in Tetovo, combination of own facilities (which are not perfect but provided with at least some necessary equipment and means) with work-based learning at companies, could result in rather good learning outcomes. The other school does not seem strong enough yet.

#### D. ECONOMY, LAW AND TRADE

142. Under the field of education **Economy, law and trade**, five qualifications, namely Economic technician, Legal Technician, Trade and marketing technician, Business secretary, and Banking technician are offered in three institutions: OSEU "8 Septemvri" in Tetovo, SEOU "Gostivar", Gostivar and SOU "Negotino", Vrapchishte. The total number of students is slightly less than 1,500, around 70% of which are concentrated in the first of above-listed schools (Table 32). The latter is the second largest in the region and is specialised in this profile only.

**TABLE 32. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR ECONOMY, LAW AND TRADE**

School	Total	Economic technician (4y)	Legal technician (4y)	Trade and marketing technician (4y)	Business secretary (4y)	Banking technician (4y)
OSEU "8 Septemvri", Tetovo	1,026	(MK, ALB) 773	(MK, ALB) 253			
SEOU "Gostivar", Gostivar	419	(MK, ALB, TUR) 290	(ALB) 20	(ALB) 35	(ALB) 31	(ALB) 43
SOU "Negotino",	21	(ALB) 21				

Vrapchishte						
<b>TOTAL</b>	1,466	1,084	273	35	31	43

Source: data collected from the institutions within this study.

143. Different qualifications offered within those profile, relate to a wide range of economy sectors. Thus, the Economic technicians can be occupied in the sector of **Wholesale and retail trade (G)**, which is slightly declining but still very large in the region (more than 14 thousand work places are projected for 2020), but also in almost all other sectors. The Legal technicians and Business secretaries may expect to work actually in **any sector**, and **Banking** technicians in the sector of **Financial and insurance activities (K)** which is growing but rather moderately (no more than 70 new jobs annually are projected). The qualification of Trade and marketing technician better fits the sector "G" but again can be demanded in some other sectors, too.

144. The enrolment data show that in general, interest to all qualifications is declining. Moreover, in 2017 and 2018, there were no applicants for Business secretary in **EOU Gostivar, Gostivar**. No one was enrolled in for Economic technician in **SOU "Negotino", Vrapchishte** in 2017 but in 2018, there were 11 applicants (Table 33).

**TABLE 33. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, ECONOMY, LAW AND TRADE**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b><i>OSEU "8 Septemvri", Tetovo</i></b>						
Economic technician	342	382	290	262	238	208
Legal technician					81	73
<b><i>SEOU Gostivar, Gostivar</i></b>						
Economic technician	174	144	130	72	85	69
Legal technician	-	-	17	-	15	12
Technician for trade and marketing	24	15	16	12	11	13
Business secretary	28	25	18	8	-	-
Bank technician	28	15	16	11	12	15
<b><i>SOU "Negotino", Vrapchishte</i></b>						
Economic technician	-	-	12	9	0	11

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

145. Data about the graduates' further pathways are extremely limited but according to the schools' staff estimation:

- ***OSEU "8 Septemvri", Tetovo***: 90% of the students are oriented towards higher education;
- ***SEOU "Gostivar", Gostivar***: no more than 20% are employed according with their qualifications, of which only half within the period of 6 months to one year;
- ***SOU "Negotino", Vrapchishte***: the first enrolment in VET was organised in 2015. No any estimation was possible to be made.

146. In all three institutions, the practical training of the student is implement in classrooms which are not even properly provided with any necessary training equipment and materials. No any practice in

companies take place due to non-existence of cooperation with the employers. Teachers of the **SOU "Negotino", Vrapchishte**, organise sometimes one-day visits to companies with "observation" purposes only. None of the schools has a Placement Coordinator.

147. In **SOU "Negotino", Vrapchishte**, due to limited number of students, the vocational subjects are delivered by 3 teachers only. The teaching staffs in **SEOU "Gostivar", Gostivar** and **OSEU "8 Septemvri", Tetovo**, among whom there are Masters and Doctors of Science and those who have been involved in trainings and in a number of projects, seem aging (there were complaints, that the teaching staff that should retire at 62 years of age for women and 64 years for men, use legal possibilities to continue working till 65-67 years old).

148. As mentioned above, all three schools seriously lacking modern training equipment. The key needs presented by teachers, related to some specific equipment and materials, such as several computers, peripheral devices and some software but it seems that all the institutions need a fundamental modernisation and extensive supply.

149. In the **SOU "Negotino", Vrapciste**, the students gave highest mark to the learning process, specifically to their involvement in project assignments and the attention and the support for their individual needs, although it is not clear how a quality learning process is possible in an institution with extremely poor material base and without contacts with the employers. In order to ensure at least some "proximity" of the practical training to the real work, in **OSEU "8 Septemvri", Tetovo** and **SEOU "Gostivar", Gostivar**, virtual companies were organised. In the latter institution, a large number of students are involved also in other extra-curricular activities such as the drama section.

150. Only in the **OSEU "8 Septemvri", Tetovo**, which has a ramp, one student with a physical disability (in a wheelchair) involved in regular classes. Here there is almost equal share of male and female students. The other two schools are not adapted to the students with SEN. None of the schools has dormitory. An assessment implemented in 2016, concluded that in the **SEOU "Gostivar", Gostivar**, atmosphere of multi-ethnic tolerance and a fair approach to students of different gender, religious, national and social backgrounds were established.

**Conclusion:** Graduates of this profile are strongly oriented to higher education. For the others, job placement after VET has rather low indicators. Due to absence of cooperation with companies, practical training is organised at the schools which, however, are far from being properly equipped. This profile does not seem offering great potential for the development of a centre of excellence.

## E. TEXTILE AND LEATHER

151. Only one institution – SOTU "Gjoce Stojceski", Tetovo, prepares specialist in the field of **Textile and leather** which related to the sector of **Manufacturing (C)**, the largest in the region. The offered qualifications are: Clothing technician; Textile technician; and Garment design technician. The total students' population is slightly over 330 (Table 34).

**TABLE 34. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR TEXTILE AND LEATHER**

Total	Clothing technician (4y)	Textile technician (4y)	Garment design technician (4y)
337	(ALB) 182	(ALB) 86	(ALB) 69

Source: data collected from the institutions within this study.

152. The interest of youth towards all three qualifications was rather stable during the recent years but the Clothing technician attracts on average 2.5 times more students than the two others (Table 35).

**TABLE 35. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, TEXTILE AND LEATHER**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Clothing technician	51	57	53	51	53	56
Textile technician	14	20	26	20	20	20
Garment design technician	18	21	19	19	20	22

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

153. According to the Director and the interviewed teachers, some of the graduates continue their education but most of them do not work because of the low salaries in the sector. However, the main motivation of choosing this profile is the perspective of self-employment which is possible with relatively limited investments

154. Practical classes within this profile are fully implemented at the school, which has an equipped workshop with necessary machines. Preparations to opening a design studio with modern equipment donated by NGOs, is under way. The students, with the help of their teachers in practice, sew uniforms for their own and two other vocational schools of the city. It is planned that from the academic year 2019/2020, the students of 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> grades will pass their practical training in a sewing factory "Ljoteks" that faces shortage of workforce and is interested in cooperation with the school. The students will attend practice in the factory once or twice a week, with opportunity to be employed after graduation. There is no Placement Coordinator in school.

155. The teachers staff in the school is aged and many of them are approaching retirement. For the academic year 2018/2019, the institution's efforts to find new teachers for a number of subjects, were unsuccessful. The renewal of the staff seems a serious challenge. No modern teaching methods are applied in the school; the students and their parents rated this aspect with a grade 3.

156. In terms of facilities and equipment, the school has some modern sewing machines, but computers with audio-visual devices, internet connection, and digital learning system are lacking. The building also requires refurbishment.

157. The school has students with special needs who are included in the regular classes and very well accepted by the other students and the teaching staff. However, many parents refuse to categorise their children in the Mental Health Institute, documents from which are necessary for justifying preparation of individual education plan for those students.

**Conclusion:** Prospective of the graduates' self-employment and also projected cooperation with the local sewing company may be supportive for considering this school at least as part of network providing vocational excellence or as a regional VET centre in this very profile. The experience of sewing uniform can also be seen as a strength. Nevertheless, at least the teaching staff shall be renewed and retrained. Provision of additional equipment will also be necessary.

## F. CHEMISTRY AND TECHNOLOGY

158. Qualifications in the field of **Chemistry and technology** offered by SOTU "Gjoce Stojceski", Tetovo and OSTU Gostivar, Gostivar, are Chemical technician and Food technician, which relate to **Manufacturing (C)** but the second one also to **Accommodation and food service activities (I)**.

These are 1<sup>st</sup> and 2<sup>nd</sup> largest in the region and both are growing. The total number of involved students is over 330 but of them, only 5 are leaning in the OSTU Gostivar, Gostivar (Table 36).

**TABLE 36. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR CHEMISTRY AND TECHNOLOGY**

School	Total	Chemical technician (4y)	Food technician (4y)
SOTU "Gjöce Stojceski", Tetovo	333	(ALB) 253	(ALB) 80
OSTU Gostivar, Gostivar	5	(ALB) 5	
<b>TOTAL</b>	<b>338</b>	<b>258</b>	<b>80</b>

Source: data collected from the institutions within this study.

159. In **SOTU "Gjöce Stojceski", Tetovo**, the youth interest toward the two qualifications in general is declining (MoES reported 13% decline in 2018), therefore the forecast of the students' number is 293 for 2020 and 200 for 2024. In **OSTU Gostivar, Gostivar**, enrolment for Chemical technician took place only in 2017 (Table 37).

**TABLE 37. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, CHEMISTRY AND TECHNOLOGY**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>SOTU "Gjöce Stojceski", Tetovo</b>						
Chemical technician	67	117	103	66	87	90
Food technician	20	24	19	18	27	29
<b>OSTU Gostivar, Gostivar</b>						
Chemical technician	-	-	-	-	5	-

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

160. Graduates face serious difficulties with finding job according to these qualifications. According to the School Directors and the staff, their specialists are not demanded in the Labour market. Nevertheless, the above data do not suggest decline of students' interest towards this profile, at least in **SOTU "Gjöce Stojceski", Tetovo**.

161. Practical training for the students of both institutions is implemented at the schools. **SOTU "Gjöce Stojceski", Tetovo**, has a laboratory which needs modernisation. In addition, there are no enough reagents and utensils for work. For none of the qualifications, there is opportunity to organise practice in cooperation with small businesses. The students are never involved in any production processes. Only bakers, sometimes participate in the sale of ready products.

162. Presently, the schools have sufficient teachers but **SOTU "Gjöce Stojceski", Tetovo**, predicts that soon they will have a shortage of staff and recruitment of new pedagogues is a challenge. The **OSTU Gostivar, Gostivar** stated that poor material conditions of the school do not allow the teachers to perform their task properly.

163. As mentioned above, there is no cooperation between the school and companies. Recently, **OSTU Gostivar, Gostivar**, established some partnership with EVN Macedonia but the impact of this initiative on the training process is still unidentifiable.

164. Diversity of teaching methods and modern approaches to learning are not the case for provision of this profile in these institutions. For example, in **SOTU "Gjoce Stojceski", Tetovo**, only a very limited number of students with high academic progression take part in projects. It should be mentioned also that in general, in this school mainly the students with lower grades enrol.

**Conclusion:** Regardless of the relatively large number of students in **SOTU "Gjoce Stojceski", Tetovo** (the other school is relatively small) this profile does not offer any potential for the development of a centre of excellence, mainly due to absence of any contacts with enterprises and unsatisfactory conditions of the school facilities and equipment.

## G. ART

165. Only one qualification in this field of education, i.e. Designer of furniture and industrial products with 4-year VET is offered by SOTU "Gjoce Stojceski" in Tetovo. The total number of students is 75 and the instruction language is Albanian. Enrolment for this profile commenced in 2015 and the number of applicants is slightly growing: from 18 in 2015 and 2016 to 22 in 2018 (the peak was in 2017 – 23 applicants), relatively stable: between 18 and 23 annually. The projection is that in 2020 there may be 90, and in 2024 – 130 students.

166. Although this qualification is categorised under the education field of **Art** it relates to the sector of **Manufacturing (C)** and to a certain extent to **Construction (F)**. The latter is declining in the Polog region. The first graduates are for 2019, therefore no data on their job placement could be available yet.

167. Practical training of the students is mainly organised at the InterMebel company but the quality and effectiveness are not known due to the fact that no teachers from this field were involved in the Focus Groups. The school does not have its own workshop and machinery and tools are required. Presently, no other partnerships with the private sector are expected.

168. Proficiency of the teachers and the teaching methods which they use have also not been identified.

169. The share of female students is 40%.

**Conclusion:** Any judgements about this profile should be done only after at least one or two graduation cycles. If successful, this profile could be considered along with the Textile and leather (offered by the same school) as a kind of Light industry cluster.

### 2.2.4.2. Declining Sectors

170. The following profiles relate to the economy sectors which are declining in the Polog region:

1. Personal Services;
2. Health;
3. Construction and Geodesy;
4. Agricultural-Veterinary;
5. Forestry and Wood Processing.

## H. PERSONAL SERVICES

171. Cosmetic technician is the qualification taught in the field of **Personal Services**. It is offered by two institutions: SOMU "Nikola Shtejn" in Tetovo (over 200 students) and OSTU Gostivar in Gostivar (65 students). In Tetovo, enrolment of the applicants is permanently growing, while in Gostivar, considerable increase was registered only in 2018 (Table 38).

**TABLE 38. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, PERSONAL SERVICES**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
SOMU "Nikola Shtejn" in Tetovo	23	23	51	48	56	69
OSTU Gostivar, Gostivar	9	7	6	11	19	29

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

172. This profile relates to the sector of **Other service activities (S)**, which is declining in the region (but growing nationally). Against more than 2,100 employees in 2018, only around 1,800 and 1,600 are expected in 2025 and 2030, respectively.

173. According to the Director of **SOMU "Nikola Shtejn", Tetovo**, graduates from this qualification are the most easily employed compared with other graduates of the school, and they can also be self-employed with a relatively small initial investment. For **OSTU Gostivar, Gostivar**, no information on the graduates of this qualification is available.

174. Practical training of the student of **SOMU "Nikola Shtejn", Tetovo**, takes place in private beauty salons, however, not on the base of any formally concluded cooperation agreements but rather through the personal contacts of the students or the teachers in practice. The students mostly observe the work, and very rarely carry out specific work assignments. The student of **OSTU Gostivar, Gostivar**, pass the practical training at the school.

175. In **SOMU "Nikola Shtejn", Tetovo**, the students involved in the focus group, assessed the staff's competence with a grade 4, and the parents – with a grade 5. The teachers within the focus group pointed out that 'they are excellent' both for theoretical and practical teaching. Nevertheless, the Director is convinced that they need additional skills in the field of communication, languages and ICT, management skills as well as skills to work with students with special educational needs. In **OSTU Gostivar, Gostivar**, poor infrastructure and lack of adequate equipment was mentioned as an obstacle for ensuring the quality of the learning process.

176. Both institutions are lacking equipment and consumables for successfully responding to the requirements of this qualification. Often, for practical training of students the teachers use their personal equipment taken from home. The key needs are: hair cutting scissors, hairdryer, hair straightener and iron, towels, as well as consumables

177. There are no students with special needs in **SOMU "Nikola Shtejn", Tetovo**. In OSTU Gostivar, students with special needs and from minority groups are involved. The enrolment of Roma is supported by a policy adopted at national level (similar to the case of **SOSU "Mosha Pijade" in Tetovo**)

**Conclusion:** This profile does lead to progression directly into labour market although the sector is declining in the region. At the same time, both schools are strongly lacking equipment and tools. Contacts with employers are *ad hoc* and informal only.

## I. HEALTH

178. Qualifications in the field of **Health**, which are Nurse; Pharmaceutical laboratory technician; Dental technician; Medical laboratory technician; Physiotherapy technician; and Nursing paramedic, are offered by two institutions – SOMU "Nikola Shtejn", Tetovo and SOMU Gostivar, Gostivar. Both are specialised medical schools having in total over 2,800 students (Table 39).

**TABLE 39. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR HEALTH**

School	Total	Nurse (4y)	Pharmaceutical laboratory technician (4y)	Dental technician (4y)	Medical laboratory technician (4y)	Physiotherapy technician (4y)	Nursing paramedic (3y)
SOMU "Nikola Shtejn", Tetovo	1,847	(MK, ALB, TUR) 881	(MK, ALB) 306	(MK, ALB) 228	(MK, ALB) 124	(MK, ALB) 194	(MK, ALB) 114
SOMU Gostivar, Gostivar	977	(MK, ALB, TUR) 843	- <sup>25</sup>	(ALB) 134			
<b>TOTAL</b>	<b>2,824</b>	<b>1,724</b>	<b>306</b>	<b>362</b>	<b>124</b>	<b>194</b>	<b>114</b>

Source: data collected from the institutions within this study.

179. The sector of **Human health and social work activities (Q)** is moderately declining in the Polog region. Less than 700 jobs are projected to be lost from 2018 (4,707) till 2030 (~4,030).

180. In terms of enrolment, in **SOMU "Nikola Shtejn", Tetovo**, there is an observable trend of a slight increase in the qualifications of Nurse, Medical laboratory technician and Pharmaceutical laboratory technician, while in the qualifications Physiotherapy technician and Dental technician there is a slight decline. It can be expected that all of these professions will retain at the same level of interest in the future. A significant increase of 44% (21 students) is observed in the 3-year secondary education, for the profession Nursing paramedic, which suggest that this profession has the potential to significantly increase the number of users in the future (Table 40).

181. In **SOMU Gostivar, Gostivar**, the introduction of a new VET programme (Dental technician) has accumulated a significant enrolment interest. Another factor that should be taken in consideration with regards to future enrolment trends are the school's capacities in terms of space and equipment. As indicated from the interviews with key respondents, the school presently operates with deficiencies with regards to both space (classrooms, cabinets) and equipment, which points to the conclusion that without substantial investments in these segments, the number of enrolled students may remain unchanged.

**TABLE 40. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, HEALTH**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>SOMU "Nikola Shtejn", Tetovo</b>						
Nurse					201	234
Dental technician					47	44
Medical laboratory technician	672	416	557	421	31	31
Pharmaceutical laboratory technician					86	81
Physiotherapy technician					46	42
Nursing paramedic	-	-	-	-	48	69
<b>SOMU Gostivar, Gostivar</b>						
Nurse	-	233	199	193	264	187
Dental technician	-	-	28	35	38	34

<sup>25</sup> There were students during previous years who have graduated. New have not expressed interest and did not enrol.

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

182. About the graduates' further pathways, the following information is available:

- **SOMU "Nikola Shtejn", Tetovo:** according to the assessment of the Director, 10% of the students find a job 6 months upon completion, and 20% within a period of 6 months to one year. On the other hand, the teachers (one of which is a member of the board of directors of the Clinical Hospital in Tetovo) consider that there is a serious lack of medical staff with secondary education, however at the recent opening the number of candidates who applied was insufficient because they are not motivated enough due to the low salaries in relation to the workload and the responsibility.
- **SOMU Gostivar, Gostivar:** the estimates regarding the transition to the labour market indicate that around 50-70% of the graduates continue their education at university. Among those who start looking for a job after graduation, around 30% find job within 6 months from graduation and another 30% find job in one-year period. The school does not have a career centre, nor offers any type of support in the field of employment. Respondents indicated that the most effective strategies for finding a job are the personal contacts, looking for a job online, while the school and the State Employment Agency offer only a little support.

183. The students' practical training of the **SOMU "Nikola Shtejn", Tetovo**, takes place in the Clinical Hospital in Tetovo. However, according to the opinion of the students, although they spend 6-7 hours at practice, they do very little work during that time. For example, sometimes they administer therapy and measure temperature, and they simply spend most of the time sitting around or, for some profiles such as dental technicians, they only observe the work but do not participate in it. In the school there is a Practice coordinator who coordinates the work of the teachers of practical training (instructors) but has no any responsibility for the quality of the practical training performance. The **SOMU Gostivar, Gostivar**, cooperates with the local hospital where the students have the opportunity for practical training. Other cooperation with private hospitals or medical centres has not been established. The school does not have Placement Coordinator.

184. The **SOMU "Nikola Shtejn", Tetovo**, does not possess enough equipment and consumables in order to successfully respond to the requirements of this qualification. The existing equipment is old and depreciated. In regard to the learning materials, the teachers in the focus group indicated that the number of textbooks is insufficient, and some of the available ones are inappropriate. The key needs are: completely equipped cabinets, observation assets (phantom dolls), beds for care of a sick person, massage chairs, devices for pressure measurement and consumables. There is also a lack of two classrooms. In the **SOMU Gostivar, Gostivar**, serious deficiencies regarding the space and equipment were identified. At present, the school operates beyond its capacities (lack of at least two additional classrooms, classrooms that are too small, lack of cabinets), as well as equipment, with insufficient quantities to be able to be used effectively by all students. The key need is fundamental modernisation of the school and provision of a full set of equipment.

185. In the **SOMU "Nikola Shtejn", Tetovo**, the teachers, who participated in some projects, in cooperation with professional groups develop teaching materials which should help the students mastering the curriculum more successfully in the circumstances of having almost no textbooks. Here the students included in the focus group, expressed satisfaction by the involvement in project work, as well as by the attention and the support to their individual learning needs (assessed them both with a grade 5). They were also satisfied by the use of ICT in the teaching.

186. At the same time, the teachers in **SOMU Gostivar, Gostivar**, think that the curricula need to be modernised and further adapted to the sector needs. Availability of textbooks and learning materials was evaluated as unsatisfactory by the students. Theoretical instruction is mostly teacher-centred and there is no evidence of individualised approach to learning. The students also indicated that the use of diverse and relevant pedagogies is poor. Both the students and the teaching are dissatisfied by the situation with laboratories and equipment and tools as well as the use of ICT in the learning process.

187. None of the institutions reported enrolled students with SEN. At the same time, they both offer instruction in three languages and opportunities for involvement of minorities are ensured. **SOMU Gostivar, Gostivar**, has developed approach and strategies for inclusion of the less able but it has never been applied. Dormitories with satisfactory conditions for accommodation are available to the school students. Girls are represented by more than half of the students' population. The school usually has a large number of applicants and around 20% of them are rejected due to existing enrolment limits. The students of **SOMU "Nikola Shtejn", Tetovo**, have no access to dormitory due to the absence thereof in the city.

**Conclusion:** Although the sector is declining and the job placement is low, enrolment in this profile is still enormous. At the same time, all common issues of the system are present also here: outdated curricula, low-effective practical training, lack of CPD for teachers, poor learning environment.

## J. CONSTRUCTION AND GEODESY

188. Two qualifications in the field of **Construction and Geodesy** are offered in the region: Construction technician in SOSU "Mosha Pijade", Tetovo and Architectural technician in OSTU Gostivar, Gostivar. The total number of students is around 80 (Table 41).

**TABLE 41. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR CONSTRUCTION AND GEODESY**

School	Total	Architectural technician (4y)	Construction technician (4y)
SOSU "Mosha Pijade", Tetovo	21		(ALB) 21
OSTU Gostivar, Gostivar	58	(MK, ALB) 58	
<b>TOTAL</b>	<b>79</b>	<b>58</b>	<b>21</b>

Source: data collected from the institutions within this study.

189. Enrolment is rather limited. There was a slight increase in the number of applicants in 2018 but it can be hardly considered that there is a high interest among youth towards this profile (Table 42).

**TABLE 42. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, CONSTRUCTION AND GEODESY**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>SOSU "Mosha Pijade", Tetovo</b>						
Construction technician	11	14	10	0	8	12
<b>OSTU Gostivar, Gostivar</b>						
Architectural technician	8	9	9	14	16	19

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

190. The sector of **Construction (F)** is declining in the region but still remains rather large: there were around 11.5 thousand employees in 2018 and around 9.5 thousand are projected for 2030. None of the institutions could provide data about job placement of the graduates from this profile but it was stated that there is a labour force demand in the market.

191. The students of the **SOSU "Mosha Pijade", Tetovo**, with help of two Practice coordinators, undertake their practical training at companies, while those of **OSTU Gostivar, Gostivar**, at the school. No more details about the cooperation with the employers are available for any of the two institutions.

192. The **SOSU "Mosha Pijade", Tetovo**, reported sufficient equipment and facilities for responding successfully to the requirements of this qualification. The current key needs are cabinets equipped particularly with area measurement lasers, as well as software for design and protection at work in the construction site. The **OSTU Gostivar, Gostivar**, stated that they do not have sufficient equipment and tools for practical work of students. There is also a serious lack of textbooks.

193. The construction students (and their parents) of the **SOSU "Mosha Pijade", Tetovo**, like for many other profiles in this school, expressed satisfaction by involvement in project work, as well as by the attention and the support to their needs (grade 4).

**Conclusion:** Presently, this profile does not offer great potential for the development of a centre of excellence, first of all due to limited number of students and lack of cooperation with employers. Nevertheless, the construction sector remains important in the region and nationally and may represent an opportunity for the future.

## K. AGRICULTURAL-VETERINARY AND FORESTRY AND WOOD PROCESSING

194. The SOSU "Mosha Pijade", Tetovo, offers three qualifications – Veterinary technician, Farm production technician, Technician for forestry and landscape architecture – in the fields of **Agricultural-veterinary** and **Forestry and wood processing**. These, however, relate to the same sector of economy, i.e. **Agriculture, forestry and fishing (A)**. The total number of students is 112, of whom seven are involved in the third of the above-listed qualifications, which is moribund (Table 43).

**TABLE 43. STUDENTS DISTRIBUTION PER QUALIFICATION FOR AGRICULTURAL-VETERINARY AND FORESTRY AND WOOD PROCESSING**

Total	Veterinary technician (4y)	Farm production technician (4y)	Technician for forestry and landscape architecture (4y)
112	(MK, ALB) 50	(ALB) 55	(ALB) 7

Source: data collected from the institutions within this study.

195. In this region, the sector of Agriculture is rapidly declining: it loses around one thousand employees annually and is projected as threatened after 2025.

196. The number of applicants is also small (Table 44). However, MoES believes that these two qualifications will be demanded by youth also in the future.

**TABLE 44. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, CHEMISTRY AND TECHNOLOGY**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Veterinary technician	17	11	10	6	12	12

Technician for farm production	16	21	14	8	17	18
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Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

197. There were no data also about the employment of the graduates from this profile but according to the Director, they face even more difficulties in finding job compared with all other qualifications offered by the school.

198. The practice within this qualification entirely takes place in the school which has two stables: for pigs and cows. There are also two workshops for wood processing where some school inventory is being repaired and custom-made furniture is produced. A greenhouse which is used for the needs of practice within this qualification, is available, too.

199. The staff is convinced that their school is the best among the ten schools over the country which have agricultural specialisations, and they are mainly provided with equipment and the facilities for responding the requirements of this qualification successfully. However, there are more needs: a plough, a tractor, and a fertiliser machine. According to the focus group of the teachers, a completely equipped (including audio-visual devices) cabinet is also required.

200. There is a certain cooperation established with employers on the base of contacts.

**Conclusion:** An institution has considerable facilities, such as cow barn and piggery, green house and wood processing workshop. Historically agriculture has been important in the region, however, enrolment is declining as are employment opportunities. No potential of VET excellence is seen here. It could be that, in the future, the facilities and expertise of Mosha Pijade could become part of an inter-regional or national Centre of Excellence for this sector.

#### 2.2.4.3. Outstanding specifics of the schools

201. The outstanding specifics of the schools in the Polog region are:

- **SOSU "Mosha Pijade", Tetovo:** the school has its own kitchen where it produces pastries and other food, whereby the students also participate in the production of pastries and food.
- **OSTU Gostivar, Gostivar:** the school is initiating collaboration with the electrical company EVN Macedonia which in the future is expected to result with improved conditions for WBL.
- **SOU "Negotino", Vrapciste:** provision of VET has been implemented since academic year 2015/2016, and the school has no enough experience to share, yet. It cannot offer also conditions for the students with special needs (there are no access ramps in the school, not a trained teaching staff).
- **SEOU "Gostivar", Gostivar:** the school has a qualified and appropriate professional staff which has had many trainings and is involved in a number of projects. A virtual company was opened for providing practical training in the field of Economy, Law and Trade.
- **OSEU "8 Septemvri", Tetovo:** ramps have been built to ease access for students with physical disabilities. The school has quality professional staff for this profession which has had many training and is involved in a number of projects. Another virtual company was opened in this institution. It provides services for career advising, preparation for work and employment.
- **SOTU "Gjoce Stojceski", Tetovo:** for the profile of Textile and Leather, the school has an equipped workshop with modern sewing machines for providing practical classes, and in cooperation with NGOs is preparing to open a design studio with modern equipment provided by donors. The students produce uniforms in the school workshop. Cooperation with a sewing

company, where the students will pass their practical training, is projected. The school has students with special needs who are very well accepted and included in the regular classes, although there are no special procedures for their admission. New qualification in arts is opened in 2018.

- **SOMU "Nikola Shtejn", Tetovo** and **SOMU Gostivar, Gostivar**: no outstanding specifics were identified.

## 2.2.5. Adult Education Provision

### 2.2.5.1. Community Development Institute, Tetovo

202. This institution does not currently provide any training programmes for adults. The funding of the trainings is done through projects and presently there is no any. The trainings discussed here were implemented in the period 2016-2018.

203. Specifically, all trainings are realised with prisoners from the prison in Tetovo, so all the characteristics that follow for the bakery qualification apply to other qualifications: locksmith, barber, horticulture, IT basic level and English basic level, because they are all realised in premises determined by the prison, while the adaptation of the room for each of the trainings and the entire equipment for each training is donated by the CDI.

204. There is no information about the employment of participants of training, as they are prisoners.

205. The training was performed in the premises of the prison in Tetovo, which was equipped according to the needs of each training.

206. The workforce required for conducting the trainings is engaged on a part-time basis. It is a well-prepared, professional workforce with whom the institution cooperates for a longer period of time. In employers' view the entire workforce has a compulsory level of knowledge and skills.

207. The provider of adult education services has no space for vocational education and training. The complete equipment and required materials necessary for the training are donated to the prison where they are being implemented.

208. There is a coordinator for cooperation in the institution who is responsible for contact with the business community, communication and cooperation. This provider of adult education services has number of significant contacts with employers, however due to the specifics of these trainings (because it is a matter of prisoners), it does not provide recommendations.

209. These trainings have been specifically created at the request of the Directorate for Execution of Sanctions, in order to reduce the costs in prisons, to maintain the capacities and to generate income. The curriculum and the programme developed for the needs of these trainings fully comply with the requirements of the participants and the conditions of their realisation.

210. The teaching is adjusted to the characteristics of the adult learners as well as to the specifics of the situation (the learners are prisoners). The methods and the techniques of work are completely adjusted to the learners' needs.

211. Learners with special needs have not been included in the programme, while minority groups have been included and their needs have been considered.

### **2.2.5.2. Open Civic University for Lifelong Learning, Tetovo**

212. At the moment, there are participants only for the programme of Catering and Tourism. Only theoretical instruction takes place in the premises of this institution. The practical part is realised with employers.

213. Previously, trainings for Mechanical Engineering and Structural Engineering and Geodesy were provided. Of the learners, 20% find work within 6 months after the completion of the training, and 50% in the period from 6 months to one year. The institution monitors the pathways of the participants through telephone contacts every 6 months for a period of 3 years.

214. The training lasts 3 months, of which only 25% is theoretical instruction, while the remaining 75% are practical classes in private companies. The latter employ some of the participants who realise work-based learning depending on their needs.

215. The practice, for example within the field of the current training for tourism and catering is realised in the hotel "Lirak" in Tetovo, for the profile of cook, and in "Rima Gjore" LLC for the profile of confectioner and baker of bread, burek and other bakery products.

216. The workforce needed for conducting the trainings is engaged on a part-time basis. The institution has a long cooperation with well-prepared, professional staff both for the theoretical and practical part of the trainings. These are trainers who are regularly employed in secondary vocational schools or at universities that are up to date with the latest trends in their profession. Modernisation of the teaching staff knowledge is performed by means of seminars which are usually organised by the British Council and the Lifelong Learning Centre Skopje.

217. The employers' assessment is that part of the engaged teachers should upgrade their skills in the field of foreign languages and management.

218. For the theoretical part of the training there are classrooms equipped with computers as well as a functioning internet connection with a speed of at least 2 Mbps, as well as wireless internet for everyone (trainers, administration, participants). It is necessary to fully equip cabinets for practical classes.

219. During its long-term operation (founded on 31<sup>st</sup> July 1959), this institution has established contacts with local employers with whom it has a long cooperation. There is no specially appointed person for a school-industry liaison, this duty is carried out by the director of the institution.

220. The curriculum is adapted to the characteristics of adult participants. Some of participants expressed their satisfaction with the treatment of the trainers and the employers. Also, they said that the training was tailored according to their needs. Some of them have expressed their willingness to be engaged in other training.

221. The AEP does not include participants with special needs, while minority groups are involved, and their needs are considered.

### **2.2.5.3. OCULL Gostivar**

222. This AEP is providing the following qualifications: Hairdressers, sewing of basic clothing and bedding, Plasterboard installer and Confectioner. In the period of previous 2 years, the only interest was drawn to qualification of Hairdresser. At present there are 10 students enrolled in this programme.

223. The institution does not keep records regarding students' transition to labour market. A general estimate by the staff was that around 30% would find a job within 6 months of completion of the programme.

224. Practical work is conducted on the premises of the institution (with minimum equipment) and in cooperation with the local businesses. The ratio of theoretical and practical classes is different for the programmes:

- Hairdresser – 52 hours theoretical and 182 hours practical;
- Confectioner – 65 theoretical and 215 practical;
- Sewing of basic clothing and bedding – 56 theoretical and 196 practical;
- Plasterboard installer – 80 theoretical and 200 practical.

225. There is sufficient space and minimum equipment for the practical work. Nevertheless, more equipment, tools and consumables are needed to ensure effective practical training. T

226. Partnership with employers is not appropriate; there is no Placement Coordinator in the institution.

227. There is a need for recruitment of additional teaching staff, and needs for significant development of the competences of the present teaching staff members, for continuous support for professional development.

228. The programme is strongly focused on development of practical skills. There is no information regarding the specific pedagogical approaches applied by the teachers/instructors.

229. There is no data regarding enrolment policies and participation of students with special needs or members of minority groups. Trainings are provided in Macedonian, Albanian and Turkish languages. There is a possibility for financial support of trainees through the active labour market policies, implemented by the State Employment Agency.

#### **2.2.5.4. AUTO CEM EDUKACIJA**

230. This AEP is a subsidiary of the Company for Transport, Trade and Services Auto-Cem LLC export-import Tetovo, which is an authorised distributor and repairer for vehicles from the brand Opel and disposes of its own workshop and service for technical inspection. The training is provided in the Mechanical sector.

231. Considering the investments that the company undertakes, a part of which is this AEP, as well as the cooperation with the business community, the expected number of participants is 60 by the end of the calendar year 2019, with a tendency to grow in the following period.

232. 50%-70% of the participants get an employment in the period of 6 months to one year after completing the training. The institution monitors what happens with the participants by means of telephone contacts each 6 months within a period of 3 years

233. The training for this qualification lasts 3 months, of which 25% is theory, and the remaining 75% is practice.

234. This AEP is a subsidiary of the Company for Transport, Trade and Services Auto-Cem DOO export-import Tetovo, which is an authorised distributor and repairer for vehicles from the brand OPEL and disposes of its own workshop and service for technical inspection. Trainees perform the practical work in the company which due to the nature of its activity, is always in step with the latest knowledge in the field of this qualification.

235. The staff required for the implementation of the training is engaged on a part-time basis. The branch for Education, since its establishment in 2015, is managed by a professor who is engaged on a

part-time basis, and is regularly employed in the Secondary Municipal Vocational School “Mosha Pijade” – Tetovo, who has attended a number of trainings and has realised a significant number of projects throughout his career. Also the other staff that conduct the training is engaged on a part-time basis, whereby the indicated main criterion for their engagement is a vocational education with a duration of 5 years.

236. The engaged teachers should modernise their knowledge in the field of pedagogical skills (teaching, conducting a training).

237. For the theoretical part of the training, there is one room equipped with a computer and a functional internet connection with a speed of at least 2 Mbps. Wireless internet is available for everyone (trainers, administration, participants), and also the bidder of educational services for adults disposes of the latest literature within the field. The participants have the work equipment which is available to them in the realisation of the practice. The space for theoretical teaching, as well as the space for practice is appropriate to respond to the needs of this qualification. Considering that technology develops very quickly in the automobile industry, it is necessary to constantly procure new equipment and tools.

238. AEC has a number of partnerships with the employers. Also it has a special staff in charge of contact with the business community, which constantly cooperates through meetings, seminars and trainings, as well as an advisor for analysis of the labour market which is a link between the participants and the employers.

239. There is a need of support from the business community for certification of all auto-mechanics in order to improve the quality and the competition of the staff in the labour market.

240. The programme which is being realised is a result of the need of the company part of which is AEP, in order to recruit staff from the trainees for work in its company. It complies with the National Qualifications Framework and corresponds to the needs of both the participants and the labour market.

241. The teaching work is tailored to the characteristics of adult participants. Participants expressed satisfaction with the overall training conditions offered by AEP (in terms of the availability of modern equipment, tools, materials and other resources), which they assessed with a grade 5, as well as with the treatment by the trainers in addressing their individual needs and learning styles.

242. Participants with special needs have not been included in the school, while the minority groups are involved, whereby their needs have been considered. AEP or the city of Tetovo do not dispose of accommodation capacity for students.

#### **2.2.5.5. AEP Siluete Luks**

243. AEP Siluete Luks, works within the hairdressing and cosmetic studio Siluete Luks in Tetovo. The license for the realisation of training of adults is from 29<sup>th</sup> August 2018. There are two shifts and classes in Macedonian only. It has a total of 4 trainees, 2 full-time jobs and two are engaged on a part-time basis. By April 2019, 31 participants were trained in total.

244. AEP Siluete Luks has two verified programmes for education on adults:

245. Hairdresser which lasts for 3 months and manicure and pedicure which lasts for 2 months.

246. It has a total area of 420 m<sup>2</sup> in the framework of which the practice and training are being realised. In the instrument 6 it was stated that Siluete Luks disposes with appropriate equipment and small tools for operation, but it is not specified from whom it was purchased.

## 2.3. North-East Region

### 2.3.1. Demography and Population

247. Population of the region was 176,260 in 2017. It was more than in 2013 by 397 people, whereas the percentage of working age population dropped by 0.26% compared to 2013.

248. In 2017, 206 people immigrated to the North-East region from other regions of the country, it was less than in 2013 by 6 people, while the number of emigrants from the North-East region to other regions of the country was larger (372) than in 2013 (357). Thus there is a negative net migration rate (-166). In 2015, 172 people immigrated to the region from abroad and only 9 people emigrated abroad from the region. So, the net migrations rate was highest in 2015. Within 5 years (2013-2017) only positive net migration rate occurred, as only few people emigrated from this region abroad each year.

### 2.3.2. Economy

249. In 2016, the GDP of the region was 132,538 million MKD, it was the highest since 2012.

250. In 2030, the GVA of the region is foreseen to be 46,869. The sector projected to have the highest GVA is Public administration and defence; compulsory social security; education; human health and social work activities, though in 2016 its GVA (4,551) was less than Wholesale and retail trade, repair of motor vehicles and motorcycles, transportation and storage; accommodation sector (7,045). Information and communication sector has very low GVA and it is foreseen to decrease. Professional, scientific and technical activities; administrative and support service activities sector is forecasted to be have negative GVA.

### 2.3.3. Labour Market

251. In 2017, the unemployment rate dropped to 35.7% from 44.9% in 2013. In 2017, the average net wage rose by 1351 MKD compared with 2013.

252. In the Table 45, data on employment for the North-East region by sectors of economy for 2016-2018 and forecast for 2020, 2025 and 2030<sup>26</sup> are exhibited. According with this, the most rapidly growing sectors are *Construction* (which is the second largest at present) and *Manufacturing* followed far behind by *Accommodation and food service activities*, *Professional, Scientific and technical activities*. Other sectors such as *Human health and social work activities*, *Information and communication*, *Administrative and support service activities*, *Arts, entertainment and recreation* grow more moderately and occupy less employees.

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<sup>26</sup> The projections are done solely by extrapolation of the recent years' dynamics, without considering any economic, social, political or other factors which could have impact on the sectors of economy in terms of growth or decline.

TABLE 45. EMPLOYED BY SECTORS, NORTH EAST REGION

Sector/Year	2016	2017	2018	2020	2025	2030
<b>GROWING SECTORS</b>						
Construction (F)	6,331	6,907	6,331	8,510	12,768	17,026
Manufacturing (C)	9,427	8,596	9,427	9,352	9,784	10,216
Accommodation and food service activities (I)	1,999	1,383	1,999	2,669	4,545	6,420
Professional, scientific and technical activities (M)	1,634	1,336	1,634	2,400	4,254	6,108
Human health and social work activities (Q)	2,315	2,155	2,315	2,708	3,663	4,619
Information and communication (J)	(969)	:	969	1,362	2,345	3,327
Administrative and support service activities (N)	1,132	(735)	1,132	1,289	1,910	2,531
Arts, entertainment and recreation (R)	(618)	(603)	618	675	807	940
<b>DECLINING SECTORS</b>						
Wholesale and retail trade, repair of motor vehicles and motorcycles (G)	7,023	7,198	7,023	6,650	5,725	4,801
Public administration and defence, compulsory social security (O)	4,739	6,188	4,739	4,709	3,608	2,507
Water supply, sewerage, waste management and remediation activities (E)	(940)	(820)	940	873	816	758
Agriculture, forestry and fishing (A)	2,802	3,649	2,802	2,602	1,568	535
Education (P)	3,340	3,833	3,340	2,935	1,715	495
Transportation and storage (H)	2,400	3,058	2,400	1,943	495	threatened
Other service activities (S)	(750)	(715)	750	523	60	threatened
Financial and insurance activities (K)	(572)	:	572	NA	NA	NA
Mining and quarrying (B)	(556)	:	556	NA	NA	NA
Electricity, gas, steam and air conditioning supply (D)	:	:	:	NA	NA	NA
Real estate activities (L)	-	:	-	NA	NA	NA
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use (T)	-	-	-	NA	NA	NA
Activities of extraterritorial organisations and bodies (U)	:	-	:	NA	NA	NA
<b>Total</b>	<b>48,060</b>	<b>48,576</b>	<b>48,060</b>	<b>51,263</b>	<b>57,759</b>	<b>64,254</b>

Note: - no occurrence; : too imprecise estimate to be published; ( ) less precise estimate, to be used with caution; NA not available (of various reasons); threatened – rather rapid decrease (forecasted negative values).

Source: "Analysis of Skills Demand and Supply at Regional and Local Level in North Macedonia". ETF, 2019;

### 2.3.4. VET Provision by Employment Sectors

253. In the North-East region of the country, there are five secondary schools, of which three provide only VET courses and two implement also general education.

254. The largest institution, which is STU "Nace Bugjoni" in Kumanovo (around 2,000 students) delivers VET in 3 different areas, while SOU "Kiro Burnaz" in Kumanovo, with considerably fewer students (448) delivers four profiles of VET. SOU "Gjorche Petrov" in Kriva Palanka, also offers three

profiles, and two other institutions (SOU "Mitko Pendjukliski" in Kratovo, and SOU "Pero Nakov" in Kumanovo) are specialised in two different profiles, each. The Table 46 shows distribution of the VET schools' students as by fields of education in the 2018-2019 academic year.

**TABLE 46. NUMBER OF STUDENTS AS BY INSTITUTIONS AND FIELDS, 2018-2018 ACADEMIC YEAR**

№	School	Educational sectors in VET (student numbers for 2018-19)									Secondary general education
		Catering and tourism	Electro-technical	Mechanical	Personal services	Economy, law and trade	Health	Agriculture-veterinary	Textile and leather	Chemistry and technology	
1	STU "Nace Bugjoni", Kumanovo		791	495			660				1,946
2	SOU "Pero Nakov", Kumanovo					713			160		873
3	SOU "Kiro Burnaz", Kumanovo			70	71			222		85	448
4	SOU "Gjorche Petrov", Kriva Palanka	26	108	89							223
5	SOU "Mitko Pendjukliski", Kratovo	83								7	90
<b>TOTAL</b>		<b>109</b>	<b>899</b>	<b>654</b>	<b>71</b>	<b>713</b>	<b>660</b>	<b>222</b>	<b>160</b>	<b>92</b>	<b>3,285</b>
											<b>1,563</b>

Source: data collected from the institutions within this study.

### 2.3.4.1. Growing Sectors

255. Qualifications of only 5 educational fields are in line with the growing sectors of economy in this region. These are:

1. Catering and tourism;
2. Electro-technical;
3. Health;
4. Textile and leather;
5. Chemistry and technology.

#### A. CATERING AND TOURISM

256. In the North-East region, two VET schools, namely SOU "Mitko Pendjukliski", Kratovo " and SOU "Gjorche Petrov", Kriva Palanka offer qualification related to **Catering and tourism: Cook, Hotel tourism technician, and Rural tourism technician**. In total, about 100 students learn in this field (Table 47).

**TABLE 47. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR SECTOR CATERING AND TOURISM**

School	Total	Cook (3y)	Hotel tourism technician (4y)	Rural tourism technician (4y)
SOU "Mitko Pendjukliski", Kratovo	83			83
SOU "Gjorche Petrov", Kriva Palanka	26	20		6

<b>TOTAL</b>	109	20	6	83
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Source: data collected from the institutions within this study.

257. These qualifications relate to the sector of **Accommodation and food service activities (I)** where around 2.7 thousand employees are projected to be occupied in 2020, more than 4 thousand in 2025 and around 6,500 in 2030. This means about 1,900 new job places every 5 years or about 400 annually, while the above schools jointly prepare no more than 30 specialists per year. While in SOU "Mitko Pendjukliski", Kratovo, the number of enrollees remains more or less stable, in SOU "Gjorche Petrov", Kriva Palanka, there is a risk that this profile may disappear soon (Table 48).

**TABLE 48. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, CATERING AND TOURISM SECTOR**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>SOU "Mitko Pendjukliski", Kratovo</b>						
Catering technician for rural tourism	-	-	23	19	16	25
<b>SOU "Gjorche Petrov", Kriva Palanka</b>						
Hotel tourism technician	-	12	6	-	-	-
Cook	-	-	5	5	9	6

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

258. Information regarding the graduates which is mainly based on personal experiences and informal contacts of the respondents, suggests that:

- **SOU "Mitko Pendjukliski", Kratovo:** around 50% of the students graduating from the programmes continue their education at university. Although Catering and tourism was identified as growing and important economic sector for the municipality, around 20% of graduates find a job within 6 months from graduation, and only 30% work in the sector they have studied for. Insights offered by parents indicate that some students find part-time jobs in the sector while studying.
- **SOU "Gjorche Petrov", Kriva Palanka:** around 10-20% of the VET graduates, who decide not to continue to university, find work within 6-12 months since graduation. As per teachers' estimates, this share is the highest for the students in catering and tourism with some 40% finding work in-sector.

259. Practical training in **SOU "Mitko Pendjukliski", Kratovo**, is implemented partly in the kitchen of the school (donated by USAID) and partly in cooperation with local businesses. The level of the business sector interest in cooperation is low. Personal contacts are often used to ensure partnership. Since 1/3 of the practice has to be conducted in catering and hospitality facilities, it is sometimes challenging to ensure quality practice, due to the legal constraints imposed on businesses (especially those working with food preparation), but also due to lack of time devoted to students. The school does not have a Placement Coordinator, but a member of staff is assigned for communication with the local business community and the municipal authorities. In **SOU "Gjorche Petrov", Kriva Palanka**, students conduct the practical work in the dormitory kitchen which has been reported to be well-equipped and comply with the HACCP standards.

260. In **SOU "Mitko Pendjukliski", Kratovo**, there is a constant lack of textbook for the greater part of the vocational courses. The school building has sufficient space for realisation of the programme, and several smaller projects for renovation of the building have taken place in the last few years.

261. None of the schools has established any sustainable partnership with employers. **SOU "Mitko Pendjukliski", Kratovo**, has a member of staff responsible for school-industry liaison, but this cooperation is mostly informal. The students of this institution expressed moderate satisfaction by the theoretical part of the learning, the availability of equipment and tools, class schedule, and availability of teaching materials. In **SOU "Gjorche Petrov", Kriva Palanka**, students were satisfied by the teaching methods.

262. At present, there are no officially registered SEN students in **SOU "Mitko Pendjukliski", Kratovo**. Their Inclusion seems not to be realistic as there is no SEN specialist in this school. There are Roma students in the school who, according with the state policy, are enrolled with 10% lower score than the mandatory. Around 5% of the students receive scholarships from the Ministry of Education and Science. The school has its own dormitory, and at present 10 students use this accommodation. The conditions were described as not satisfactory, particularly with regards to food, and the general state of the facility.

263. **SOU "Gjorche Petrov", Kriva Palanka**, has students with SEN and Roma students (all applications from the latter are accepted). There are provisions in place for accommodating the needs of students with special needs. As indicated from members of school management, the all enrolment applications are accepted. Registered SEN students receive individual mentor support. However, it is only available for students which have formally been categorised as students with special needs, but not all students that require such assistance have been registered

**Conclusion:** This profile provides very limited number of specialists for the sector, and in general there is no indication that interest will expand. Half of the graduates continue their education in university, and no more than 30% of others find jobs according with their qualification. In the context of growing sector of tourism, this may be due to lack of relevance of qualifications or weak relationships to employers. One of the reasons seems poor cooperation with the private sector.

## B. ELECTRO-TECHNICAL SECTOR

264. Two schools prepare specialists in the **Electro-technical** sector. These are: STU "Nace Bugjoni" in Kumanovo and SOU "Gjorche Petrov" in Kriva Palanka. The offered qualifications are: Electrical technician for computer technology and automation; Electrical mechanics; Electrical engineering – energy technician. The total number of students is almost 900 (Table 49).

**TABLE 49. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR ELECTRO-TECHNICAL SECTOR**

School	Total	Electrical technician for computer technology and automation (4y)	Electrical mechanics (3y)	Electrical engineering – energy technician (4y)
SOU "Gjorche Petrov", Kriva Palanka	108	(MK) 108		
STU "Nace Bugjoni", Kumanovo	791	(MK, ALB) 469	(ALB) 48	(MK, ALB) 274
<b>TOTAL</b>	<b>899</b>	<b>577</b>	<b>48</b>	<b>274</b>

Source: data collected from the institutions within this study.

265. These qualifications can be considered mainly relating to the sector of **Manufacturing (C)** which is growing (approximately 90 new work places are projected to be created annually) but the specialists with electro-technical qualifications, specifically those who are specialised in computers and electronics can be occupied in many other sectors. For this qualification, the number of applicants is also continuously growing rapidly than for other ones (Table 50).

**TABLE 50. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, ELECTRO-TECHNICAL SECTOR**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b><i>SOU "Gjorche Petrov", Kriva Palanka</i></b>						
Electrical technician for computer technology and automation (4y)	25	29	28	24	26	28
<b><i>STU "Nace Bugjoni", Kumanovo</i></b>						
Electrical technician for computer technology and automation	-	86	113	112	110	134
Electrical technician – energy technician	-	64	69	66	56	83
Electrical mechanics (3y)	40	20	-	19	12	17

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

266. There is no precise record on graduates' transition to LM. According to estimates of the respondents:

- ***SOU "Gjorche Petrov", Kriva Palanka:*** around 30% of the ICT technicians who decide not to continue to university, find work within 6-12 months.
- ***STU "Nace Bugjoni", Kumanovo:*** around 50% of graduates continue their education; 50% of those who decide not to enter university, find a job within 6 months after graduation, and the remaining within a year. The school does not have a career centre or provides any type of career guidance.

267. The practical training of the students in ***SOU "Gjorche Petrov", Kriva Palanka***, is mainly realised at the local companies with which the school has regular cooperation. The 3<sup>rd</sup> year students spend 1 day per week in the companies and 4<sup>th</sup> year for students – 2 days. In ***STU "Nace Bugjoni", Kumanovo***, students pass their practical training mainly at the school and partly in local businesses. The school does not have a Placement Coordinator.

268. In the past years, ***SOU "Gjorche Petrov", Kriva Palanka***, has acquired several pieces of equipment, and the staff thinks that the school facilities and equipment meet the formal standards for realisation of the programme. However specific equipment items required by different VET programmes. In ***STU "Nace Bugjoni"*** only small tools and consumables are available in sufficient numbers and are in regular use. There is a huge need for equipment in quantity corresponding the number of the students. The school building requires renovation.

269. The schools are relatively satisfied with the cooperation with business community. Moreover, ***STU "Nace Bugjoni"*** has acquired equipment and tools with the help of business sector. There is no specific person in school that is in charge of school-industry liaison. Teachers in ***SOU "Gjorche Petrov"*** believe that the partnership can be improved by government policy of incentives (tax or otherwise) for companies providing WBL for VET students.

270. In terms of the teaching methods, students in **SOU "Gjorche Petrov", Kriva Palanka**, expressed satisfaction by them, while in **STU "Nace Bugjoni", Kumanovo**, satisfaction was moderate, and dissatisfaction with availability of laboratories, equipment and tools was expressed. Interviews with teaching staff indicated that they lack training in working with SEN students, which impacts their capacity to provide individualised support to them.

271. **STU "Nace Bugjoni", Kumanovo** building has to be improved to provide better accessibility for SEN students (they do not have access to the upper floor of the building). Teachers' lack of training for working with SEN students impacts their capacity to provide individualised support to these students. The school adheres to the national policies for inclusion of children from marginalised groups – Roma, which refers to the possibility for enrolment with 10% lower academic score than the required. The number of enrolled female students increases every academic year.

**Conclusion:** The job placement of graduates seems high in Kumanovo but share of those who continue at university is also large here. In Kriva Palanka, the job placement rate is up to 30%. Both institutions are lacking modern equipment, however the STU "Nace Bugjoni" can be more closely considered in terms of development potential.

## C. HEALTH

272. In this region only one institution namely **STU "Nace Bugjoni", Kumanovo** provides VET related to the **Health** sector. The offered qualification is Nurse. The total number of students in the academic year 20018-2019 was 660. Instruction is performed in Macedonian and Albanian. It is important to mention that this institution is not a specialised medical school but implements education for two more profiles.

273. This qualification relates to the growing sector of **Human health and social services (Q)** where around 2,700 employees are projected to be occupied in 2020, over 3.6 thousand in 2025 and more than 4.6 thousand in 2030. This means almost 200 new job places annually, while the above school prepares on average around 150 specialists per year. However, among those 200 will evidently not only nurses required. The number of applications is relatively stable during the last 5 years (Table 51).

**TABLE 51. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, HUMAN HEALTH AND SOCIAL SERVICES**

2014/15	2015/16	2016/17	2017/18	2018/19
167	153	157	179	171

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

274. For this profile too, the share of those who continue at university is large – around 50% of graduates. Out of the remaining cohort of the graduates, 50% are reportedly job placed within 6 months after graduation and other 50% within a year.

275. This is the only case among the studied regions when the practical training of future medical workers is implemented solely at the school premises. At the same time, the institution lacks a large number of equipment necessary for implementing practice. The school has acquired some equipment and tools with the help of business sector. The school does not have a Placement Coordinator.

276. Students are moderately satisfied with teaching methods, and dissatisfied with availability of laboratories, equipment and tools.

**Conclusion:** Regardless of the high demand of medical personnel in the region, this profile does not offer great potential for the development of a centre of excellence.

#### D. TEXTILE AND LEATHER

277. Only one school namely **SOU "Pero Nakov", Kumanovo** prepare specialists in the **Textile and Leather sector**. The offered qualifications are: Clothing technician; Footwear technician; Clothing technician/Footwear technician; Clothing design technician. The total number of students in the academic year 20018-2019 was 160 (Table 52).

**TABLE 52. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR TEXTILE AND LEATHER**

Total	Clothing technician (4y)	Footwear technician (4y)	Clothing technician / Footwear technician (4y)	Clothing design technician (4y)
160	(ALB) 45	(MK, ALB) 37	(MK) 11	(MK) 67

Source: data collected from the institutions within this study.

278. These profiles relate particularly to the skills needs of the **Manufacturing (C)** sector where around 9.3 thousand employees are projected to be occupied in 2020, 9.7 thousand in 2025 and more than 10 thousand in 2030. This means about 430 new job places every 5 years or almost 90 annually.

279. However, enrolment is observably declining. Introduction of a new qualification of Clothing design technician in 2018 helped to attract more students but there is no guarantee yet that this will become a stable trend (Table 53).

**TABLE 53. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, TEXTILE AND LEATHER**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Shoe technician	20	8	10	7	5	6
Technician for ready-made clothing	14	31	27	21	19	7
Clothing technician / Shoe technician	29	16	26	10	10	6
Clothing design technician	-	-	-	-	-	11

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

280. The school has a career centre (several teachers have attended training courses on career development of students) which provides consultation and counselling of students regarding their career development after completing vocational education. However, no any information about the graduates' further pathways is available at the school.

281. This school designs plans for professional development of staff, and CPD is supported on a regular basis for new teachers: orientation, on-the-job training, learning from colleagues, but also participation in other capacity-building activities organised by the school or provided by other institutions.

282. Only a part of practical training is implemented in companies (while the main part is conducted at the school) but this is not satisfying the students as they actually do not get involved in performing any real work-related tasks.

283. School has acquired some equipment through donations from civil society organisations and other institutions but the number of items is not adequate to the number of the students. At present, they often have to take turns to use the same pieces of equipment, which is time-consuming and less effective. The school makes efforts to acquire additional consumables.

284. The school reports satisfactory partnership with the local business sector justifying this by the signed memoranda of cooperation with several local companies. However, the students' dissatisfaction with the quality of practical training calls to be more restrained about this positive statement. The school has designated members of staff who are responsible for communications with the business sector.

285. At the same time, the students are relatively satisfied with the teaching methods. Teachers have participated in trainings on innovative pedagogical methods and techniques. Some of them received also training for pedagogical work with SEN students, who do exist in the school but are not officially categorised as such (most commonly due to the parents' objections). There is a SEN specialist in the school who assists the work with these students. Moreover, a specialised teaching plans have been developed to facilitate work with SEN students.

**Conclusion:** No judgements are possible about the effectiveness of this profile in terms of transition to the labour market. Probably, self-employment is one of the possible pathways of the graduates. Nevertheless, there are doubts about their practical skills due to poor performance of the practical trainings.

## E. CHEMISTRY AND TECHNOLOGY

286. Two schools prepare specialists in the **Chemistry and technology** profile. These are: SOU "Mitko Pendjukliski" in Kratovo and SOU "Kiro Burnaz" in Kumanovo. The offered qualifications are: Food technician; Baker; Technician nutritionist. The total number of students is slightly over 90 (Table 54).

**TABLE 54. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR CHEMISTRY AND TECHNOLOGY**

School	Total	Food technician (4y)	Baker (3y)	Technician nutritionist (4y)
SOU "Mitko Pendjukliski", Kratovo	7	(MK) 7		
SOU "Kiro Burnaz", Kumanovo	85	(MK) 24	(MK) 14	(MK) 47
<b>TOTAL</b>	<b>92</b>	<b>31</b>	<b>14</b>	<b>47</b>

Source: data collected from the institutions within this study.

287. These profile also relates to the skills needs of the growing sector of **Manufacturing (C)**. However, enrolment in both institutions is extremely limited (Table 54) and no indications of increase are identified.

**TABLE 55. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, CHEMISTRY AND TECHNOLOGY SECTOR**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>SOU "Mitko Pendjukliski", Kratovo</b>						
Food technician	-	-	2	4	0	1
<b>SOU "Kiro Burnaz", Kumanovo</b>						

Technician - nutritionist	-	4	7	13	7	7
Baker (3y)	5	4	4	4	2	7
Food technician	20	12	11	10	5	4

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

288. The data on school to work transition of graduates which is based on mostly informal meetings, suggests that:

- **OU "Kiro Burnaz", Kumanovo:** around 20% find job within six months after graduation, and other 20% within a year. Only around 20% find job in the sector they have studied for.
- **SOU "Mitko Pendjukliski", Kratovo:** around 50% of the students graduating from the programmes continue their education at university. Despite the fact that catering and tourism was identified as important economic sector for employment in the municipality, estimates by members of staff were that around 20% of graduates find a job within 6 months from graduation, and 30% work in the sector they have studied for. Insights offered by parents indicate that some students find part-time jobs in the sector during the study.

289. Performance of practice is not satisfying:

- **SOU Mitko Pendjukliski", Kratovo:** Part of the practical work is conducted on the premises of the school. The school has a kitchen donated by USAID for performing students' practice. Part of the practice is realised in cooperation with local businesses. Key respondents indicate that the interest in cooperation among the local business community is low, and they often have to use personal contacts to ensure cooperation. Since 1/3 of the practice has to be conducted in food processing companies, ensuring quality practice is sometimes challenging, due to legal constraints imposed on businesses (especially those working with food preparation), but also due to lack of time devoted to students, and lack of interest. The school does not have a Placement Coordinator, but a member of staff is assigned for communication with the local business community and the municipal authorities.
- **SOU "Kiro Burnaz", Kumanovo:** Part of the practical training is conducted in the premises of the school, which students are not satisfied with due to volume (only one day a week is devoted to learning through practice) and insufficient equipment and tools. The school also maintains cooperation with several companies in the region where students can attend practice. Key respondents indicated certain challenges with regards to this cooperation. Lack of interest among companies was noted, and staff indicated that often they have to use personal contacts to ensure cooperation with regards to student practice. New regulations regarding student practice issued by the Ministry of Education and Science, also create unfavourable conditions for realisation of student practice.

290. There is a lack of equipment and tools required for practice in both schools.

- **SOU Mitko Pendjukliski", Kratovo:** The school building has sufficient space for realisation of the programme, and several smaller projects for renovation of the building have taken place in the past few years. But there is a constant lack of textbook for the greater part of the vocational courses
- **SOU "Kiro Burnaz", Kumanovo:** The available equipment only meets the formal criteria for realisation of the VET programmes in this sector. Lack of equipment (microscopes, computers,

white boards), teaching aids and consumables means that often practical exercises, experiments are prolonged or delayed,

291. The partnership with employers mostly is not formalised and initiated by the schools' staff. Cooperation relates to the realisation of students' practice only:

- **SOU Mitko Pendjukliski", Kratovo:** Business sector is not interested in partnership with schools and is not aware of potentials of such cooperation;
- **SOU "Kiro Burnaz", Kumanovo:** The school maintains cooperation with several companies in the municipality.

292. In **SOU Mitko Pendjukliski", Kratovo**, students are moderately satisfied with educational process. There is no information of diverse and relevant pedagogies are being implemented. In **SOU "Kiro Burnaz", Kumanovo**, students expressed satisfaction with teaching methods but they dissatisfied with quantity and quality of practice.

293. **SOU "Mitko Pendjukliski", Kratovo**, does not have a SEN specialist. There are no officially registered SEN students, and they expressed scepticism regarding the capacities for inclusion of SEN students without support from SEN specialist. In **SOU "Kiro Burnaz", Kumanovo**, there are no indications that specific measures are undertaken to promote the enrolment of students with special needs or members of minority groups. Dormitory accommodation is available, however students reported that the dormitory accommodation could be improved.

**Conclusions:** This profile does not offer great potential for the development of a centre of excellence.

#### 2.3.4.2. Declining Sectors

294. The following education fields relate to the sectors which were identified as declining in terms of employment:

1. Mechanical;
2. Economy, law and trade;
3. Personal services;
4. Agriculture-veterinary.

#### F. MECHANICAL SECTOR

295. Three schools prepare specialists in the **Mechanical** sector. These are: SOU "Gjorche Petrov" in Kriva Palanka, SOU "Kiro Burnaz" in Kumanovo, and STU "Nace Bugjoni" in Kumanovo. The offered qualifications are: Mechanical engineering – energy technician; Auto-mechanic; Auto-technician – mechatronic; Mechanical technician for computer management; Mechanical technician; and Machine mechanics. The total number of students in the academic year 20018-2019 was over 650 (Table 56).

**TABLE 56. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR MECHANICAL SECTOR**

School	TOTAL	Mechanical engineering – energy technician (4y)	Auto-mechanic (3y)	Mechanical technician for computer management (4y)	Mechanical technician (4y)	Auto technician – mechatronic (4y)	Machine mechanics (3y)
SOU "Gjorche Petrov", Kriva Palanka	89		(MK) 27		(MK) 62		

SOU "Kiro Burnaz", Kumanovo	70					(MK) 70	
STU "Nace Bugjoni", Kumanovo	495	(MK, ALB) 181		(MK, ALB) 227			(MK, ALB) 87
<b>TOTAL</b>	<b>654</b>	<b>181</b>	<b>27</b>	<b>227</b>	<b>62</b>	<b>70</b>	<b>87</b>

Source: data collected from the institutions within this study.

296. These profile relates particularly to the skills needs of the auto servicing industry covered by the sector of **Wholesale and retail trade, repair of motor vehicles and motorcycles (G)**. This sector is losing around 1,000 work places a year. Nevertheless, around 4,800 people are projected to be occupied here in 2030. Enrolment ins also declining for almost all qualifications (Table 57).

**TABLE 57. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, MECHANICAL SECTOR**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
<b>SOU "Gjorche Petrov", Kriva Palanka</b>						
Mechanical technician	21	32	24	10	22	17
Auto mechanic (3y)	9	13	9	8	16	5
<b>STU "Nace Bugjoni", Kumanovo</b>						
Mechanic	52	23	29	27	23	29
Mechanical technician for computer management		48	52	52	60	59
Mechanic - energy technician		45	42	47	48	44
<b>SOU "Kiro Burnaz", Kumanovo</b>						
Auto technician – mechatronic (4y)	18	15	14	18	20	18

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

297. Available estimation about the graduates' further pathways is:

- **SOU "Gjorche Petrov", Kriva Palanka:** around 10-20% of the VET graduates, who decide not to continue to university, find work within 6-12 months after graduation. For the machine technicians it is around 10-20% of those do not continue to university.
- **SOU "Kiro Burnaz", Kumanovo:** around 20% find a job within six months after graduation, and an additional 20% find a job within a year. Only around 20% of graduates find job in the sector they have studied for.
- **STU "Nace Bugjoni", Kumanovo:** around 50% of graduates who that do not continue their education at university find a job within 6 months after graduation; additional 50% find a job within a year. Around 50% of the students continue their education. The school doesn't have career guidance centre.

298. All three schools report cooperation with companies where students can attend practice but like for other profiles offered by these schools (see above) the quality of practical training is strongly questioned.

299. In the past years **SOU "Gjorche Petrov", Kriva Palanka**, has acquired several pieces of equipment, which meets the formal standards for realisation of the programme. However specific

equipment items required by individual VET programmes. In **STU "Nace Bugjoni", Kumanovo**, only small tools and consumables are available in sufficient numbers and are in regular use. There is a huge need for equipment in quantity corresponding the number of the students and for renovation of the school building. **SOU "Kiro Burnaz", Kumanovo**, also needs specific equipment for the need of practical training.

300. Employers collaboration occurs in connection with student practice. Moreover, **STU "Nace Bugjoni", Kumanovo**, has acquired equipment and tools with the help of business sector. There is no specific person in school that is in charge of school-industry liaison. Teachers in **SOU "Gjorche Petrov", Kriva Palanka**, believe that the partnership can be improved by government policy of incentives (tax or otherwise) for companies providing WBL for VET students. In **SOU "Kiro Burnaz", Kumanovo**, cooperation with employers is not formalised, and cooperation regarding practical work is difficult and often on the initiative of the school staff.

301. In **SOU "Kiro Burnaz"** students are satisfied moderately with teaching methods, and dissatisfied with availability of laboratories, equipment and tools. Interviews with teaching staff indicated that they lack training in working with SEN students, which impacts their capacity to provide individualised support to these students. In two other school students expressed satisfaction with teaching methods. In **STU "Nace Bugjoni"** insufficient number and low quality of practice was indicated as the key problem.

**Conclusion:** decline of the sector and decrease of the number of learners, as well as a number of issues related to the practical training and provision of schools with equipment and tools, do not offer for this profile great potential for the development of a centre of excellence.

## G. ECONOMY, LAW AND TRADE

302. Only one school namely **SOU "Pero Nakov", Kumanovo** prepares specialists in the **Economy, Law and Trade sector**. The offered qualifications are: Economic technician; Trade and marketing technician; Business secretary; Law technician; Banking technician. The total number of students in the academic year 2008-2019 was more than 700 (Table 58).

**TABLE 58. STUDENTS DISTRIBUTION PER QUALIFICATION IN VET SCHOOLS FOR ECONOMY, LAW AND TRADE**

TOTAL	Economic technician (4y)	Trade and marketing technician (4y)	Business secretary (4y)	Law technician (4y)	Banking technician (4y)
713	(MK, ALB) 239	(MK, ALB) 217	(MK, ALB) 108	(ALB) 58	(MK, ALB) 91

Source: data collected from the institutions within this study.

303. As it was explained for the case of Polog region, qualifications within this profiles relate to a wide range of economic sectors, particularly to **Wholesale and retail trade (G)** and **Financial and insurance activities (K)**. The former is declining, while the latter is already very small and threatened.

304. During the last four years, the enrolment was in the interval of 160-200 (Table 59).

**TABLE 59. STUDENTS ENROLMENT BY QUALIFICATIONS AND YEARS, ECONOMY, LAW AND TRADE**

Qualification	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Economic technician	46	58	81	50	52	56
Technician for trade and marketing	23	64	54	56	57	50

Business secretary	24	27	27	23	22	36
Legal technician	23	14	17	10	12	19
Banking technician	25	31	24	21	19	27

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

305. No data on the graduates' employment or further education are available.

306. All other aspects related to organisation of works in this institution, are entirely similar to those described under the profile Textile and leather. Therefore, no any further information is provided here.

## H. PERSONAL SERVICES

307. Again only one institution namely **SOU "Kiro Burnaz", Kumanovo** offers qualifications related to **Personal services sector** – Cosmetic technician and Hairdresser. The total number of students in the academic year 20018-2019 was 121 (Table 60).

**TABLE 60. STUDENTS DISTRIBUTION AND ENROLMENT BY QUALIFICATIONS AND YEARS, PERSONAL SERVICES**

Qualification	Number of students	Enrolment					
		2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Cosmetic technician (4y)	(MK, ALB) 102	17	18	16	18	24	31
Hairdresser (3y)	(MK) 19	10	4	11	7	9	4
<b>TOTAL</b>	<b>121</b>	<b>27</b>	<b>22</b>	<b>27</b>	<b>25</b>	<b>33</b>	<b>35</b>

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

308. These profiles relate particularly to the skills needs of the **Other services (S)** sector which is assessed as "threatened".

309. Data on the graduates available from non-formal sources, relate to the entire cohort but not specifically to those of this profile: around 20% find a job within six months from graduation, and other 20% within a year. Only around 20% find jobs in the sector they have studied for.

310. Little potential for developing into a Centre of Excellence unless as part of an inter-regional network.

## I. AGRICULTURE-VETERINARY

311. **SOU "Kiro Burnaz", Kumanovo** is the only institution in the region which prepares specialists in the **Agriculture-Veterinary sector**. Four qualifications are offered: Veterinary technician; Farm production technician; Agricultural technician; and Horticultural technician. The total number of students in the academic year 20018-2019 was 222. Since 2013, enrolment has always been over 70 students, and only in 2018, a slight decrease was registered (Table 61).

**TABLE 61. STUDENTS DISTRIBUTION AND ENROLMENT BY QUALIFICATIONS AND YEARS, AGRICULTURE-VETERINARY**

Qualification	Number of students	Enrolment					
		2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Veterinary technician (4y)	(ALB) 78	20	20	19	20	21	5
Farm production technician (4y)	(MK, ALB) 67	20	19	14	15	12	12
Agricultural technician (4y)	(MK) 72	18	18	19	19	19	27
Horticultural technician (4y)	(MK) 5	18	18	19	19	19	22
<b>TOTAL</b>	<b>222</b>	<b>76</b>	<b>75</b>	<b>71</b>	<b>73</b>	<b>71</b>	<b>66</b>

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018, adjusted by the data collected from the institutions within this study.

312. Agriculture is one of the small sectors in the region (in 2018, there were only 2.8 thousand people involved) and is rapidly declining: for 2030, around 530 employees are forecast.

313. For any information about different aspects of this school's works organisation, please refer to the above sections where provision of other profiles by SOU "Kiro Burnaz", Kumanovo, is presented. The school has agricultural land which could be used for some purpose and a dormitory, which is currently unused.

#### 2.3.4.3. Outstanding specifics of the schools

314. The following are the outstanding specifics of the schools in the North-East region:

- **SOU "Pero Nakov", Kumanovo:** the school has plans for professional development of the staff, and the school allocates funding for its realisation. Students with SEN are enrolled in the school, and the teaching staff has received training for pedagogical work with them. Moreover, specialised teaching plans have been developed to facilitate work with SEN students. The school has also a SEN specialist which assists the work with these students. Teachers have experience and are willing to provide post-secondary VET and AE programmes if there is an interest from the general population. Key respondents indicated preparedness to support start-up initiatives upon request.
- **SOU "Gjorche Petrov", Kriva Palanka:** the school includes students with special needs and Roma students. There are provisions in place for accommodating the needs of students with special needs. VET students in catering and tourism conduct the practical work in the dormitory kitchen which has been reported to be well-equipped and comply with the HACCP standards. Building is well-maintained. The school has been awarded recognition by the Ministry of Education and Science to this end. Equipment is mainly in place.
- **SOU "Mitko Pendjukliski", Kratovo:** the school has a designated member of staff mandated with communication with the local business sector, but this cooperation is mostly informal and on the initiative of the school management and teachers and related to realisation of student practice. The available space and equipment, particularly new kitchen are part of the potential for sharing. Some members of staff expressed interest to be involved in Curriculum development, Adult Education, preparation of teaching and learning materials and sharing practical teaching practices.
- **SOU "Kiro Burnaz", Kumanovo:** the school develops plans for CPD and allocates funds for their implementation. Members of staff demonstrated interest in sharing experiences and practices.

Teachers have relevant experience in development of curricula, teaching and learning materials. The school management expressed interest in cooperation with secondary schools in regionalisation and provision of specialised programmes. The school has agricultural land which is unused, and representatives of school management consider it to be a potential for improving the educational offer (through the construction of a greenhouse).

- **STU "Nace Bugjoni", Kumanovo:** staff demonstrated interest in taking part in curriculum development, adult education (there is relevant experience), preparation of teaching and learning materials.

### 2.3.5. Provision by Employment Sector (Adult Education Providers)

#### 2.3.5.1. VIRTUAL-M in Kumanovo

315. In 2019, this AEP has only two adults who learn Economics. Information on graduates' employment is anecdotal: around 75% of graduates find a job within a 6 months after completion the programmes. About 80% of graduates find a job in the sector they have studied. Learners are offered consultations and counselling regarding employment and self-employment

316. There is no information regarding any kind of relevant work-based learning.

317. The Centre claims that they have appropriately skilled staff. However, there is no information about their experience, pedagogical trainings and participation in CPD.

318. School has sufficient space and equipment to implement educational programmes.

319. The institution has cooperated with companies on development and realisation (retraining of employees, training of specialists) of training programmes suited to their needs: project management, development of business plans, ICT skills. At present, there is no consistent partnership between the AEP and employers. The institution does not have a designated person in charge of school-industry liaison.

320. It supports distance-based learning through the Moodle platform.

321. There is no indication that this AEP has specific policies or initiatives to promote participation of SEN students and minority groups. Some of the students have received support through State Employment Agency.

#### 2.3.5.2. EURO College in Kumanovo

322. Euro College in Kumanovo was established in 2008 and provides adult education. They have in total 6 employees: 3 full-time, 3 part-time. They have a database with learners' data and data from delivered programmes, as well as a database with interested and adequate practical trainers. Tracer study of own learners has never been conducted.

323. Data on the trainings provided in the previous years are as follows:

324. In the previous years, the College have provided data on AE for years 2018 and 2019. In

- 2018: Economics – 15 learners (including 12 women);
- 2019: Economics – 15 learners (including 10 women), IT – 10 learners (4 women), and languages – 10 learners (5 women).

325. The college premises have area of 646 m<sup>2</sup> for own needs. There are 6 classrooms, 1 IT lab, and library. All these capacities are used also for provision of higher education. Some 15-20 computers are used for AE programmes.

#### **2.3.5.3. AEP Educational Centre Vizija**

326. AEP Educational Centre Vizija in Kumanovo is in 1996. The institution has 11 members of staff – 4 full-time and 7 part-time employees. The institution maintains a database on practical trainers and students. The Centre provides adult education courses in several fields: ICT (30 learners – 19 women), Economics (15 learners – 13 women), and Languages (72 learners – 40 women).

327. This AEP operates at two locations: the first has area of 45 m<sup>2</sup>, and the second – 48 m<sup>2</sup>. Both location have one administrative room and one classroom. No information regarding the specific equipment used in the training process is available.

### 3. POTENTIAL OF THE PROFILES AND THE INSTITUTIONS BY REGIONS

#### 3.1. General features

328. There is a significant decline in the number of young people choosing to study most of the vocational profiles in the Republic of North Macedonia – even when there is some growth of employment in the corresponding labour market. Thus, within the period of 2013-2017, the largest decrease in enrolment, by 47.3%, was registered in the sector of Geology, mining and metallurgy, followed by Catering and tourism – 22.4% decrease, Agriculture-veterinary – 21.6%, Chemistry and technology – 17.2%, Economy, law and trade by 14.1%, Traffic – 13.7%, Textile and leather – 11.4%. Smaller fall were recorded for the Mechanical (3.7%) and Electro-technical (1.9%) sectors. At the same time, there was an increase in the enrolment for Construction and geodesy – 8.1% and Health – 29.2%<sup>27</sup>.

329. Analysis of the VET provision in the three selected regions identified a number of common features of the schools:

- Almost all schools reported that they have appropriate and sufficient workforce to teach the offered qualifications. All teachers are fulfilling the formal entry requirements but only some of them have experience of working in the industries. There is no regular provision of continuing professional development (CPD), so most of the teachers have a strong need of updating their professional knowledge and skills related to both pedagogy and the vocation taught. The exceptions are SOU "Pero Nakov" and SOU "Kiro Burnaz" in Kumanovo which have developed CPD plans for their teachers and allocate funds for their implementation<sup>28</sup>.
- In general, there is a serious lack of textbooks for vocational subjects in either Macedonian or Albanian<sup>29</sup>. Teachers are expected to generate their own teaching and learning materials. Occasionally materials are shared with other schools providing the similar qualifications. Teaching and learning resources for VET subjects are of uneven quality because there is no systematic approach to their preparation: every teacher develops them individually with a sporadic collaboration with other teachers of the same subjects from different schools. The quantity and quality of materials/books translated into Albanian language, is a considerable issue.
- Insufficient IT use in teaching and learning has been identified in almost all schools. Both available hardware and software are obsolete and should be updated. At the same time, the students require to be taught more advanced IT skills.
- None on the schools performs any tracer study of the graduates' pathways – job placement or further education. Schools only receive unofficial information about their further careers; provision of better careers advice and guidance for students is a national strategic priority, however, capacity at the level of schools is uneven.
- Only a small proportion of graduates of 4-year programmes progress directly to employment – either because they wish to continue their education or because they do not have the skills to

<sup>27</sup> Rationalisation of the VET School Network in the Republic of North Macedonia, MoES 2018.

<sup>28</sup> It is a legal requirement that all schools design a continuous professional development plan for their teachers which they submit to the BDE, and depending on the allocated budget, teacher training is conducted.

<sup>29</sup> There are some exceptions, e.g. on-line materials in Albanian.

obtain satisfactory employment or some other reasons, e.g. neither curriculum nor the pedagogy are well suited to this purpose. It is anticipated that the implementation of reformed vocational programmes will support higher transition into employment. There are no indications that the 3-year programmes graduates have a higher employment rate. Youth unemployment in the Republic of North Macedonia has averaged 51.3% between 2010 and 2017.

- The cooperation between schools and local employers is generally undeveloped. Only a minority of schools are able to provide appropriate and sufficient placements for practical training for all of their learners and few have a work placement coordinator or a school-business liaison specialist. However, from this year work-based learning will be compulsory for the 4 year technical programmes, increasing the need for liaison. The content of education is defined by the national curricula provided to the schools by the central bodies. Based on this curricula, the teachers prepare lesson plans. While schools are entitled to dedicate some time to a locally designed curriculum designed to meet the needs of the community, it seems that in practice, the curriculum is not modified to meet the needs of pupils or employers.
- Some vocational schools have experienced a steady and significant fall in number of students, so that they are now have very few students with high student to teacher ratios. Student to teacher ratios are highest in SOMU "Gostivar", Gostivar (15.9) and STU "Nace Bujoni", Kumanovo (13.4), while the lowest were in SSOU "Kiro Burnaz" in Kumanovo, OUTU "Vancho Pitosheski" in Ohrid and SOU "Sv. Naum Ohridski" in Ohrid – 6.5, 6.4 and 5.3, respectively. The vocational profiles offered by the CSNO "Zdravko Chochkovski" in Debar, were reported unattractive for youth, therefore, this institution has no vocational students for a number of years.
- Most of the graduates with 3- and 4-year qualifications are not highly appreciated on the labour market. To increase their value, vocational schools will need to provide additional support for transition, for example, through additional qualifications and post-secondary education.
- There is relatively little Adult Education provision in the three regions. Low basic skills, high unemployment and changing employment patterns suggest that there is a need but currently that need has not been converted into a demand. Currently, there is relatively little public provision of AEL, and the cost of participation falls largely on employers or learners. The quality assurance system needs improvement. Systematic provision of Adult Education will require processes for commissioning and management, coordination, funding as well as development in curriculum, pedagogy and education/business partnership. Some of these functions might be exercised by a regional vocational centre, in coordination with the existing service providers, with special emphasis on public adult education provider.

330. As a general conclusion, no single school can be said to already offer excellence in vocational education in relation to the employment sector it serves. However, some schools may be said to offer some strengths in relation to particular profiles or resources or in terms of reputation or enrolment. Some other schools could work together to establish a close collaboration and develop excellence – either with respect to particular profiles or with respect to other functions – collectively. Possible options for particular regions are proposed below.

331. The findings, which are more specific to the regions, are presented below.

## 3.2. Features of the regions and development options

### 3.2.1. South-West Region

#### 3.2.1.1. The State of Play and Identified Issues

332. Growth in employment is forecast particularly in the following employment sectors<sup>30</sup>:

- Wholesale and retail trade, repair of motor vehicles and motorcycles (G);
- Human health and social work activities (Q);
- Manufacturing (C);
- Mining and quarrying (B);
- Accommodation and food service activities (I).

333. There is evidence of skills shortages in some areas, for example, in Catering and Tourism, where the yearly demand of new employees is assessed around 130 but a total of 80-90 students graduate from these schools annually and only half of them wish to enter labour market (others continue education in universities).

334. For Manufacturing, profiles are offered in the following specialisms: Electro-technical, Mechanical, Textile and leather and Chemistry and technology. Other sub-sectors of manufacturing are not covered. No specialists are prepared for the sector of Mining and quarrying.

335. There is an issue related to the size of the groups in terms of training provision: only in some small institutions the academic groups are small enough for provision of both quality practical and theoretical training. In the institutions with a large number of students, it is reported that teaching groups are large and that this works against more personalised teaching and assessment. However, this may also be a matter of the number of profiles offered and the use that is made of staff because student to staff ratios are generally low.

336. All institutions in the South-West region have dormitories with equal access for both genders.

337. There are no cases of students with special educational needs (SEN) attending secondary vocational schools. It is not clear why not. However, only 5 schools, i.e. "V. Pitoshevski" and "Sv. Naum Ohridski in Ohrid, "Mirko Mlleski" and SOU "Drita" in Kichevo and "Niko Nestor" in Struga have SEN specialists who support students with SEN during their study.

338. Additional support for key skills, such as communication, ICT and entrepreneurial skills, is demanded by some students.

339. Adult education providers are not active in this region. Although there are 7 AEPs which are said to exist in the region, only 2 of them were willing to participate in this research and none of them, it seems, are actually providing training programmes.

#### 3.2.1.2. Potential for development

340. The stakeholders' groups interviewed in the South-West region, did not identify any need for additional qualifications. For Adult learning too, no demand for additional training programmes was stated. On the other hand, low levels of basic skills in adults and ongoing changes in employment may help create demand for adult education. Currently we can infer a need rather than an explicit demand.

<sup>30</sup> Sectors defined according to National Classification of Activities/Sectors

341. Currently the AEPs are inactive in the region, and the VET schools have no specific experience in, and preparedness for, providing adult education. Nevertheless, in the future a collaboration between these two types of institutions could be established or alternatively AE provision could be made by schools rather than by private AE providers. Some schools have teachers that have experience in delivering adult training in the past in the school premises.

342. Most of the School Directors interviewed were appointed recently. On one hand, this might be considered as a weakness due to their short experience at this positions, but on the other hand some demonstrated ambition and initiative for change. If properly directed, their energy could help to bring about change.

343. Although there is general dissatisfaction with the quality and effectiveness of practical training at the companies, a minority of schools have good and regular contacts with the industry. Until now, the schools have never offered training programmes for the companies' employees or other services to the private sector. This is an additional functionality that the new centre could offer but the know-how and procedures for such customised provision would have to be put in place.

### **3.2.1.3. Options proposed for the region**

344. There is evidence of increased employment opportunities in the tourism and hospitality sector but there is a decline in young people who study the relevant profiles and the sector employs many non-specialists. A specialist, well equipped, well staffed Tourism school may be able to address this gap and make Tourism profiles more attractive to learners and more valuable to employers. This can be done by making the training programme (curricula) more relevant to local employment opportunities and improving the learning experience and the teaching conditions. There may also be scope to offer training for unskilled workers that the sector has employed and also to provide skills for adults that would like to enter this sector. It is vital that such a RVC with a sectoral focus establishes very strong cooperation with the sector, that students have extensive opportunities for placements and that teachers are up to date with current practices in the sector.

345. Taking into account the above-mentioned, the first option related to the type of *Regional sectoral* VC is proposed.

#### **OPTION 1. South-West Regional VC for Tourism and Hospitality, Ohrid**

**Type:** Regional sectoral

**Coverage:** South-West region

**Profiles:** Catering and tourism

**Scope of possible functions:**

- Provision of VET
- School-business cooperation; work-based learning
- International projects
- Adult Education (non-formal education, retraining)
- Post-secondary education

- Services to customers (companies and individuals), e.g. catering services, tour packages, tourism marketing, organisation of events, etc. (e.g. real school companies)
- Identification of labour force demand and skill needs in the labour market
- Initiating changes in the curricula for a specific qualification with the relevant institutions
- Curricula and teaching and learning materials development
- Designing Adult Education programmes
- Teachers' and trainers' continuous professional development
- Networking with and exchange of trained teachers from schools in the region
- Career guidance
- Tracers studies of graduates (of formal and non-formal education)
- Consultancy for small businesses and self-employment and entrepreneurship - business incubator
- VNFILE for individuals engaged in the sector (at a later stage)
- Sharing premises and equipment to train the staff

**Form of organisation:**

- Network of service providers based on memorandum of cooperation

**Involved parties:**

- OUTU "V. Pitoshevski", Ohrid
- SOU "Niko Nestor", Struga
- SOU "St. Naum Ohridski", M.Brod
- Suitably equipped Adult Education Providers
- Regional organisations of employers (specifically in the sector of Catering and tourism), if any, and/or private companies and entrepreneurs
- Other partners (to be identified)

**Governance/management and administrative arrangements**

- Coordination Council with equal representation of all parties (including employers)
- Coordinator appointed by the Council
- Secretariat and other structures and/or officers, upon necessity.

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346. There is considerable growth of employment forecast for Manufacturing sector (about 400 new job places annually projected), though we do not know which sub-sectors are growing. Investments by more than one firm are reported that will lead to more than 1000 new jobs in the next few years. The number of students enrolling to study the Electro-technical profiles, is either relatively stable (OEMUC "Sv. Naum Ohridski", Ohrid – on average around 60 applicants annually) or is growing (OSU "Mirko Mlleski", Kichevo – from 53 in 2013 and 48 in 2014 to 55 in 2018; SOU "Niko Nestor", Struga – from 16 in 2013 to 36 in 2018), while the number of students involved in the Chemistry and Technology

profile, is continuously growing (SOU "Niko Nestor", Struga – from 62 in 2013 to 100 in 2018). Nevertheless, the relationships of VET schools with industries are not particularly strong and the job placement rate of the graduates is low.

347. SOU "Niko Nestor" in Struga is the largest institution in the region with a long-lasting experience particularly in the mentioned engineering profiles which it can share with other institutions of the region and even beyond. The second option of a **Regional multi-sectoral** VC, led by this school, offers a possible solution for overcoming the above challenges and ensuring the Manufacturing sector of the South-West region with specialists who would be competitive in the labour market.

348. Not only the Electro-technical and Chemistry and technology profiles, but also e.g. Textile and leather and Economy, law and trade (with rather stable number of applicants for the former – 31 in 2013 and 2018, and permanently growing for the latter – from 147 in 2013 to 204 in 2018) could be considered for this RVC in order to have wider coverage of professions directly or indirectly related to the sector of Manufacturing.

## **OPTION 2. South-West Regional VC for Technologies (Technological VC), Struga**

**Type:** Regional multi-sectoral

**Coverage:** South-West region

**Profiles:** Electro-technical; Chemistry and technology; [Textile and leather; Economy, law and trade]<sup>31</sup>

### **Scope of possible functions:**

- Provision of VET
- School-business cooperation; work-based learning
- Adult Education (non-formal education – retraining)
- Identification of labour force demand and skill needs in the labour market
- Tracer studies of graduates (of formal and non-formal education)
- Business consultancy and preparation of projects (including business projects)
- Curricula and teaching and learning materials development
- Career guidance
- VNIFIL for individuals engaged in the sector (at a later stage)
- Post-secondary education
- Inclusive education
- Initiating changes in the curricula for a specific qualification with the relevant institutions
- Curricula and teaching and learning materials development
- Designing Adult Education programmes
- Teachers' and trainers' continuous professional development
- Networking with and exchange of trained teachers from schools in the region
- Career guidance
- Consultancy for small businesses and self-employment and entrepreneurship - business incubator
- Sharing premises and equipment to train the staff

### **Form of organisation:**

- Network of service providers based on memorandum of cooperation

### **Involved parties:**

- SOU "Niko Nestor", Struga
- OEMUC "Sv. Naum Ohridski", Ohrid

<sup>31</sup> Optional.

- OSU "Mirko Mlleski", Kichevo
- SOU "Drita", Kichevo
- [SOSU "Sv. Kiril i Metodij", Ohrid]
- Adequately equipped AEPs
- Regional employers' organizations (especially in the tourism and catering sector) if any, and/or private companies and entrepreneurs
- Other partners (to be identified)

#### **Governance/management and administrative arrangements**

- Coordination Council with equal representation of all parties (including employers)
- Coordinator appointed by the Regional Centre Council
- Secretariat and other structures and/or officers, upon necessity.

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349. The third option which is also ***Regional multi-sectoral***, is based on the strengths of the OEMUC "Sv. Naum Ohridski", Ohrid. This institution has a long institutional experience in Electro-technical, Traffic and Mechanical sector and a well-equipped laboratory donated by GIZ. From the academic year 2019-2020, dual education will be introduced. This RVC could also be tasked to provide CPD and SEN support to other schools – thus making it more of a regional hub than a specialist vocational beacon.

#### **OPTION 3. South-West Regional Industrial VC, Ohrid**

**Type:** Regional multi-sectoral

**Coverage:** South-West region

**Profiles:** Electro-technical, Mechanical, Traffic

#### **Scope of possible functions:**

- Teachers' and trainers' continuous professional development and exchange
- School-business cooperation; work-based learning
- Initiating changes in the curricula for a specific qualification with the relevant institutions
- Designing Adult Education programmes
- Sharing of premises and equipment
- inclusive education and sharing experience in this field
- Adult Education (non-formal education – retraining)
- Post-secondary education
- Services to the companies and individuals (e.g. design and production of customised

garment, repair of auto vehicles, electrical installations, transportation services)

- Identification of labour force demand and skill needs in the labour market
- Tracers studies of graduates (of formal and non-formal education)
- VN FIL for individuals engaged in the sector
- Preparation for self-employment (e.g. consultancy, entrepreneurial courses)
- Business consultancy and preparation of projects (including business projects)
- Career guidance

**Form of organisation:**

- Network of service providers based on memorandum of cooperation

**Involved parties:**

- OEMUC "Sv. Naum Ohridski", Ohrid
- SOU "Niko Nestor", Struga
- OSU "Mirko Mlleski", Kichevo
- SOU "Drita", Kichevo
- Adequately equipped AEPs
- Regional employers' organizations (especially in the tourism and catering sector) if any, and/or private companies and entrepreneurs
- Other partners (to be identified)

**Governance/management and administrative arrangements**

- Coordination Council with equal representation of all parties
- Coordinator appointed by the Council
- Secretariat and other structures and/or officers, upon necessity.

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350. Any of the above options (and also those proposed for the other regions) should have the features presented below:

**PRECONDITIONS FOR SUCCESS OF ANY REGIONAL VOCATIONAL CENTRE:**

- programmes offered/graduates are in high demand on the labour market
- very high quality physical conditions (refurbished buildings and other facilities), provided with training equipment and furniture relevant to that used in industry which are regularly maintained
- staff has competence and up to date professional knowledge to ensure effective teaching and learning and this competence is sustained by an ongoing process of CPD (needs assessment, planning and provision)

- the administrative staff is capable to carry out modern ways of effective and collaborative management, particularly project management, partnership building, including international partnership
- strong liaison with relevant employers in order to secure student placements and also to engage employers in CPD, assessment and careers development
- internal quality assurance mechanisms (and units), subject to systematic external quality evaluation
- capacities (dormitories and/or transportation means) for hosting students from other municipalities and regions as well as invited teachers and other specialists
- expertise to diagnose<sup>32</sup> SEN and to support provision across all participating providers
- sustainable funding arrangements in place

### 3.2.2. Polog Region

#### 3.2.2.1. The State of Play and Identified Issues

351. In the Polog region, the growing sectors of economy particularly are:

- Manufacturing (C);
- Accommodation and food service activities (I);
- Transportation and storage (H);
- Arts, entertainment and recreation (R);
- Information and communication (J);
- Financial and insurance activities (K).

352. Similar to the South-West region, here also the sector of Manufacturing is limited to the profiles of Electro-technical, Mechanical, Textile and leather and Chemistry and technology. The Tourism sector here requires even more employees (annual demand of around 1,500 job places is forecast), while only one institution, namely SOSU "Mosha Pijade" in Tetovo, prepares no more than 30-35 specialists per year.

353. To a large extent, the schools and the AEPs have qualified staff for teaching the offered qualifications and programmes. There are obstacles for recruiting appropriate teachers in the schools, which include: negative reputation/image of the profession and the low salaries that are not attractive for the qualified specialists. In all institutions, the majority of staff, although qualified, needs significant training for improving the knowledge and skills both in terms of pedagogy and the vocational field. Some AEPs have expressed a need for andragogy classes for their teaching staff.

354. In some schools, poor infrastructure and equipment is a challenge in terms of ensuring quality learning regardless of the teachers' competences. At the same time, among the teaching staff of SOSU "Mosha Pijade" in Tetovo, SEOU "Gostivar" in Gostivar, and OSEU "8 Septemvri" in Tetovo,

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<sup>32</sup> Should not be understood as categorisation which is responsibility of the Institute of Mental Health, but as diagnosis of specific educational needs.

there are specialists who have Master and Doctoral degrees and updated with the latest knowledge within the profession that they teach.

355. Teachers indicated the need for revision of VET programmes which presently contain outdated topics not relevant to the contemporary market needs. It has also been indicated that some VET programmes contain topics related to machines which are no longer in use. There are no textbooks for some profiles – teachers try to mitigate this problem by downloading content from the Internet, which often is in a language that not all students can follow and needs to be further adapted to the specific structure and content of the educational programme. Even in the cases when textbooks are available, their content is often outdated and not suitable to the educational programme or learners' needs.

356. In all institutions, the teachers need to be trained for working with the students with special educational needs. No special procedures for admission of the students with SEN or these from vulnerable groups do exist. Only 2 out of 8 schools in this region have employed SEN specialists that can support students with SEN whenever needed. The minority groups are included in the institutions without problems and their needs are considered.

357. All key stakeholders in all schools indicated the need to improve the conditions and quality of the practical work. Investment in equipment and tools is needed. Some school buildings and buildings of dormitories should also be renovated.

358. The AEPs also need renewal and regular maintenance of equipment. Significant investments in equipment, tools, and consumables are necessary to ensure the quality of provided programmes.

359. One of them, namely AUTO CEM EDUKACIJA cooperates already with the SOSU "Mosha Pijade" in Tetovo, providing practical training for the students of Mechanical qualifications for which it is well equipped. This may be a model for future cooperation.

### **3.2.2.2. Potential for development**

360. The interviewed groups of stakeholder did not identify any need for additional qualification/educational profiles. There was no any proposal also about additional training programmes for adults. At the same time, the trainees in the focus group from AUTO CEM EDUKACIJA emphasised the need for additional competences in regard with the foreign languages, primarily English (adjusted to the needs of their profession) in order to be able to more easily keep pace with the latest knowledge within the field.

361. No training provider has reported an unused space.

362. All 4 interviewed AEPs have long-lasting experience in project work and adult training, and are willing to share it within the regional network. OGUDU Tetovo, which has a long tradition in provision of VET and generally possesses relevant institutional knowledge and experience, can offer training programmes for employees in partnership with local employers. However, the institution needs to be further equipped.

363. Some teachers of the VET schools are also experienced in project work, collaboration with other schools, extra-curricular activities etc. These experiences represent a potential that could be used.

364. Currently AUTO CEM EDUKACIJA performs monitoring and analysis of the labour market needs for identifying the required skills to be provided via relevant AE programmes. It participates in international projects and undertakes measures for promotion of education of adults. This experience can be used for serving also needs of the VET system.

365. The Community Development Institute (CDI) could offer soft skills training (preparation of draft projects, development of project applications). Due to the long term experience in working with projects, CDI can offer project management.

366. OGUDU Tetovo conducts validation of non-formal and informal learning by organising assessment conducted by a three-member commission (from the required profession) which checks both the theoretical knowledge and the practical skills of the candidates, and ultimately decides on the candidates' competences. This service could also be offered by the selected regional centre. Staff members of this institution who have an extensive experience in the NGO, can be of a great support in the project management.

367. The Polog region has the following **strengths** which can be taken into account when proposing options for RVC in the Polog region:

- provision of VET for Textile profile in **SOTU "Gjoce Stojceski", Tetovo**:
  - with practical training of students at the well-equipped school workshop with involvement in real work of sewing uniform,
  - emerging design studio with modern equipment to be provided by donors,
  - newly established cooperation with local sewing factory,
  - self-employment opportunities within this sector;
- students with special needs participate in **SOTU "Gjoce Stojceski", Tetovo**:
  - very well accepted by parents and teachers,
  - included in the regular classes;
- capacities of the AEPs to provide variety of services and their readiness to cooperate with VET:
  - AUTO CEM EDUKACIJA to perform monitoring and analysis of the labour market needs,
  - Community Development Institute to offer soft skills training (preparation of draft projects, development of project applications),
  - OGUDU Tetovo conducts validation of non-formal and informal learning.

### 3.2.2.3. Options proposed for the region

368. For the Polog region the following *indicative* options are proposed. They are of three types: Regional sectoral, Inter-regional sectoral and Regional multi-sectoral.

369. The first is conditioned by the rapid growth of the Manufacturing sector in the region (around 2.4 thousand new work places annually can be expected), in particular the garment industry. In parallel, enrolment of students in the profile of Textile and leather, although small in absolute terms, is rising: in 2018 the number of applicants reached 100, demonstrating increase of 18% compared with 2013. This profile is offered in SOTU "Gjoce Stojceski" in Tetovo, which has a number of strengths, e.g. a well-equipped workshop, where the practical training of the students is implemented, experience in producing garments (the students sew uniforms), and emerging partnership with the private sector.

370. The proposed option of a **Regional sectoral** VC in Garment Design and Manufacturing is seen as a tool for contributing to students' initial acquisition of competences and further improvement of the professional competences of the graduates from the Textile profile. The Centre would expand and deepen the cooperation between VET and the companies of the sector.

## **OPTION 1. Polog Regional VC for Garment Design and Manufacturing, Tetovo**

**Type:** Regional sectoral

**Coverage:** Polog region

**Profiles:** Textile and Leather

### **Scope of possible functions:**

- Provision of VET
- Adult Education
- Retraining of employed in the sector
- Services to the companies and individuals (e.g. design and production of customised garment)
- Identification of labour force demand and skill needs in the labour market
- Tracers studies of graduates (of formal and non-formal education)
- VN FIL for individuals engaged in the sector
- Preparation for self-employment (e.g. consultancy, entrepreneurial courses)
- Business consultancy and preparation of projects (including business projects)
- Curricula and teaching and learning materials development
- Teachers' and trainers' continuous professional development
- Career guidance

### **Form of organisation:**

- Institutional cooperation of providers based on contractual obligations

### **Involved parties:**

- SOTU "Gjoce Stojceski", Tetovo
- Community Development Institute, Tetovo
- OGUDU, Tetovo

### **Governance/management and administrative arrangements**

- Board (of Directors) with equal representation of all parties (including employers)
- Executive<sup>33</sup> elected by the Board
- Secretariat and other structures and/or officers, upon necessity.

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<sup>33</sup> Does not substitute managers or executives of any involved party but is solely responsible for managing the institutional cooperation activities.

371. Unlike the option presented above, the Option 2 is proposed to cover more profiles and accordingly, more sub-sectors of the sector of Manufacturing, as well as the growing sector of Transportation and storage (projected 400 new work places annually). This **Regional multi-sectoral** VC would be led by two institutions, namely SOSU "Moshia Pijade" and SOTU "Gjoce Stojceski" in Tetovo, and would be more focused on provision of services to other schools (i.e. function as a regional hub). The RVC would have a responsibility for teacher CPD; school-business cooperation; work-based learning; curricula development across all regional schools or across those that chose to participate<sup>34</sup>. In addition, there may be opportunity to share some equipment and laboratories.

### **OPTION 2. Polog Regional Industrial VC, Tetovo**

**Type:** Regional multi-sectoral

**Coverage:** Polog region

**Profiles:** Electro-technical, Mechanical, Traffic, Textile and Leather, Chemistry and technology

**The RVC specific functions:**

- Teachers' and trainers' professional development and exchange
- Curricula and teaching and learning materials development
- School-business cooperation; work-based learning
- Share of premises and equipment
- Work with SEN and sharing experience in this field

**Other “additional” functions:**

- Provision of VET
- Adult Education
- Retraining of employed in the sector
- Services to the companies and individuals (e.g. design and production of customised garment, repair of auto vehicles, electrical installations, transportation services)
- Identification of labour force demand and skill needs in the labour market
- Tracers studies of graduates (of formal and non-formal education)
- VNFIL for individuals engaged in the sector
- Preparation for self-employment (e.g. consultancy, entrepreneurial courses)
- Business consultancy and preparation of projects (including business projects)
- Teachers' and trainers' continuous professional development
- Career guidance

<sup>34</sup> A network of regional schools could be built gradually over time – depending on resources.

**Form of organisation:**

- Institutional cooperation of providers based on contractual obligations

**Involved parties:**

- SOTU "Gjoce Stojceski", Tetovo
- SOSU "Mosha Pijade", Tetovo
- OSTU Gostivar, Gostivar
- AUTO CEM Edukacija, Tetovo
- Community Development Institute, Tetovo
- OGUDU, Tetovo

**Governance/management and administrative arrangements**

- Board (of Directors) with equal representation of all parties
- Executive elected by the Board
- Secretariat and other structures and/or officers, upon necessity.

\* \* \*

372. Although the Health sector is declining in the region, it is still fairly large and the decline is moderate. At the same time, the number of learners in this profile in the two schools offering medical profiles, namely SOMU "Nikola Shtejn" in Tetovo and SOMU Gostivar, Gostivar, is considerable (around 700 every year) and stable. Moreover, the Health sector is growing at the national level. The purpose of the option proposed below, is to further strengthen the capacities of particularly the SOMU "Nikola Shtejn" which in the future could be seen as one on the national beacons for this profile.

**OPTION 3. Polog Regional Medical VC, Tetovo**

**Type:** Regional sectoral

**Coverage:** Polog region

**Profiles:** Health

**Scope of possible functions:**

- Teachers' and trainers' professional development and exchange
- Curricula and teaching and learning materials development
- Methodological support
- Teachers' and trainers' continuous professional development
- Share of share of premises and equipment

- Work with SEN and sharing experience in this field
- Adult Education
- Retraining of employed in the sector
- Identification of labour force demand and skill needs in the labour market
- Tracer studies of graduates (of formal and non-formal education)
- Career guidance

**Form of organisation:**

- Network of providers based on memorandum of cooperation (in the future, more than two institutions can be involved)

**Involved parties:**

- SOMU "Nikola Shtejn", Tetovo
- OMU Gostivar, Gostivar

**Governance/management and administrative arrangements**

- Coordination Council with equal representation of all parties (including employers)
- Coordinator appointed by the Council
- Secretariat and other structures and/or officers, upon necessity.

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373. The next option is a variant on Option 2 – however, the RVC is more multi-sectoral and the form is more collaborative rather than based on the leadership of one school. This option addresses the needs of economic profiles which are distributed across many schools and takes advantage of the capacity of OSEU "8 Septemvri", Tetovo, which is specialised in this field. This option is relatively complex – but it is useful to reflect on the possible advantages and organisational implications of this alternative.

**OPTION 4. Polog Regional VC, Tetovo**

**Type:** Regional multi-sectoral

**Coverage:** Polog region

**Profiles:** Textile and Leather, Electro-technical, Mechanical, Traffic, Economy, law and trade (with a view of further expansion of the sectors)

**Scope of possible functions:**

- Teachers' and trainers' professional development and exchange
- Curricula and teaching and learning materials development

- School-business cooperation; work-based learning
- Teachers' and trainers' continuous professional development
- Sharing of premises and equipment
- Work with SEN and sharing experience in this field
- Adult Education
- Retraining of employed in the sector
- Services to the companies and individuals
- Identification of labour force demand and skill needs in the labour market
- Tracers studies of graduates (of formal and non-formal education)
- VNFIL for individuals engaged in the sector
- Preparation for self-employment (e.g. consultancy, entrepreneurial courses)
- Business consultancy and preparation of projects (including business projects)
- Career guidance
- Management training, vendor qualifications (e.g. Microsoft)

**Form of organisation:**

- Institutional cooperation of providers based on contractual obligations

**Involved parties:**

- SOTU "Gjoce Stojceski", Tetovo
- OSEU "8 Septemvri", Tetovo
- SOSU "Mosha Pijade" Tetovo
- OSTU Gostivar, Gostivar
- AUTO CEM Educacija, Tetovo
- Community Development Institute, Tetovo
- OGUDU, Tetovo

**Governance/management and administrative arrangements**

- Board (of Directors) with equal representation of all parties
- Executive elected by the Board
- Secretariat and other structures and/or officers, upon necessity.

374. For the preconditions required for all RCVs, see those presented under the options for the South-West region.

### 3.2.3. North-East Region

#### 3.2.3.1. The State of Play and Identified Issues

375. The following sectors of economy are growing in the North-East region:

- Construction (F)
- Manufacturing (C)
- Accommodation and food service activities (I)
- Human health and social work activities (Q)
- Information and communication (J)
- Arts, entertainment and recreation (R)

376. For many sectors, provision of VET is not adequate, e.g. Construction which according to the projections, requires more than 1,000 new workers annually, specialists are not prepared at all. For Tourism, the quantity of prepared specialists is not adequate to the demand: no more than 30 graduates yearly against projected 400 new job places. However, in part this is because some profiles, such as that for cook, are not attractive to young people – enrolment is falling sharply. In the field of Health, only nurses (around 150 yearly) are prepared, while projected annual demand of 200 medical workers can be expected to include also other specialists, e.g. midwives, dental technicians, etc.

377. Teaching and learning resources for VET subjects are of uneven quality because there is no systematic approach in preparing them; every teacher is preparing them individually with sporadic collaboration between teachers for same subjects from different schools.

378. Permanent offer of CPD possibilities is necessary for teachers to update their professional skills and knowledge. For the moment offer of CPD is extremely scarce. At the same time, only in this region there were 2 institutions which have developed CPD plans and allocate financial resources for their implementation.

379. Only 2 out of 5 interviewed schools in this region have employed SEN specialist that can support students with SEN whenever needed.

380. Students in most schools in Northeast region have expressed their need to have more practical work, better equipment and regular supply of consumables. Students also expressed the need for more quality ICT training.

381. Provision of Adult education is not well developed in region. It seems there are only two AEPs with a limited number of trainees.

### **3.2.3.2. Potential for development**

382. Schools have not identified any unused space or equipment. However, SOU "Mitko Pendjukliski" in Kratovo, has expressed readiness to share its kitchen with other schools. In addition, SOU "Kiro Burnaz" in Kumanovo, has reported agricultural land which is unused, and could be a potential for improving the educational offer (through the construction of a greenhouse).

383. Teachers from SOU "Mitko Pendjukliski" in Kratovo and SOU "Kiro Burnaz" in Kumanovo, expressed interest to be involved in Curriculum development, Adult Education, preparation of teaching and learning materials and sharing practical teaching experience. Moreover, teachers in some schools have expressed preparedness and willingness to deliver adult training.

384. No demand for additional training programmes for adults was identified during the interviews. However, as in other regions, low levels of basic skills among in part of the population, economic change and high unemployment imply that there is an underlying need. It may be possible to turn this need into an active demand.,

385. Experience of the vocational schools in Kumanovo, in planning and implementing CPD for staff, could be shared and expanded to other institutions.

### **3.2.3.3. Options proposed for the region**

386. Manufacturing is the second biggest sector in the region and is growing. STU "Nace Bugjoni" in Kumanovo, is the largest institution of North-East and is specialised particularly in Electro-technical and Mechanical profiles, having a long-lasting experience from which other institutions can also gain. These profiles are offered also by two other schools – SOU "Kiro Burnaz" in Kumanovo and SOU "Gjorche Petrov", Kriva Palanka. The establishment of an multi-sectoral VET "cluster" involving these 3 schools would enable these schools, across two related sectors, to work together to improve key elements: work-based learning, CPD, SEN, instructional materials, careers services and AE. This option could be extended to include also schools providing economic profiles which have some experience in CPD planning. This option is therefore for a Regional Hub serving 3 sectors taking the form of a collaborative model.

#### **OPTION 1. North-East Regional Industrial Regional VC, Kumanovo**

**Type:** Regional multi-sectoral

**Coverage:** North-East region

**Profiles:** Electro-technical; Mechanical; Economy, law and trade

**Scope of possible functions:**

- Teachers' and trainers' professional development and mobility
- Curricula and teaching and learning materials development
- School-business cooperation; work-based learning
- Teachers' and trainers' continuous professional development
- Work with SEN and sharing experience in this field
- Adult Education
- Retraining of employed in the sector
- Services to the companies and individuals
- Identification of labour force demand and skill needs in the labour market
- Tracers studies of graduates (of formal and non-formal education)
- Preparation for self-employment (e.g. consultancy, entrepreneurial courses)
- Business consultancy and preparation of projects (including business projects)
- **Career counselling and guidance**
- VNFI for individuals engaged in the sector (at a later stage)

**Form of organisation:**

- Network of service providers based on memorandum of cooperation

**Involved parties:**

- STU "Nace Bugjoni", Kumanovo
- SOU "Kiro Burnaz", Kumanovo
- SOU "Pero Nakov", Kumanovo
- SOU "Gjorche Petrov", Kriva Palanka

**Governance/management and administrative arrangements**

- Coordination Council with equal representation of all parties
- Coordinator appointed by the Council
- Secretariat and other structures and/or officers, upon necessity.

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387. No VET qualifications are offered for Construction in the North-East region. However, this sector is the largest in the region and is growing rapidly – more than 800 new jobs projected annually. Therefore, establishment of a VET school specialised in Construction Trades – carpentry, bricklaying, plumbing, roofing, electrician, plastering – could address a regional need and, in the future, a national need.

388. Introduction of a range of profiles in a RVC that was well equipped with well-trained staff and good links to the sector could create a centre of vocational excellence that could be a beacon for the region. This RVC would need support from outside of the region to be set up – however, it would address a clear gap in provision – which is forecast to grow. A new, up to date Centre of Excellence or Beacon in Construction could be attractive to learners and employers. Such a centre may be able to offer customised training to existing employees, for example, to update skills necessary to meet changes in regulations associated with environmental changes and also skills for unemployed adults. In the future, this Centre could be ***inter-regional*** (not necessarily national but covering a group of regions) as employment in this sector is forecast to grow nationally.

**OPTION 2. North-East Regional VC for Construction Crafts, (place TBD)**

**Type:** Regional sectoral

**Coverage:** North-East region

**Profiles:** Construction Crafts

**The scope of possible functions:**

- Provision of VET
- Adult Education
- Retraining of employed in the sector

- Teachers' and trainers' continuous professional development
- School-business cooperation; work-based learning
- Services to customers, e.g. design, planning, different types of construction works
- Identification of labour force demand and skill needs in the labour market
- Tracers studies of graduates (of formal and non-formal education)
- VN FIL for individuals engaged in the sector
- Preparation for self-employment (e.g. consultancy, entrepreneurial courses)
- Business consultancy and preparation of projects (including business projects)
- Curricula and teaching and learning materials development
- Career and professional guidance

**Form of organisation:**

- VET school

**Involved parties:**

- VET school
- Private companies
- International partners?

**Governance/management and administrative arrangements**

- Multi-stakeholder Board (of Directors) with equal representation of all parties
- Executive elected by the Board.

## 4. CONCLUSIONS AND RECOMMENDATIONS

389. The options of RVC models proposed in the Section 3 above, can be categorised under the two broad types: 1) *Regional Vocational Beacon* and 2) *Regional Vocational Hub*. Their main characteristics are:

### Regional Vocational Beacon

#### What is it?

- Specialised in a sector (e.g. tourism) or several related sectors;
- Strong relationship with the sector, e.g. governance, funding.

#### What does it do?

- Meets skills needs of growing employment sector;
- Provides sector-relevant skills for Adults as well as young – employed and unemployed – also at MQF Level 5B (55) and above;
- Over time, could become National Vocational Beacon.

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### Regional Vocational Hub

#### What is it?

- Coordinates and supports all or some of the other schools in the region;
- Has strong relationship with other schools, for example, service agreements or joint ownership of 'Regional Centre'.

#### What does it do?

- Regional Hub could, for example, address some of the priority needs of all schools in the region:
  - School-business liaison and placements,
  - Additional support for SEN students,
  - CPD,
  - Adult Education,
  - Curriculum and Resources Development;
- Over time it could help to coordinate and rationalise VET provision and develop Adult Education.

390. The preliminary consultations with the local stakeholders suggest that stakeholders incline towards the model of the Regional Vocational Hub and express a preference for multi-sectoral VET Centres in all three regions.<sup>35</sup> In particular, those consulted expressed a preference for the following three options:

#### NORTH EAST REGION

**NORTH EAST MULTI-SECTORAL REGIONAL VOCATIONAL CENTRE WITH ELECTRO-TECHNICAL AND MECHANICAL AS LEADING PROFILES, AND ECONOMY, LAW AND TRADE AS COMPLEMENTARY PROFILES TO SUPPORT ENTREPRENEURSHIP DEVELOPMENT BUT IN ADDITION OFFERING ADULT EDUCATION AND POST-SECONDARY EDUCATION FOR CONSTRUCTION TRADES**

#### SOUTH WEST REGION

**SOUTH WEST MULTI-SECTORAL REGIONAL VOCATIONAL CENTRE WITH CATERING AND TOURISM AS LEADING PROFILES, WITH CHEMISTRY AND TECHNOLOGY AND ECONOMY, LAW AND TRADE AS COMPLEMENTARY PROFILES TO SUPPORT ENTREPRENEURSHIP DEVELOPMENT. PROVISION OF ADULT EDUCATION AND POST-SECONDARY EDUCATION FOR TOURISM AND CATERING IS COMPULSORY.**

#### POLOG REGION

**POLOG MULTI-SECTORAL REGIONAL VOCATIONAL CENTRE WITH AGRICULTURE, FISHERY AND VETERINARY AND ELECTRO-TECHNICAL AS LEADING PROFILES, WITH CHEMISTRY AND TECHNOLOGY AS A COMPLEMENTARY PROFILE. IN ADDITION, OFFERING ADULT EDUCATION AND POST-SECONDARY EDUCATION FOR TRAFFIC AND TOURISM AND CATERING.**

The following additional functionalities were prioritised across the three regions:

- CPD
- SEN
- Validation of Prior Learning
- Adult Education
- Coordination of Placements for work-based learning

391. However, the scope of the sectors and additional services to be covered by an RVC may need to be constrained. An inclusive approach is popular but it could compromise the efficiency and effectiveness of the RVC. A fundamental constraint is sustainable funding beyond the life cycle of European support programmes – it will be necessary to prioritise which profiles merit investment. Schools cannot be expected to take on any number of additional functionalities since additional

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<sup>35</sup> A consultation took place on 9<sup>th</sup> July 2019.

responsibilities imply extra staff or training, spending and management. There are also practical constraints relating to which institutions will be grouped together and what existing capacities they possess. Given that schools that are addressing the same sector are likely to have a better understanding of one another, it can be argued that, at least to start with, schools that serve the same or allied sectors share a RVC. However, it could also be argued that some functionalities, such as SEN, can be shared between institutions that serve diverse sectors.

### **Examples of potential additional functionalities that could be offered by a RVC across the region**

- Teachers' and trainers' initial training and professional development and exchange, staff appraisal.
- Curricula and teaching and learning materials development, including digital learning resources<sup>36</sup>
- Development of tools for assessment, training and coordination of assessment
- School-business cooperation; work-based learning.
- Provision, commissioning and coordination of Adult Education and Labour Market Activation Programmes
- Post-secondary non-tertiary education and post Level 4 programmes up to the Level VB (VB) of MQF
- SEN support, needs assessment
- Further training for employees in partnership with employers
- Career advice and guidance.
- Identification of labour force demand and skill needs in the labour market.
- Tracer studies of graduates (of formal and non-formal education).
- VNFI for individuals engaged in the sector.
- Sharing or renting of premises and equipment.
- Traded Services to customers, e.g. motor servicing
- Financial and other services for other training providers, e.g. procurement, accounting, data storing, human resources
- Consultancy for small businesses and self-employment, entrepreneurial, management and IT courses.
- Preparation for self-employment (e.g. advice, entrepreneurial courses).
- Business consultancy and support for start up (e.g. incubators).
- International projects and project management.
- Coordination of skills training between providers across the region.

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<sup>36</sup> Currently the responsibility of developing curricula sits with BDE and the VET Centre, however, it could be envisaged that RVCs could develop modified local curricula, particular modules, instructional materials and that they may work in partnership with national agencies.

- Identifying, adapting, piloting and disseminating corresponding best international VET practices.
- Participating in development of strategic and programming documents targeted to the reforms of VET and ALE sectors.
- Contributing to the implementation of measures targeted to the socio-economic development of the region.
- Participating in social and cultural life in the region and supporting its development.

#### 4.1. Defining the Regional VET Centres in North Macedonia

392. A Concept Note on the Regional VET Centres in North Macedonia has been drafted<sup>37</sup>. Before commencing the process of the RVCs establishment, this Concept should be finalised and adopted by the Government or at least by MoES. The Concept note provides a framework for national RVCs but allows that there can be some flexibility at regional level. The Concept note starts to answer the following key questions:

- How do we define Regional VET Centres in North Macedonia?
- What are the range of objectives of RVCs in North Macedonia?
- What are the range of characteristics of RVCs?
- What can be the scope of the RVCs functions?
- What legal status may be the most appropriate for the RVCs and to which body they should be sub-ordinated?
- Which responsibilities will be attributed to which institution(s) (e.g. Ministry, municipalities) both during the creation of RVCs and in their subsequent operation?
- What will be the structure of governance for RVCs? How will managers be appointed and made accountable? How will industry and other stakeholders be involved?
- What level of autonomy (regards staffing, learning content, management and budget) do RVCs need to carry out their responsibilities? How will this be achieved?
- How will RVCs monitored and evaluated? What kind of quality management system do they need?
- What amendments to the legislation or other formal statutory instruments are necessary to set up and operate RVCs. When will these changes be achieved?
- How will investment and revenue funding for each RVC operate? Is the financial planning in place to ensure funding appropriate to the responsibilities?
- What will be the relationship between the RVC and other schools?
- What will be the process for selecting individual RVCs and for deciding which other schools or providers they work with?

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<sup>37</sup> Concept Note on the Regional VET Centres in North Macedonia. The Process, the national flexible model, and the applied regional model in Polog, South West and North East (Draft). ETF, 2019.

393. In addition, for every specific RVC, the following is to be decided:

- What shall be the coverage of the RVC: regional or inter-regional<sup>38</sup>, sectoral (a beacon type) or multi-sectoral (a hub type)?
- What is the architecture of the RVC: a single institution, a group (network) of institutions or a “conglomerate” of a group of VET providers and other institutions, e.g. Adult Education Providers, private companies, civil society organisations?

The options set out in Chapter 3 above provide some concrete alternatives but they are neither final nor exhaustive.

394. While this paper provides guidance on options and on criteria it does not make detailed proposals on the selection process. Currently, it is understood that selection is the responsibility of the Ministry acting with the advice of the Steering Group. The following points make support the selection process:

- a. Options have been identified through research – it is desirable to build upon the research to develop concrete options which can be tested for cost, practicability and acceptability
- b. It is essential to consult with the relevant stakeholders since this may lead to additional relevant information, e.g. relating to changes in skills needs or unused resources within schools. In addition, consultation helps to identify social benefits and costs that can result from selection.
- c. It is desirable to engage those schools that will play a leadership role or which are expected to be beneficiaries in the selection process. If schools help to shape the development of a RVC it is more likely that the RVC will meet their needs and will be able to lead improvements in provision across the region. One option would be to permit schools to come together to submit joint bids to develop a RVC. An alternative approach is for the Ministry to negotiate a scope and a mission with one or more schools.
- d. Selection decisions should take into account not only the immediate needs of particular schools and their labour markets but also the needs of other schools and employers in the region and skills strategies in other regions.
- e. Selection decisions should take account of available evidence, should be transparent, should include appropriate and extensive consultation and should be justified publicly.

#### Possible criteria to inform the selection of RVCs<sup>39</sup>:

- **Relevance:** selection of the sector(s) and the qualifications to be offered vs the regional needs, possible partners, beneficiaries, clients, etc.
- **Efficiency:** any possible cost-benefit analysis, investments as per graduate for the coming 3-5 years, diversified services, projected profit, taxable capacity; comparison with “regular” VET providers;

<sup>38</sup> At this initial stage, only regional coverage is recommended (see the options under the Section 3 of this Report).

<sup>39</sup> Setting Up VET Centres of Excellence and Innovation in Ukraine: Major Issues and Key Options for Supporting Policy Learning and Dialogue to Reform Ukrainian VET Network. Policy discussion paper. ETF, 2018.

- **Effectiveness:** estimated number of yearly enrollees as by different types of courses and learners (formal and non-formal, initial and continuing VET, youth and adults) as a percentage of the total population of the relevant age groups, estimated job placement rate, etc.;
- **Impact:** intended impact on the socio-economic situation in the region, reduction of unemployment and poverty rates, migration, economic productivity, etc.;
- **Sustainability:** potential for development, possible future sources and volumes of funding, income generation, continuous attractiveness of the Centre (for both learners and employees).

## 4.2. Legal Aspects

395. It is essential that RVC have a legal basis and that this legal basis gives them the powers necessary to fulfil their work, but at the same time consistent with their public purpose and the close links that they will have with public bodies, such as schools, municipalities and the Ministry. There are currently revisions planned to the Law on Secondary Education and Law on the Vocational Education – which offers an opportunity to address this issue. The options proposed in this report are compatible with more than one legal form. However, the following three alternatives may be considered:

- Introduction of a **new type of VET institution**, i.e. Regional (and Inter-regional) Vocational Centre. This can be an individual VET provider or a status awarded to one or a group of institutions.
- Extension or modification of the **scope of the objectives (task) and the functions and the structure** of existing VET providers.
- Assigning status, responsibilities and funding to some form of organisation that already has an established **legal status, such as a private limited company or a charity**, which would then have a formal relationship with all of the schools with which it is working and with governmental bodies, such as the Ministry.

Whatever legal form is chosen, it will need to provide the basis for the following powers:

- Authorising the VET providers to enter into **commercial relations** with private economic operators and sign contracts independently.
- Establishing **academic freedoms** for the VET providers, including curriculum and programme development, selection of training methods and instruments, introduction of innovative teaching and learning methodologies and techniques, instruction schedules, etc.
- Defining new **management and governance mechanisms**, including multi-level and multi-stakeholder schemes.
- Defining **methods and norms for RVC financing** and ensuring opportunities for multichannel funding.

## 4.3. The Next Steps

396. A clear road map for the entire process of establishment and operationalisation of the RVCs is to be developed. A Sector Reform Performance Contract (Sector Budget Support as implementation modality thereof) and the corresponding Financing Agreement are expected to be signed at the beginning of 2020 and one of the conditionalities foreseen by the Policy Matrix, is the establishment and accreditation of three Regional Vocational Centres in the selected regions. The year for

performance is 2021. Therefore, the proposed road map should consider the timing of every step in order to meet the target deadline. Not only the time required for formal procedures, e.g. legislative changes, implementation of tenders and services, works and supply, etc., but also for the consultation processes, is to be considered.

397. The following main steps may be included:

- Finalisation of the RVC concept.
- Amendments to the legislation.
- Taking decisions on every RVC as per region (including a multi-stakeholder consultations). Regional stakeholder analysis.
- Establishing liaison with regional stakeholders and carrying out the negotiations.
- Developing the texts of a Memoranda of Cooperation and Partnership Agreements (see options under the Section 3).
- Formal establishment of the RVCs.
- Establishment of the RVCs Boards and/or Councils, training of their members.
- Setting up new management structures and processes.
- Improvement of physical conditions of the RVCs (buildings, equipment, furniture, tools and materials).
- Purchase and/or development of different didactic and methodological resources.
- Training of the RVCs teaching and administrative staffs.
- Organising events (conferences, discussions, debates, workshops), campaigns, promotional and other similar activities by and for the RVCs.

398. The Activities 2.7.1 – 2.7.6 under the Section 7.4 of the Education Strategy Action Plan, are also to be considered.

## REFERENCES

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14. Rama. L and Sulstarova. A "Multifunctional VET centres in Albania" (feasibility study), ETF 2014;
15. Baseline Survey of Public VET Providers in Albania, GIZ and ETF, 2014.
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17. Platforms of Centres of Vocational Excellence, Information Note, European Commission, 2019.

# ANNEX 1. SURVEY INSTRUMENTS

## INSTRUMENT 1A: GENERAL INFORMATION - VOCATIONAL SCHOOLS

***Please provide general information about your vocational school.***

***Under the question 32 – concisely describe only major changes in last five years – if any.***

No	Data	Content
<i>Institution</i>		
1	Name of the school	
2	Municipality	
3	Region	
4	Status of institution	Only Vocational <input type="checkbox"/> Vocational and general <input type="checkbox"/>
5	Dates of establishment, reorganisation and/or renaming <sup>40</sup>	
6	Founder/owner	
7	Legal address	
8	Functioning address(es)	
9	Branches, if any <sup>41</sup>	1. 2. 3.
10	Main Profile/sector(s)	
<i>Director</i>		
11	Name and Surname	
12	Gender	
13	Date of appointment (Order №)	
14	Scientific degree and/or academic title	
15	License (date)	
<i>Contact information</i>		
16	Telephone numbers	
17	E-mail address	
18	Skype	
19	Web-site	
20	Other	
<i>General activities</i>		
21	Number of shifts	Single <input type="checkbox"/> Double <input type="checkbox"/>
22	Instruction Language(s)	Macedonian <input type="checkbox"/> Albanian <input type="checkbox"/> Turkish <input type="checkbox"/>
23	Total number of students (formal education including post-secondary) as of April 2019, <i>out of them:</i>	
24	<i>Full-time</i>	
25	<i>Part-time</i>	
26	Total number of trainees involved in any non-formal education/training programmes, e.g. those for adults (not included in the cohort under the questions 23-5 above) as of April 2019	
27	Total number of employees as of April 2019, <i>out of them:</i>	

<sup>40</sup> In case of being reorganised and/or renamed, please provide more details about the original (previous) name(s) and status(es) under the question 32.

<sup>41</sup> In case of branches, please copy this sheet and provide information about each of them.

28	<i>Teachers and trainers</i>		
29	Do you keep a database recording destinations of graduates?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
30	Do you keep a database recording details of your training staff?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
31	Do you keep a database recording details of the number and type of students on different programmes over the last two years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<i>Any major reorganisation or change over the last 5 years, e.g. merger, change of purpose, re-building...:</i>			
32			
Name and position of person who completed the questionnaire			
Date		Day	Month
			Year

## INSTRUMENT 1B: GENERAL INFORMATION - ADULT EDUCATION PROVIDER (AEP)

***Please provide general information about your institution.***

***Under the question 29 report major changes (if any) in your institution over last 5 years.***

<b>No</b>	<b>Data</b>	<b>Content</b>
<i>Institution</i>		
1	Name of the Institution	
2	Municipality	
3	Region	
4	Dates of establishment, reorganisation and/or renaming <sup>42</sup>	
5	Founder/owner	
6	Legal address	
7	Verified	Yes <input type="checkbox"/> No <input type="checkbox"/>
8	Functioning address(es)	
9	Branches, if any <sup>43</sup>	4.
		5.
		6.
<i>Director</i>		
10	Name and Surname	
11	Gender	
12	Date of appointment (Order №)	
13	Scientific degree and/or academic title	
14	License (date)	
<i>Contact information</i>		
15	Telephone numbers	
16	E-mail address	
17	Skype	
18	Web-site	
19	Other	
<i>General activities</i>		
20	Number of shifts	Single <input type="checkbox"/> Double <input type="checkbox"/>
21	Instruction Language(s)	Macedonian <input type="checkbox"/> Albanian <input type="checkbox"/> Turkish <input type="checkbox"/> Other <input type="checkbox"/>
22	Total number of trainees as of April 2019	
23	Total number of employees as of April 2019, out of them:	
24	<i>Full-time Trainers</i>	
25	<i>Part-time Trainers</i>	
26	Do you keep a database recording destinations of graduates?	Yes <input type="checkbox"/> No <input type="checkbox"/>
27	Do you keep a database recording details of your training staff?	Yes <input type="checkbox"/> No <input type="checkbox"/>
28	Do you keep a database recording details of the number and type of trainees on different programmes over the last two years?	Yes <input type="checkbox"/> No <input type="checkbox"/>

<sup>42</sup> In case of being reorganised and/or renamed, please provide more details about the original (previous) name(s) and status(es) under the question 29.

<sup>43</sup> In case of branches, please copy this sheet and provide data only specific for each of them.

*Summary of any major institutional change over the last 5 years, e.g. merger, rebuilding, restructuring:*

29			
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Name and position of person who completed the questionnaire			
Date	Day	Month	Year

## INSTRUMENT 2: STUDENTS – VET SCHOOLS

**Please provide information related only to the students involved in the formal education in your VET school (2-year, 3-year, 4-year secondary, and post-secondary VET).**

Name of institution						
---------------------	--	--	--	--	--	--

Table 2-1. Total number of students

			2016-2017		2017-2018		2018-2019 <sup>44</sup>	
			Total	Female	Total	Female	Total	Female
A	B	1	2	3	4	5	6	
1	Full-time secondary VET, including:							
2	2-year VET							
3	3-year VET							
4	4-year VET							
5	Part-time secondary VET							
6	Part-time post-secondary VET							
7	Secondary General (Non-vocational)							
8	<b>TOTAL</b>							

2-2. Distribution of students by origin, 2018-2019 academic year

Table 2-2-1. Full-time secondary students

№		Macedonians				Foreigners	
		Urban	Rural	From this region			
				and this municipality	but another municipality		
A	B	1	2	3	4	5	
1	Number of students						
2	including female						

Table 2-2-2. Part-time secondary students

№		Macedonians				Foreigners	
		Urban	Rural	From this region			
				and this municipality	but another municipality		
A	B	1	2	3	4	5	
1	Number of students						
2	including female						

Table 2-2-3. Part-time post-secondary students

№		Macedonians				Foreigners	
		Urban	Rural	From this region			
				and this municipality	but another municipality		
A	B	1	2	3	4	5	
1	Number of students						
2	including female						

<sup>44</sup> As of April 2019

### INSTRUMENT 3: TRAINEES – VET SCHOOLS AND ADULT EDUCATION PROVIDERS

***Please record the different training programmes currently delivered together with the number of learners per programme. This excludes formal qualifications provided to secondary learners in schools (recorded elsewhere). Adult Education Centres should record their programmes in this table. Some schools may offer some programmes for adults, if so they should include in this table. If you cannot complete a particular section, please leave it blank.***

Name of institution

Calendar year 2019

Table 3-1. Distribution by programmes

N	Number	Profession/sector	Title of the programmes	Duration of the programme, days/ weeks/ months	Duration of the programme, hours	Out of them		Duration of classes, hours	Number of trainees		
						Theoretical	Practical		As of April 2019	Expected till the end of 2019	
A	1	2	3	4	5	6	7	8	B	9	10
1									total		
2									incl. women		
3									total		
4									incl. women		
5									total		
6									incl. women		
7									total		
8									incl. women		
9									total		
10									incl. women		
11									total		
12									incl. women		
13									total		
14									incl. women		
15									total		
16									incl. women		
17									total		
18									incl. women		

**Table 3-2. Distribution by educational attainment<sup>45</sup>**

№			Programmes (indicate the number of the Programme mentioned under "1" in the above table)									
			1	2	3	4	5	6	7	8	9	Total
A	B	C										
1	With Primary Education	total										
2		incl. women										
3	With Secondary general education	total										
4		incl. women										
5	With 2-year Vocational Education	total										
6		incl. women										
7	With 3-year Vocational Education	total										
8		incl. women										
9	With 4-year Vocational Education	total										
10		incl. women										
11	With Post-Secondary Vocational Education	total										
12		incl. women										
13	With Higher Education	total										
14		incl. women										
15	other /specify/	total										
16		incl. women										
17	Those with special educational needs	total										
18		incl. women										
19	Macedonians, including those	total										
20		incl. women										
21	from urban areas	total										
22		incl. women										
23	from rural areas	total										
24		incl. women										
25	from this region	total										
26		incl. women										
27	from other regions	total										
28		incl. women										
29	Foreigners	total										
30		incl. women										

**Calendar year 2018**

**Table 3-3. Distribution by programmes**

N	Number	Profession/sector	Title of the programmes		Number of trainees
A	1	2	3	B	4
1				total	
2				incl. women	
3				total	
4				incl. women	
5				total	
6				incl. women	
7				total	

<sup>45</sup> As of April 2019

N	Number	Profession/sector	Title of the programmes		Number of trainees
A	1	2	3	B	4
8				incl. women	
9				total	
10				incl. women	
11				total	
12				incl. women	
13				total	
14				incl. women	
15				total	
16				incl. women	
17				total	
18				incl. women	
19				total	
20				incl. women	
21				total	
22				incl. women	
23	<b>Total</b>			total	
24				incl. women	

#### Calendar year 2017

**Table 3-4. Distribution by programmes**

N	Number	Profession/sector	Title of the programmes		Number of trainees
A	1	2	3	B	4
1				total	
2				incl. women	
3				total	
4				incl. women	
5				total	
6				incl. women	
7				total	
8				incl. women	
9				total	
10				incl. women	
11				total	
12				incl. women	
13				total	
14				incl. women	
15				total	
16				incl. women	
17				total	
18				incl. women	
19				total	
20				incl. women	
21				total	
22				incl. women	
23	<b>Total</b>			total	
24				incl. women	

## INSTRUMENT 4: STAFF WITH SPECIFIC FUNCTIONS

**Please provide information about the staff with specific functions, as mentioned in the table below, according with their work contracts.**

Name of institution			
---------------------	--	--	--

### 4-1. Staff with specific functions, as of April 2019

№	Functions	Number	
		Total	Women
A	1	2	3
1	Staff responsible for liaison (relations, partnership, cooperation) with businesses		
	Title of the position		
	<i>Please describe the principal tasks:</i>		
2	Staff responsible for Labour Market analysis		
	Title of the position		
	<i>Please describe the principal tasks:</i>		
3	Staff responsible for liaison with community		
	Title of the position		
	<i>Please describe the principal tasks:</i>		
4	Staff responsible for Vocational guidance (Professional orientation) and Career development		
	Title of the position		
	<i>Please describe the principal tasks:</i>		
5	Staff responsible for marketing activities (except vocational guidance)		
	Title of the position		
	<i>Please describe the principal tasks:</i>		
6	Staff responsible for other specific activities (specify)		
	Title of the position		
	<i>Please describe the principal tasks:</i>		

7	Staff responsible for other specific activities (specify)		
	Title of the position		
	<p><i>Please describe the principal tasks:</i></p> <p> </p>		

## INSTRUMENT 4 A: PATHWAYS OF THE GRADUATES – VET SCHOOLS.

***Please provide information related only to those graduates who were involved in the formal education in the VET schools (2-year, 3-year, 4-year secondary, and post-secondary VET). Please fill in these tables only if you collect the requested information and can provide reliable data.***

Academic year 2017-2018

### 4-1. Pathways of the Graduates by qualifications

Table 4-1-1. Full-time students

N	Code	Profession	Qualification		Total number of 2017-2018 graduates	Out of them					Found job			
						Continued education in university	Further Secondary Qualifications	Emigrated	Were seeking job	Other	according to their qualification	not according to their qualification		
A	1	2	3	B	4	5	6	7	8	9	10	11		
1		<b>TOTAL FULL-TIME STUDENTS</b>			total									
2					incl. female									
3		<b>Secondary Vocational</b>			total									
4					incl. female									
5					total									
6					incl. female									
7					total									
8					incl. female									
9					total									
10					incl. female									
11					total									
12					incl. female									
13					total									
14					incl. female									
15					total									
16					incl. female									
17					total									
18					incl. female									
19					total									
20					incl. female									
21		<b>Secondary General (Non-vocational)</b>			total									
22					incl. female									
23		<b>Those with special educational needs</b>			total									
24					incl. female									

Table 4-1-2. Part-time students

N	Code	Profession	Qualification		Total number of 2014-2015 graduates	Out of them					Found job		
						B	4	5	6	7	8	9	10
A	1	2	3										11
1					total								
2					incl. female								
3					total								
4					incl. female								
5					total								
6					incl. female								
7					total								
8					incl. female								
9					total								
10					incl. female								
11					total								
12					incl. female								
13					total								
14					incl. female								
15					total								
16					incl. female								
17					total								
18					incl. female								
19					total								
20					incl. female								
21					total								
22					incl. female								
23					total								
24					incl. female								

Academic year 2016-2017

4-2. Pathways of the Graduates by qualifications

Table 4-2-1. Full-time students

N	Code	Profession	Qualification		Total number	Out of them	Found job
---	------	------------	---------------	--	--------------	-------------	-----------

						Continued education in university	Further Secondary Qualifications	Emigrated	Were seeking job	Other	according to their qualification	not according to their qualification
A	1	2	3	B	4	5	6	7	8	9	10	
1	<b>TOTAL FULL-TIME STUDENTS</b>				total							
2					incl. female							
3	<b>Secondary Vocational</b>				total							
4					incl. female							
5					total							
6					incl. female							
7					total							
8					incl. female							
9					total							
10					incl. female							
11					total							
12					incl. female							
13					total							
14					incl. female							
15					total							
16					incl. female							
17					total							
18					incl. female							
19					total							
20					incl. female							
21	<b>Secondary General (Non-vocational)</b>				total							
22					incl. female							
23	<b>Those with special educational needs</b>				total							
24					incl. female							

Table 4-2-2. Part-time students

N	Code	Profession	Qualification		Total number of 2014-2015 graduates	Out of them				Found job	
						Continued education in university	Further Secondary Qualifications	Emigrated	Were seeking job	Other	according to their qualification
A	1	2	3	B	4	5	6	7	8	9	10
1	<b>PART-TIME STUDENTS</b>			total							

N	Code	Profession	Qualification		Total number of 2014-2015 graduates	Out of them				Found job	
						Continued education in university	Further Secondary Qualifications	Emigrated	Were seeking job	Other	according to their qualification
A	1	2	3	B	4	5	6	7	8	9	10
2				incl. female							
3				total							
4				incl. female							
5				total							
6				incl. female							
7				total							
8				incl. female							
9				total							
10				incl. female							
11				total							
12				incl. female							
13				total							
14				incl. female							
15				total							
16				incl. female							
17				total							
18				incl. female							
19				total							
20				incl. female							
21				total							
22				incl. female							
23	Those with special educational needs			total							
24				incl. female							

**Academic year 2015-2016**

**4-3. Pathways of the Graduates by qualifications**

**Table 4-3-1. Full-time students**

N	Code	Profession	Qualification		Total number of 2017-2018 graduates	Out of them					Found job			
						Continued education in university	Further Secondary Qualifications	Emigrated	Were seeking job	Other	according to their qualification	not according to their qualification		
A	1	2	3	B	4	5	6	7	8	9	10			
1	<b>TOTAL FULL-TIME STUDENTS</b>			total										
2				incl. female										
3	<b>Secondary Vocational</b>			total										
4				incl. female										
5				total										
6				incl. female										
7				total										
8				incl. female										
9				total										
10				incl. female										
11				total										
12				incl. female										
13				total										
14				incl. female										
15				total										
16				incl. female										
17				total										
18				incl. female										
19				total										
20				incl. female										
21	<b>Secondary General (Non-vocational)</b>			total										
22				incl. female										
23	<b>Those with special educational needs</b>			total										
24				incl. female										

**Table 4-3-2. Part-time students**

N	Code	Profession	Qualification		Total number	Out of them	Found job
---	------	------------	---------------	--	--------------	-------------	-----------

						Continued education in university	Further Secondary Qualifications	Emigrated	Were seeking job	Other	according to their qualification	not according to their qualification
A	1	2	3	B	4	5	6	7	8	9	10	
1	<b>PART-TIME STUDENTS</b>			total								
2				incl. female								
3				total								
4				incl. female								
5				total								
6				incl. female								
7				total								
8				incl. female								
9				total								
10				incl. female								
11				total								
12				incl. female								
13				total								
14				incl. female								
15				total								
16				incl. female								
17				total								
18				incl. female								
19				total								
20				incl. female								
21				total								
22				incl. female								
23	Those with special educational needs			total								
24				incl. female								

## INSTRUMENT 4 B: PATHWAYS OF THE GRADUATES – VET SCHOOLS AND ADULT EDUCATION PROVIDERS.

**Please provide information related to all trainees of your Adult Education Provider institution or to the trainees of your VET School involved in any type of non-formal training programmes, different from those mentioned in the Instrument 4 A. Please fill in these tables only if you collect the requested information and can provide reliable data.**

2018

### 4-1. Pathways of the Graduates by programmes

N	Number	Profession/field	Title of the Programme		Total number of 2017-2018 graduates	Out of them				Found job		
						Continued education in university	Further Secondary Qualifications	Emigrated	Were seeking job	Other	according to their qualification	not according to their qualification
A	1	2	3	B	4	5	6	7	8	9	10	11
1				total								
2				incl. female								
3				total								
4				incl. female								
5				total								
6				incl. female								
7				total								
8				incl. female								
9				total								
10				incl. female								
11				total								
12				incl. female								
13				total								
14				incl. female								
15				total								
16				incl. female								
17				total								
18				incl. female								
19				total								
20				incl. female								
21	Those with special educational needs			total								
22				incl. female								

2017

4-1. Pathways of the Graduates by programmes

N	Number	Profession	Qualification		Total number of 2017-2018 graduates	Out of them				Found job					
						Continued education in university	Further Secondary Qualifications	Emigrated	Were seeking job	Other	according to their qualification	not according to their qualification			
A	1	2	3	B	4	5	6	7	8	9	10	11			
1					total										
2					incl. female										
3					total										
4					incl. female										
5					total										
6					incl. female										
7					total										
8					incl. female										
9					total										
10					incl. female										
11					total										
12					incl. female										
13					total										
14					incl. female										
15					total										
16					incl. female										
17					total										
18					incl. female										
19					total										
20					incl. female										
21	Those with special educational needs				total										
22					incl. female										

2016

4-1. Pathways of the Graduates by programmes

N	Number	Profession	Qualification		Total number of 2017-2018 graduates	Out of them					Found job				
						Continued education in university	Further Secondary Qualifications	Emigrated	Were seeking job	Other	according to their qualification	not according to their qualification			
A	1	2	3	B	4	5	6	7	8	9	10	11			
1					total										
2					incl. female										
3					total										
4					incl. female										
5					total										
6					incl. female										
7					total										
8					incl. female										
9					total										
10					incl. female										
11					total										
12					incl. female										
13					total										
14					incl. female										
15					total										
16					incl. female										
17					total										
18					incl. female										
19					total										
20					incl. female										
21	Those with special educational needs				total										
22					incl. female										

## INSTRUMENT 5. LAND AND BUILDINGS

**This form should be completed by the Director or member of staff responsible for site and buildings. Information about the land and buildings (questions 5.1 and 5.2) should be available at your institution. If for any reason, this information is not available at your institution, please advise where it is available (e.g. in the municipality administration).**

***Please note that all the titles of the facilities in the Table 5.3 are indicative (proposed as examples only) and should be replaced by the real ones existing in your institution. In the same table, please provide comments in the column "Purpose" only if the name of the facility is not self-explaining and additional clarifications are necessary.***

**In the Table 5.4, please describe the conditions of the dormitory facilities in terms of meeting all sanitary and other established norms for the students' residence as well as in term of facilities and equipment/furniture improvements (provision) needs.**

**In the Tables 5.5 and 5.6, no highly professional description of construction (renovation) works is required. Please explain in your own words.**

**The cost assessment in the Table 5.6 can also be done approximately. If you cannot complete some sections please leave them blank.**

**Name of institution**

## 5-1. Land

№	Land, total surface, m <sup>2</sup>						out of which:  Under other type of use (specify)  Purpose <sup>46</sup>	
	Own use, m <sup>2</sup>	Leased, m <sup>2</sup>	Rented, m <sup>2</sup>	Under the buildings, m <sup>2</sup>				
					№	surface, m <sup>2</sup>		
1					1.			
					2.			
					3.			
					4.			
					5			

## 5-2. Buildings (fill in a table for every building. Add tables if necessary)

5.2. Buildings (fill in a table for every building. Add tables if necessary)							
1	Name or number	Purpose			Year of construction	Year of last capital renovation	Annual running cost, MKD:
	total surface, $m^2$	useful surface, $m^2$	total volume, $m^3$	Own use, $m^2$	Leased, $m^2$	Rented, $m^2$	

<sup>46</sup> E.g. Sports field, training ground for e.g. construction, agriculture, etc.

2	Name or number	Purpose		Year of construction	Year of last capital renovation	Annual running cost, MKD:
	total surface, $m^2$	useful surface, $m^2$	total volume, $m^3$	Own use, $m^2$	Leased, $m^2$	Rented, $m^2$

3	Name or number	Purpose		Year of construction	Year of last capital renovation	Annual running cost, MKD:
	total surface, $m^2$	useful surface, $m^2$	total volume, $m^3$	Own use, $m^2$	Leased, $m^2$	Rented, $m^2$

4	Name or number	Purpose		Year of construction	Year of last capital renovation	Annual running cost, MKD:
	total surface, $m^2$	useful surface, $m^2$	total volume, $m^3$	Own use, $m^2$	Leased, $m^2$	Rented, $m^2$

5	Name or number	Purpose		Year of construction	Year of last capital renovation	Annual running cost, MKD:
	total surface, $m^2$	useful surface, $m^2$	total volume, $m^3$	Own use, $m^2$	Leased, $m^2$	Rented, $m^2$

### 5-3. List of classrooms, Laboratories, Workshops and other facilities

№	Facility	Number of units	Surface, $m^2$	Capacity (students / work places)		Purpose (if specific explanations on the purpose are necessary)
				per unit	total	
1	Classroom type 1					
2	Classroom type 2					
3	Classroom type 3					
4	Classroom type 4					
5	Laboratory for ....					
6	Laboratory for ....					
7	Laboratory for ....					
8	Laboratory for ....					
9	Laboratory for ....					
10	Workshop for ....					
11	Workshop for ....					
12	Workshop for ....					

13	Workshop for ....				
14	Workshop for ....				
15	Library				
16	Reading hall				
17	Conference hall				
18					
19					
20	Administrative office of Director				
21	Administrative office of Deputy Directors				
22	Teachers' room				
23					
24					
25	Storage				
26	Boiler				
27	...				
28					

#### 5-4. Dormitory

Nº	A	1
1	Year of construction	
2	Total surface, m <sup>2</sup>	
3	Number of floors	
4	Number of rooms	
5	Maximal capacity, person	
6	Annual running/maintenance cost	
7	Number of people living in the dormitory	
8	Incl. female	
9	Monthly fee for accommodation per person (if any), MKD	
10	Conditions, including all facilities (e.g. building conditions, furniture, equipment, health and safety, security, catering, etc.). Please describe:	
11		

#### 5-5. Renovation and Reconstruction

Nº	A	1
1	When last time the building of the institution was renovated and/or reconstructed	
2	Capital renovation/reconstruction (within last 5 years)	<input type="checkbox"/>
3	How much was the cost, MKD	
4	Who funded the renovation/reconstruction (e.g. government, donors, private, etc.)	
5	Please describe what type of works were done (e.g. facade, foundations, walls (internal or external), redecoration, floor covering, doors/windows, water supply/sewage, water supply/sewage, new equipment and machinery, furnishing, etc.): 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.	

5-6. What are the most urgent needs in terms of renovation and/or reconstruction of your institution?

No	Renovation and/or reconstruction needs	Level of priority <sup>47</sup>	Brief explanation of the needed works	Rough assessment of the cost, MKD
1	Facade			
2	Foundations			
3	Walls (internal or external)			
4	Roof/Ceilings			
5	Doors/Windows			
6	Water supply/sewage			
7	Toilets			
8	Electricity supply/Electric system			
9	Heating system			
10	Expansion of teaching spaces, e.g. classrooms, laboratories, workshops (specific) here			
11	Security			
12	Fence			
13	Dormitories			
14	Equipment (specify)			
15	Redecoration (specify)			
16	Other (specify)			
17	Other (specify)			
18	Other (specify)			
19	Other (specify)			
20	Other (specify)			
21	Other (specify)			

<sup>47</sup> "1" is the top priority.

## INSTRUMENT 6. EQUIPMENT, TOOLS AND OTHER MATERIAL RESOURCES: AVAILABILITY AND NEEDS

Table 6-1. Equipment and specialist tools

**Use 6.1 to provide information about large equipment or specialist tools used to teach particular qualifications (programmes) which were obtained during the last 5 years and the value of units taken together is equal or greater than 10 thousand Euros. Add as many tables as the number of different qualifications (or groups of qualifications) or programmes in your institution. If there are not enough rows in a table then add more. If equipment is shared between all qualifications/programmes add information to table D below. Please complete the table so far as you can – if you lack information simply leave those parts of the table blank. Use 6.2 and 6.3 to indicate whether your institution has sufficient resources and what needs exist.**

Name of institution									
---------------------	--	--	--	--	--	--	--	--	--

No	Type of equipment and tools	Number of units	Date of purchase	Purchased by					
				Government	Own resources	Business (specify)	Donors (specify)	Local self-government	Other (specify)
A	1	2	3	4	5	6	7	8	9
<b>A Qualification or Qualifications:</b>									
1				<input type="checkbox"/>					
2				<input type="checkbox"/>					
3				<input type="checkbox"/>					
4				<input type="checkbox"/>					
5				<input type="checkbox"/>					

№	Type of equipment and tools	Number of units	Date of purchase	Purchased by						
				Government	Own resources	Business (specify)	Donors (specify)	Local self-government	Other (specify)	
A	1	2	3	4	5	6	7	8	9	
B	Qualification or Qualifications:									
6				<input type="checkbox"/>						
7				<input type="checkbox"/>						
8				<input type="checkbox"/>						
9				<input type="checkbox"/>						
10				<input type="checkbox"/>						
C	Qualification or Qualifications:									
11				<input type="checkbox"/>						
12				<input type="checkbox"/>						
13				<input type="checkbox"/>						
14				<input type="checkbox"/>						
15				<input type="checkbox"/>						

№	Type of equipment and tools	Number of units	Date of purchase	Purchased by					
				Government	Own resources	Business (specify)	Donors (specify)	Local self-government	Other (specify)
A	1	2	3	4	5	6	7	8	9
D	Qualification or Qualifications:	Shared between:							
16				<input type="checkbox"/>					
17				<input type="checkbox"/>					
18				<input type="checkbox"/>					
19				<input type="checkbox"/>					
20				<input type="checkbox"/>					

Table 6-2. Adequacy of Resourcing

***Please provide information whether the facilities, equipment, tools and consumables available in your institution are sufficient for provision of quality education in relation to each profession/qualification or programme.***

N	Code	Profession (струка) <sup>48</sup>	Qualification (Квалификација) <sup>49</sup>	The available facilities, equipment, tools and other material resources are sufficient for provision of quality education for the profession/qualification		
				Resources are sufficient in relation to curriculum and number of learners	Formal qualification requirements met but there are some unmet needs	No
A	1	2	3	4	5	6
1				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>48</sup> E.g. "Графичка струка" or "Економско-правна и трговска струка".

<sup>49</sup> E.g. "Печатар" or "Банкарски службеник".

N	Code	Profession (струка) <sup>48</sup>	Qualification (Квалификација) <sup>49</sup>	The available facilities, equipment, tools and other material resources are sufficient for provision of quality education for the profession/qualification		
				Resources are sufficient in relation to curriculum and number of learners	Formal qualification requirements met but there are some unmet needs	No
A	1	2	3	4	5	6
10				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table 6-3. Needs

*If you answered "Formally" or "No" for any profession/qualification or programme, please provide a list of needed facilities, equipment, tools and consumables required to teach this profession/qualification or programme. Add as many tables and rows as needed.*

Code (number) and Title of Profession/qualification (programme)				
Nº	Item	Amount	Short description and/or purpose	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

## INSTRUMENT 8. FINANCES

*Please provide information according with the official financial documents (financial reports, balance sheets).*

*If any category (type) of financial means or financial expenditures is not relevant to your institution, please insert "n.r." in the corresponding cell.*

Table 8-1. Total funds

YEAR	Total	Balance at the beginning of the year	Total	Availability of the financial means										Financial expenditures								Financial balance at the end of the year							
				Including Current year incomes					Including					Including			Financial expenditures												
				From budget (state and community)		Paid by legal entities		Paid by students/trainees	From services to the population (individuals)		From other paid services		From donations		From leasing		Other income		Material expenditures		Payments for non-material services		Missions expenditures		Salaries and other payments equated to it (gross)		Stipends (scholarships)		Renovation, purchase of equipment and tools
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22								
1	2019* <sup>50</sup>																												
2	2018																												
3	2017																												

<sup>50</sup> Projected

**Table 8-2. Salaries and costs equated to it**

№	Category	Actually paid, MKD		
		2019*	2018	2017
1	Administrative staff			
2	Teachers			
3	Trainers (instructors)			
4	Support staff			
5	External staff (e.g. external experts for providing services)			
6	Other ( <i>specify</i> )			
7	<b>Total (= column 18 in the table 8-1)</b>			

**Table 8-3. Renovation, purchase of equipment and tools**

№	Category	Actually spent, MKD		
		2019*	2018	2017
1	Capital renovation			
2	Current renovation			
3	Purchase of training equipment and tools			
4	Purchase of other equipment and tools			
5	Purchase of training consumables			
6	Purchase of other consumables			
7	Other ( <i>specify</i> )			
8	<b>Total (= column 20 in the table 8-1)</b>			

## INSTRUMENT 9. INDICATIVE DATA LIST FOR MUNICIPALITIES AND REGIONAL AUTHORITIES

<b>1. Demographic trends</b> (indicators for the last 5 years)
<ul style="list-style-type: none"> <li>Population dynamics by age groups (0-4, 5-9, 10-14 etc.) and gender (region)</li> <li>Urbanisation (share of urban and rural population)</li> <li>Migration dynamics and structure by age groups and gender (region)</li> </ul>
<b>2. Economic trends</b> (indicators for the last 5 years)
<ul style="list-style-type: none"> <li>Share of regional GDP vs national</li> <li>Gross Regional Product per capita (factual prices)</li> <li>Industrial subsectors (region) <ul style="list-style-type: none"> <li>Employment</li> <li>Value added</li> <li>Exports</li> <li>Number of companies</li> <li>Real wages</li> <li>Share of innovative companies</li> </ul> </li> <li>Areas zoned for new economic activity (e.g. industrial areas/parks) and expected employment in industrial subsectors; estimation.</li> <li>Financial capacity of region: <ul style="list-style-type: none"> <li>Revenues of local budgets (without transfers), per capita</li> <li>Growth rate of local budget revenues (without transfers), as % to the previous year</li> </ul> </li> <li>Transport infrastructure: Population that can reach the location of VET school within one hour (one way); estimation.</li> </ul>
<b>3. Employment trends in the region</b> (indicators for the last 5 years)
<ul style="list-style-type: none"> <li>Economic activity rate and structure by educational attainment levels and age groups</li> <li>Employment rate and structure by educational attainment levels and age groups</li> <li>Unemployment rate and structure by educational attainment levels and age groups</li> <li>Share of those employed in non-formal economy</li> <li>Interregional employment mobility (share of those employed in others regions)</li> <li>Number of vacancies (NACE classification), including for those with VET, proposed average wages</li> </ul>
<b>4. Education system of the region</b> (indicators for the last 5 years, depending on availability)
<ul style="list-style-type: none"> <li>Number of primary schools, number of pupils</li> <li>Number of secondary schools (gymnasia), number of pupils</li> <li>Number of VET institutions (pure and mixed), number of students (for cross-check)</li> <li>Number of Adult Education Centres, number of trainees (for cross-check)</li> <li>Public spending on education by the levels, with break-down on recurrent and capital</li> <li>Non-public spending (including tuition fee) and investments in education by the levels</li> </ul>

## INSTRUMENT 10 A: INTERVIEW SCHEDULE FOR VET SCHOOL DIRECTOR ASSESSMENT OF VET NETWORK IN NORTH MACEDONIA (2019)

This interview schedule will structure interviews carried out by ETF researchers when they visit particular VET school. The researcher will complete this document using the responses of the interviewee. It is planned that the interview will last about 1.5 - 2 hours. The interview schedule may be shared with the interviewee in advance of the interview to permit preparation.

№		
0.1	Name of the Institution	
0.2	Municipality	
0.3	Region	
0.4	Date of the interview	
0.5	Name of Interviewee	
0.6	Name of Interviewer	
<b>SECTION 1. Quality of Output and VET Impact</b>		
1.1	<b>In your opinion, to what extent are graduates of your VET school prepared for employment in the field relevant to their qualification?</b>	
A	Fully prepared	<input type="checkbox"/>
B	Mainly prepared	<input type="checkbox"/>
C	Mainly not prepared	<input type="checkbox"/>
D	Not at all prepared	<input type="checkbox"/>
E	Other (explain):	
1.2	<b>If your answer is mainly not or not at all (1.2.1 C, D), why? (multiple answers possible)</b>	
A	The content of the training programme/curricula is not relevant to the labour market needs	<input type="checkbox"/>
B	Teachers/trainers not sufficiently qualified for providing quality education/training	<input type="checkbox"/>
C	The institution facilities and equipment are not appropriate for providing quality education/training	<input type="checkbox"/>
D	Students/Trainees are not sufficiently motivated	<input type="checkbox"/>
E	Other (explain):	
1.3	<b>In your opinion, what percentage of your graduates gets jobs after completing the course?</b>	
A	In total	%
B	<i>out of them, according with their qualification:</i>	%
C	I do not have any information on this	<input type="checkbox"/>
1.4	<b>According to your knowledge, what percentage of graduates finds jobs?</b>	
A	within six months?	%
B	between six months and one year?	%
1.5	<b>For graduates with which qualifications offered in your VET school or from which non-formal training programmes it is easiest to find employment? (list the easiest three)</b>	
A	1.	
B	2.	
C	3.	
1.6	<b>For graduates with which qualifications offered in your VET school or from which non-formal training programmes it is most difficult to find employment? (list the most difficult three)</b>	
A	1.	

<b>B</b>	2.	
<b>C</b>	3.	
<b>1.7 For tracking the pathways of your graduates:</b>		
<b>A</b>	What methodology is used (telephone, letters)? Please explain:	
<b>B</b>	What is the frequency of follow-up? (e.g. 6 months, 12 months, 18 months, 36 months):	
<b>C</b>	For how many years after graduation? <span style="float: right;">years</span>	
<b>1.8 Is there career guidance for students prior to vocational education and training in order to make young people more aware of career opportunities through vocational education and training and to discover their talents and interests at an earlier stage?</b>		
<b>A</b>	Yes (explain the principal tasks of this service and the methods used):	
<b>B</b>	No (explain the reasons and the alternative approaches, if any):	
<b>1.9 Is there a career development (guidance) unit (service) in your institution which helps the graduates development to find employment?</b>		
<b>A</b>	Yes (explain the principal tasks of this service and the methods used):	
<b>B</b>	No (explain whether any support to the graduates for finding employment is provided in a different way):	
<b>1.10 How do your graduates obtain their jobs after completing their studies?</b>		<b>Specify according with the priority ("1" is the top priority)</b>
<b>A</b>	The business approaches the institution	
<b>B</b>	The institution contacts the businesses and assists students/ trainees	
<b>C</b>	Personal initiative is taken by graduates	
<b>D</b>	Through the employment office	
<b>E</b>	Through family/friend network and personal contact	
<b>F</b>	Job search via internet and mass media	
<b>G</b>	Job fairs	
<b>H</b>	Other (specify):	
<b>I</b>	Don't know	<input type="checkbox"/>
<b>1.11 Based on your knowledge, what percentage of your graduates pursues higher education?</b>		
<b>A</b>	%	<input type="checkbox"/>
<b>B</b>	I do not have any information on this	<input type="checkbox"/>
<b>1.12 In your opinion, which of the following measures would most improve the quality of education/training offered in your institution? (choose three alternatives)</b>		<b>Specify according with the priority ("1" is the top priority and 3 is low priority)</b>
<b>A</b>	Improve buildings and facilities	
<b>B</b>	Improve equipment/tools	
<b>C</b>	Establish more and/or better computers	
<b>D</b>	Improve the quality of internet	
<b>E</b>	Improve (modernise) the curriculum and the study programmes	
<b>F</b>	Change the course of study towards more work-based learning	
<b>G</b>	Improve the quality and quantity of the training and teaching materials	
<b>H</b>	Improve assessment processes (please specify how):	
<b>I</b>	Improve assessment tools	
<b>J</b>	Increase number of teachers/instructors	

<b>K</b>	Upgrade the skills of teachers/instructors	
<b>L</b>	Increase number and or upgrade the skills of support staff, e.g. technicians	
<b>M</b>	Increase supply of raw materials and auxiliary materials such as metals, paper, spare parts, etc.	
<b>N</b>	Improve guidance and career counselling	
<b>O</b>	Improve the selection process for incoming students/trainees who are enrolled in the institution	
<b>P</b>	Establish closer relations with employers and industry	
<b>Q</b>	Change the governance and management model of the institution (please specify how):	
<b>R</b>	Other (specify):	
<b>S</b>	Explain how this would bring about improvements:	
<b>1.13 Does your school have a working broadband connection with a speed of at least 2 Mbps?</b>		
<b>A</b>	Yes, always	<input type="checkbox"/>
<b>B</b>	Sometimes	<input type="checkbox"/>
<b>C</b>	No, never	<input type="checkbox"/>
<b>1.14 Does your school provide wireless access to the internet?</b>		
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	For some parts of the building or buildings	<input type="checkbox"/>
<b>C</b>	No	<input type="checkbox"/>
<b>D</b>	Comment:	
<b>1.15 For whom internet access is available in your institution?</b>		
<b>A</b>	For the teachers and instructors, for teaching purposes	<input type="checkbox"/>
<b>B</b>	For your administrative duties	<input type="checkbox"/>
<b>C</b>	For all students/trainees, for learning purposes	<input type="checkbox"/>
<b>D</b>	Comment:	
<b>1.16 Does your school have a digital Learning Management System (e.g. Moodle or similar)?</b>		
<b>A</b>	Yes. Please specify the type:	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>SECTION 2. Selection and Admission of Students and Trainees</b>		
<b>2.1 If you have AE programmes, admission of trainees in your institution is determined by: (multiple answers possible)</b>		
<b>A</b>	Age (specify)	<input type="checkbox"/>
<b>B</b>	Years of general education completed (specify)	<input type="checkbox"/>
<b>C</b>	School leaving certificate (specify)	<input type="checkbox"/>
<b>D</b>	Nomination by government/Ministry	<input type="checkbox"/>
<b>E</b>	Sponsorship by industry	<input type="checkbox"/>
<b>F</b>	Ability to pay course fee	<input type="checkbox"/>
<b>G</b>	Not employed	<input type="checkbox"/>
<b>H</b>	Disadvantaged group	<input type="checkbox"/>
<b>I</b>	Other (specify)	<input type="checkbox"/>
<b>J</b>	There are no criteria	<input type="checkbox"/>

<b>2.2</b>	<b>If you have AE programmes, what is the method of selection? (multiple answers possible)</b>	
<b>A</b>	Official documents, e.g. Certificates, Diploma, recommendation (specify):	<input type="checkbox"/>
<b>B</b>	Allocation by education authority	<input type="checkbox"/>
<b>C</b>	Interviews	<input type="checkbox"/>
<b>D</b>	Practical tests	<input type="checkbox"/>
<b>E</b>	Theory tests	<input type="checkbox"/>
<b>F</b>	Health examination	<input type="checkbox"/>
<b>G</b>	Average grade	<input type="checkbox"/>
<b>H</b>	Other (specify):	
<b>2.3</b>	<b>Are there any students/trainees who applied but have not been admitted in your institution?</b>	
<b>A</b>	Yes	Please provide estimate percentage: %
<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	If yes, what was (were) the reason(s):	
<b>2.4</b>	<b>Are there special procedures for admission of students or trainees with special needs?</b>	
<b>A</b>	Yes (explain):	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>2.5</b>	<b>Are there special procedures regarding vulnerable groups?</b>	
<b>A</b>	Yes (explain):	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>2.6</b>	<b>What percentage of selected students or trainees is sponsored by:</b>	
<b>A</b>	Government/Ministry (specify):	%
<b>B</b>	Private sector (specify):	%
<b>C</b>	Others (specify):	%

### SECTION 3. Staff

<b>3.1</b>	<b>Do you have a sufficient number of teachers needed in your institution?</b>	
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>3.2</b>	<b>In your opinion, is it possible to recruit an adequate number of qualified and experienced vocational teachers or instructors in your institution?</b>	
<b>A</b>	Yes [go to the question 3.7]	<input type="checkbox"/>
<b>B</b>	Mainly yes	<input type="checkbox"/>
<b>C</b>	Mainly not	<input type="checkbox"/>
<b>D</b>	No	<input type="checkbox"/>
<b>3.3</b>	<b>What are the obstacles for recruiting necessary teachers?</b>	
<b>A</b>	Poor reputation/image of the VET teacher profession	<input type="checkbox"/>
<b>B</b>	Low salaries, which do not attract qualified specialist	<input type="checkbox"/>
<b>C</b>	Low attractiveness of this locality	<input type="checkbox"/>
<b>D</b>	Bad work conditions at VET institutions	<input type="checkbox"/>
<b>E</b>	Other (specify):	

<b>3.4</b>	<b>What are the obstacles for involving professionals from the industry in the VET schools?</b>	
<b>A</b>	Absence of companies' interest towards the VET system	<input type="checkbox"/>
<b>B</b>	Low salaries, which do not attract qualified specialist	<input type="checkbox"/>
<b>D</b>	Bad work conditions at VET institutions	<input type="checkbox"/>
<b>E</b>	Other (specify):	

<b>3.5</b>	How many hours per week does the average teacher in your school/AEP spend directly teaching learners?	
<b>A</b>	hours	

<b>3.6</b>	What % of teachers in the school teach more than one shift, e.g. 2 shifts or 1.5 shifts?	
<b>A</b>	%	

<b>3.7</b>	<b>What is the annual turnover of teachers or instructors, as a percentage of total teaching staff?</b>	
<b>A</b>	[if the answer is less than 10% go to question 3.11]	%
<b>B</b>	Comment:	

<b>3.8</b>	<b>If the turnover is greater than 10 percent a year, what is the principal reason?</b>	
<b>A</b>	Retirement, illness or death	<input type="checkbox"/>
<b>B</b>	Transfer to another vocational institution	<input type="checkbox"/>
<b>C</b>	Transfer to the private sector	<input type="checkbox"/>
<b>D</b>	Transfer to other jobs in public sector	<input type="checkbox"/>
<b>E</b>	Other (explain):	

<b>3.9</b>	<b>If your staff members are moving to private sector, what is the main reason for that?</b>	
<b>A</b>	Better payment	<input type="checkbox"/>
<b>B</b>	Better working conditions and benefits	<input type="checkbox"/>
<b>C</b>	Development (career promotion) prospective	<input type="checkbox"/>
<b>D</b>	Other (explain):	

<b>3.10</b>	<b>What is the need of your institution teachers' and trainers' knowledge and skills upgrade?</b>	
<b>A</b>	The entire staff is in need of considerable training for upgrading of their knowledge and skills	<input type="checkbox"/>
<b>B</b>	Most of the staff is in need of considerable training for upgrading of their knowledge and skills	<input type="checkbox"/>
<b>C</b>	Some staff members need considerable training for upgrading of their knowledge and skills	<input type="checkbox"/>
<b>D</b>	All staff has a satisfactory level of knowledge and skills	<input type="checkbox"/>

<b>3.11</b>	<b>If staff is in need of training or experience (3.11 - A, B, C), in what areas? (multiple answers possible)</b>	
<b>A</b>	Pedagogical (teaching, training) skills	<input type="checkbox"/>
<b>B</b>	Technical (professional) knowledge related to the area of teaching	<input type="checkbox"/>
<b>C</b>	Key skills (communication, languages, IT, etc.)	<input type="checkbox"/>
<b>D</b>	Managerial skills	<input type="checkbox"/>
<b>E</b>	Other (explain):	

<b>3.12</b>	<b>Does your institution have a staff development plan?</b>		
<b>A</b>	Yes (If yes, please provide a copy)	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>	<input type="checkbox"/>

<b>3.13</b>	<b>If YES, does the plan include measures/activities for?</b>		
<b>A</b>	Professional technical upgrading through courses	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	Pedagogical/andragogic training	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	Orientation before starting to work as a teacher	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	In-service training	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	Peer learning from colleagues	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	Management training for senior staff	<input type="checkbox"/>	<input type="checkbox"/>
<b>G</b>	Assessment of the need for qualification	<input type="checkbox"/>	<input type="checkbox"/>

<b>3.14</b>	<b>If YES to (3.15), is the plan sufficient?</b>		
<b>A</b>	Yes	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	Comment:		

<b>3.15</b>	<b>If YES to (3.15), is there a monitoring of the plan implementation?</b>		
<b>A</b>	Yes	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	Comment:		

<b>3.16</b>	<b>If YES to (3.15), is there a budget for staff development?</b>		
<b>A</b>	Yes (how much):	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>	<input type="checkbox"/>

<b>SECTION 4. External Relations and Industrial Activities</b>		
<b>4.1</b>	<b>What are the most relevant economic sectors offering jobs in your region? (multiple answers possible)</b>	<b>Specify according with the priority ("1" is the top priority and 5 is lowest priority)</b>
<b>A</b>	Agriculture, Forestry, Fishery and Agro-food Processing	
<b>B</b>	Mining and Electricity, Gas and Water, Energy, Manufacturing	
<b>C</b>	Manufacturing (Processing) Industry	
<b>D</b>	Construction Industry	
<b>E</b>	Trade and Business Services	
<b>F</b>	Tourism and Hospitality	
<b>G</b>	Transport, Storing and Communication Services	
<b>H</b>	Education and Training	
<b>I</b>	Health Care Sector	
<b>J</b>	Other (specify):	

<b>4.2</b>	<b>Does your institution provide any programme/training course designed jointly with a company for that company's employees?</b>
<b>A</b>	Yes <input type="checkbox"/>
<b>B</b>	No <input type="checkbox"/>
<b>4.3</b>	<b>If YES, give details of the nature, duration, frequency of those programmes/courses and the number of trained people</b>
<b>A</b>	Provide details:
<b>4.4</b>	<b>What is the purpose of the above programme/training course? (multiple choices are possible)</b>
<b>A</b>	Prepare specialist for the company <input type="checkbox"/>
<b>B</b>	Retrain the company's employees <input type="checkbox"/>
<b>C</b>	Prepare specialist for the sector in general <input type="checkbox"/>
<b>D</b>	Retrain the sector's employees <input type="checkbox"/>
<b>E</b>	Other (specify):
<b>4.5</b>	<b>Does any company provide support to your institution? If Yes, please specify the forms of that support:</b>
<b>A</b>	Provision of base for the students'/trainee's practical training at the enterprises <input type="checkbox"/>
<b>B</b>	Fiscal investments <input type="checkbox"/>
<b>C</b>	Material support (equipment, tools, materials) <input type="checkbox"/>
<b>D</b>	Retraining of the institution teachers and trainers at the enterprise <input type="checkbox"/>
<b>E</b>	Contribution to curricula and/or didactic materials developments <input type="checkbox"/>
<b>F</b>	Participation in the students'/trainee's instruction and/or assessment processes <input type="checkbox"/>
<b>G</b>	Other (specify):
<b>H</b>	No <input type="checkbox"/>
<b>I</b>	Comment:
<b>4.6</b>	<b>Does your institution provide any support (e.g. technical, financial), or the use of the facilities for graduates who are or want to become self-employed entrepreneurs?</b>
<b>A</b>	Yes (describe the nature of the support): <input type="checkbox"/>
<b>B</b>	No (comment, if needed): <input type="checkbox"/>
<b>C</b>	Opportunities for future?
<b>4.7</b>	<b>Does your institution provide any technical or other support to the private sector or local industry?</b>
<b>A</b>	Yes (describe the nature of the support): <input type="checkbox"/>
<b>B</b>	No (comment, if needed): <input type="checkbox"/>
<b>C</b>	Opportunities for future?
<b>4.8</b>	<b>Does your institution undertake production activities or provide services for which it receives income (other than vocational training courses)?</b>
<b>A</b>	Yes <input type="checkbox"/>
<b>B</b>	No (please explain what are these obstacles): <input type="checkbox"/>
<b>C</b>	Opportunities for future?

<b>4.9</b> <b>If YES to (4.7) are the generated incomes used by your institution?</b>			
<b>A</b>	Yes (please explain for what purposes it is used):	<input type="checkbox"/>	
<b>B</b>	No (please explain what are these obstacles):	<input type="checkbox"/>	
<b>C</b>	Describe:		
<b>4.10</b> <b>If YES, list the products or services, the amount of production or activity, and the value or income for the last year</b>			
	Product or Service	Output (physical units, or hours of services)	Value or Income, MKD
<b>A</b>			
<b>B</b>			
<b>C</b>			
<b>D</b>			
<b>4.11</b> <b>If YES to (4.7), describe involvement of the staff and students/trainees in the activity</b>			
<b>A</b>	Describe:		
<b>4.12</b> <b>Does your institution collaborate with other VET institutions in the country?</b>			
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>C</b>	Opportunities for future?	<input type="checkbox"/>	
<b>4.13</b> <b>Does your institution collaborate with a foreign VET institution?</b>			
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>C</b>	Opportunities for future?	<input type="checkbox"/>	
<b>4.14</b> <b>Does your institution collaborate with an Gymnasium?</b>			
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>C</b>	Opportunities for future?	<input type="checkbox"/>	
<b>4.15</b> <b>Does your institution collaborate with an Adult Education Provider?</b>			
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>C</b>	Opportunities for future?	<input type="checkbox"/>	
<b>4.16</b> <b>Does your institution collaborate with institutions that offer after-school supervision/programmes?</b>			
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>C</b>	Opportunities for future?	<input type="checkbox"/>	
<b>4.17</b> <b>Does your institution collaborate with higher education institutions?</b>			
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>	

B	No	<input type="checkbox"/>
C	Opportunities for future?	<input type="checkbox"/>

<b>SECTION 5. Management</b>		
<b>5.1</b>	<b>Please list below whom and/or what organisations the Board members represent:</b>	
<b>A</b>	1.	<input type="checkbox"/>
	2.	<input type="checkbox"/>
	3.	<input type="checkbox"/>
	4.	<input type="checkbox"/>
	5.	<input type="checkbox"/>
	6.	<input type="checkbox"/>
	7.	<input type="checkbox"/>
	8.	<input type="checkbox"/>
	9.	<input type="checkbox"/>
	10.	<input type="checkbox"/>

<b>5.2</b>	<b>How often does it meet?</b>
<b>A</b>	Once per
<b>B</b>	Comment:

<b>5.3</b>	<b>Would you assess this Boards effectiveness?</b>	
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	Effective to some extent	<input type="checkbox"/>
<b>C</b>	Rather not effective	<input type="checkbox"/>
<b>D</b>	No	<input type="checkbox"/>
<b>E</b>	Comment:	

<b>5.4</b>	<b>Does your institution have an internal management team?</b>	
<b>A</b>	Yes (specify the title, the tasks, frequency of meeting, etc.)	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	Comment:	

<b>5.5</b>	<b>Does the institution have a Business Plan (Strategic Development Plan, Action Plan)?</b>	
<b>A</b>	Yes. Please specify the title and the period: <i>(Please provide a copy, if possible)</i>	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	Comment:	

<b>5.6</b>	<b>Is there a mechanism for monitoring of:</b>	
<b>A</b>	Implementation of the above Plan (describe)	<input type="checkbox"/>
<b>B</b>	Comment:	

<b>5.7</b>	<b>How is the teaching staff of your institution organised?</b>	
<b>A</b>	In subjects	<input type="checkbox"/>
<b>B</b>	In subject groups	<input type="checkbox"/>
<b>C</b>	In departments	<input type="checkbox"/>
<b>E</b>	Explain:	

<b>F</b>	Are duties and terms of reference of staff given in writing?	<input type="checkbox"/>
<b>G</b>	How often are staff meetings held?	

5.8	<b>Only for AE programmes - Data/Records</b>		
		Hard copy	Electronically
<b>A</b>	Does your institution have records of trainee's admission? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	Are attendance registers maintained? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	Are there registers for monitoring trainee progress (starting from admission until final examination) maintained? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	Is there another method for monitoring trainee progress? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	Are records kept of teaching staff qualifications, experience and professional development? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	Are records kept on teaching staff and trainees' absences? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
<b>G</b>	Curricula	<input type="checkbox"/>	<input type="checkbox"/>
<b>I</b>	Annual or termly adult education programmes	<input type="checkbox"/>	<input type="checkbox"/>
<b>J</b>	Lesson plans - detailed training plan	<input type="checkbox"/>	<input type="checkbox"/>
<b>K</b>	Task sheets, instructional materials and information sheets to support learning	<input type="checkbox"/>	<input type="checkbox"/>
<b>L</b>	Comment:		

<b>5.9 Equipment, Spare Tools, and Consumable Materials</b>		
<b>A</b>	Is an inventory of equipment and materials maintained?	<input type="checkbox"/>
<b>B</b>	Comment:	

<b>5.10 Back Office services</b>		
<b>A</b>	Do you have an accounting system?	<input type="checkbox"/>
<b>B</b>	Do you have invoice processing?	<input type="checkbox"/>
<b>C</b>	Are costs analysed to give costs per student/trainee or graduate?	<input type="checkbox"/>
<b>D</b>	If yes, are these analyses used as a management tool?	<input type="checkbox"/>
<b>E</b>	Do you provide marketing of services? Describe:	<input type="checkbox"/>
<b>F</b>	Do you have Human Resources planning? Describe:	<input type="checkbox"/>
<b>G</b>	Comment:	

## **SECTION 6. Availability and Use of Small Tools, Measuring Equipment and Consumables**

<b>6.1 Is there a sufficient stock of small tools and measuring equipment to deliver training?</b>		
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	No. Give main reasons:	<input type="checkbox"/>
<b>C</b>	Partially	<input type="checkbox"/>
<b>D</b>	Comment:	

<b>6.2</b>	<b>Are the small tools and measuring equipment in regular use?</b>		
<b>A</b>	Yes	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	No. Give main reasons:	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	Partially	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	Comment:		

<b>6.3</b>	<b>Who is assigned/authorised for:</b>	<b>Your institution</b>	<b>Other body (specify)</b>
<b>A</b>	Determining the annual expenditures	<input type="checkbox"/>	
<b>B</b>	Selecting the material to be purchased	<input type="checkbox"/>	

<b>6.4</b>	<b>How long does it normally take to procure materials?</b>		
<b>A</b>	Specify:		

## SECTION 7. Innovations and Additional Services

<b>7.1</b>	<b>Would you say that your institution uses modern/innovative teaching, learning and/or assessment technologies, methodologies or techniques?</b>		
<b>A</b>	Yes. Please explain:	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	No. Why?	<input type="checkbox"/>	<input type="checkbox"/>

<b>7.2</b>	<b>Has your institution ever developed any innovative teaching/learning technologies, its own teaching/learning materials, handbooks, methodological guides, etc. Please describe.</b>		
<b>A</b>	Yes. Please describe:	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	If YES, have you shared it with other institutions?	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	No	<input type="checkbox"/>	<input type="checkbox"/>

<b>7.3</b>	<b>Do you exercise project-based learning in your institution?</b>		
<b>A</b>	Yes. Please describe:	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>	<input type="checkbox"/>

<b>7.4</b>	<b>Would you say that teaching/learning in your institution clearly leads to the development of competences?</b>		
<b>A</b>	Yes. Please justify/explain:	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>	<input type="checkbox"/>

<b>7.5</b>	<b>Does your institution implement VNFI or any of its elements?</b>		
<b>A</b>	Yes. Please describe:	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>	<input type="checkbox"/>

<b>7.6</b>	<b>Does your institution provide or do you think it could provide to other similar institutions the following types of support?</b>	<b>Does provide at present</b>	<b>Could provide in the future</b>
<b>A</b>	Curricula development	<input type="checkbox"/>	<input type="checkbox"/>

<b>B</b>	Mentoring	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	Teaching, learning and/or assessment materials development	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	Teacher training	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	Teacher exchanges	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	Sharing or renting facilities and/or equipment	<input type="checkbox"/>	<input type="checkbox"/>
<b>G</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>H</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>I</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>J</b>	Comment:		

7.7	<b>Does your institution provide or do you think it could provide to other similar institutions the following types of support?</b>	<i>Does provide at present</i>	<i>Could provide in the future</i>
		<input type="checkbox"/>	<input type="checkbox"/>
<b>A</b>	Labour market needs monitoring and analysis for identification of skills needs and design of relevant programmes/courses	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	Development and provision of customised training programmes for employers	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	Retraining of a company's employees, carried out on employer's premises	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	Designing and provision of courses or other activities promoting self-employment as well as contributing to civic, cultural, physical, moral and other aspects of individuals' development	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	Revision (development) of occupational/professional and educational standards;	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	Implementation of other levels of education: gymnasium education, post-secondary education, post-secondary VET studies, art education. Specify:	<input type="checkbox"/>	<input type="checkbox"/>
<b>G</b>	Joint provision of programmes with the higher educational institutions or with NGOs	<input type="checkbox"/>	<input type="checkbox"/>
<b>H</b>	Implementation of Validation of Non-formal and Informal Learning (VNFL)	<input type="checkbox"/>	<input type="checkbox"/>
<b>I</b>	Identification, adaptation and dissemination of relevant best international vet practices in the country;	<input type="checkbox"/>	<input type="checkbox"/>
<b>J</b>	Development and implementation of innovative programmes (educational and other) for contributing to the improvement of socio-economic situation of the community/region	<input type="checkbox"/>	<input type="checkbox"/>
<b>K</b>	Vocational orientation and career development for graduates and other community members	<input type="checkbox"/>	<input type="checkbox"/>
<b>L</b>	International projects	<input type="checkbox"/>	<input type="checkbox"/>
<b>M</b>	Implementation of projects and programmes that promote development of VET	<input type="checkbox"/>	<input type="checkbox"/>
<b>N</b>	Provision of recommendations, consolidated opinions on, and participants in development of strategic and programming documents targeted to the reforms of VET and Adult Education sectors	<input type="checkbox"/>	<input type="checkbox"/>
<b>O</b>	Taking measures promoting education and learning, contributing to increase of VET attractiveness ("marketing" of VET), to development of multiculturalism, respect for diversity and democratic values, and ensuring inclusiveness, e.g.	<input type="checkbox"/>	<input type="checkbox"/>

	competitions, jobs fairs, visits		
<b>P</b>	Implementing activities targeted at strengthening social partnership	<input type="checkbox"/>	<input type="checkbox"/>
<b>Q</b>	Provision of studies, surveys, researches, counselling and coaching, organisation of conferences, discussions, debates, contests, other types of events and campaigns	<input type="checkbox"/>	<input type="checkbox"/>
<b>R</b>	Incubators	<input type="checkbox"/>	<input type="checkbox"/>
<b>S</b>	Cooperation between Schools to provide courses jointly or cooperation between schools and adult education centres	<input type="checkbox"/>	<input type="checkbox"/>
<b>T</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>U</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>V</b>	Comment:		

## SECTION 8. Challenges

<b>8.1</b>	<b>Do you think that the points presented below, are challenges for VET or/and Adult education? If yes, please comment.</b>
<b>A</b>	The impact of changing demography and migration. What strategies could be applied to deal with it?
<b>B</b>	Centralisation/decentralisation of VET and Adult education governance, level of institutions' autonomy, budgets and institution management:
<b>C</b>	Decreasing attractiveness and relatively poor image of VET. What measures could be taken to improve the situation with different levels of VET (2-year, 3-year, 4-year and post-secondary) and adult education?
<b>D</b>	Collaborating with other educational providers and with other stakeholders to support regional planning and development.
<b>E</b>	Changing employment opportunities in area
<b>D</b>	Are there other matters or challenges that your institution faces and are not mentioned in the above list or in the basic information sheets or during this questionnaire? Please list: 1. 2. 3. 4. 5. 6. 7. 8. 9.

## INSTRUMENT 10 B: INTERVIEW SCHEDULE FOR MANAGER OF ADULT EDUCATION PROVIDER (AEP) INSTITUTION

### ASSESSMENT OF VET NETWORK IN NORTH MACEDONIA (2019)

This interview schedule will structure interviews carried out by ETF researchers when they visit particular adult education provider institution. The researcher will complete this document using the responses of the interviewee. It is planned that the interview will last about 1 hour. The interview schedule may be shared with the interviewee in advance of the interview to permit preparation.

Nº	
0.1	Name of the Institution
0.2	Municipality
0.3	Region
0.4	Date of the interview
0.5	Name of Interviewee
0.6	Name of Interviewer

#### SECTION 1. Quality of Output and Adult Education Impact

1.1	In your opinion, to what extent are graduates from your institution prepared for employment in the field relevant to their training?	
A	Fully prepared	<input type="checkbox"/>
B	Mainly prepared	<input type="checkbox"/>
C	Mainly not prepared	<input type="checkbox"/>
D	Not at all prepared	<input type="checkbox"/>
E	Other (explain):	
1.2	If your answer is mainly not or not at all (1.2.1 C, D), why? (multiple answers possible)	
A	The content of the training programmes are not relevant to the labour market needs	<input type="checkbox"/>
B	Trainers not sufficiently qualified for providing quality education/training	<input type="checkbox"/>
C	The institution facilities and equipment are not appropriate for providing quality training	<input type="checkbox"/>
D	Trainees are not sufficiently motivated	<input type="checkbox"/>
E	Other (explain):	
1.3	In your opinion, what percentage of your graduates gets jobs after completing the programme?	
A	In total	%
B	out of them, according with their qualification:	%
C	I do not have any information on this	<input type="checkbox"/>
1.4	According to your knowledge, what percentage of graduates finds jobs?	
A	within six months?	%
B	within one year?	%

<b>1.5</b>	<b>For graduates of which from your training programmes it is easiest to find employment? (list the easiest three)</b>	
<b>A</b>	1.	
<b>B</b>	2.	
<b>C</b>	3.	
<b>1.6</b>	<b>For graduates of which from your training programmes it is most difficult to find employment? (list the most difficult three)</b>	
<b>A</b>	1.	
<b>B</b>	2.	
<b>C</b>	3.	
<b>1.7</b>	<b>For tracking the pathways of your graduates:</b>	
<b>A</b>	What methodology is used (telephone, letters)? Please explain:	
<b>B</b>	What is the frequency of follow-up? (e.g. 6 months, 12 months, 18 months, 36 months):	
<b>C</b>	For how many years after graduation?	years
<b>1.8</b>	<b>Is there career guidance prior to adult education and training in order to make them more aware of career opportunities through adult education and training and to discover their talents and interests at any stage of their lives?</b>	
<b>A</b>	Yes (explain the principal tasks of this service and the methods used):	
<b>B</b>	No (explain the reasons and the alternative approaches, if any):	
<b>1.9</b>	<b>Is there a career development (guidance) unit (service) in your institution which helps the graduates development to find employment?</b>	
<b>A</b>	Yes (explain the principal tasks of this service and the methods used):	
<b>B</b>	No (explain whether any support to the graduates for finding employment is provided in a different way):	
<b>1.10</b>	<b>How do your graduates obtain their jobs after completing their studies?</b>	<b>Specify according with the priority ("1" is the top priority)</b>
<b>A</b>	The business approaches the institution	
<b>B</b>	The institution contacts the businesses and assists trainees	
<b>C</b>	Personal initiative is taken by graduates	
<b>D</b>	Through the employment office	
<b>E</b>	Through family/friend network and personal contact	
<b>F</b>	Job search via internet and mass media	
<b>G</b>	Job fairs	
<b>H</b>	Other (specify):	
<b>I</b>	Don't know	<input type="checkbox"/>
<b>1.11</b>	<b>Based on your knowledge, what percentage of your graduates pursues higher education?</b>	
<b>A</b>	%	<input type="checkbox"/>
<b>B</b>	I do not have any information on this	<input type="checkbox"/>

<b>1.12 Does your institution have internal quality assurance system?</b>		
<b>A</b>	Yes. Please describe:	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>1.13 Is your institution involved in any external quality assurance mechanism?</b>		
<b>A</b>	Yes. Please describe:	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>1.14</b>	<b>In your opinion, which of the following measures would most improve the quality of training offered in your institution? (choose three alternatives)</b>	<b>Specify according with the priority ("1" is the top priority and 3 is low priority)</b>
<b>A</b>	Improve buildings and facilities	
<b>B</b>	Improve equipment/tools	
<b>C</b>	Establish more and/or better computers	
<b>D</b>	Improve the quality of internet	
<b>E</b>	Improve (modernise) the curriculum and the study programmes	
<b>F</b>	Change the course of study towards more work-based learning	
<b>G</b>	Improve the quality and quantity of the training and teaching materials	
<b>H</b>	Improve assessment processes. Specify how:	
<b>I</b>	Improve assessment tools	
<b>J</b>	Increase number of trainers	
<b>K</b>	Upgrade the skills of trainers	
<b>L</b>	Increase number and or upgrade the skills of support staff, e.g. technicians	
<b>M</b>	Increase supply of raw materials and auxiliary materials such as metals, paper, spare parts, etc.	
<b>N</b>	Improve guidance and career counselling	
<b>O</b>	Improve the selection process for incoming trainees who are enrolled in the institution	
<b>P</b>	Establish closer relations with employers and industry	
<b>Q</b>	Change the governance and management model of the institution (please specify how):	
<b>R</b>	Other (specify):	
<b>S</b>	Explain how this would bring about improvements:	
<b>1.15 Does your institution have a working broadband connection with a speed of at least 2 Mbps?</b>		
<b>A</b>	Yes, always	<input type="checkbox"/>
<b>B</b>	Sometimes	<input type="checkbox"/>
<b>C</b>	No, never	<input type="checkbox"/>

<b>1.16</b>	<b>Does your institution provide wireless access to the internet?</b>	
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	For some parts of the building or buildings	<input type="checkbox"/>
<b>C</b>	No	<input type="checkbox"/>
<b>D</b>	Comment:	

<b>1.17</b>	<b>For whom internet access is available in your institution?</b>	
<b>A</b>	For the trainers, for teaching purposes	<input type="checkbox"/>
<b>B</b>	For your administrative duties	<input type="checkbox"/>
<b>C</b>	For all trainees, for learning purposes	<input type="checkbox"/>
<b>D</b>	Comment:	

<b>1.18</b>	<b>Does your institution have a digital Learning Management System (e.g. Moodle or similar)?</b>	
<b>A</b>	Yes. Please specify the type:	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>

## SECTION 2. Selection and Admission of Trainees

<b>2.1</b>	<b>Admission of trainees in your institution is determined by: (multiple answers possible)</b>	
<b>A</b>	Age (specify)	<input type="checkbox"/>
<b>B</b>	Years of general education completed (specify)	<input type="checkbox"/>
<b>C</b>	School leaving certificate (specify)	<input type="checkbox"/>
<b>D</b>	Nomination by government/Ministry	<input type="checkbox"/>
<b>E</b>	Sponsorship by industry	<input type="checkbox"/>
<b>F</b>	Ability to pay course fee	<input type="checkbox"/>
<b>G</b>	Not employed	<input type="checkbox"/>
<b>H</b>	Disadvantaged group	<input type="checkbox"/>
<b>I</b>	Other (specify)	<input type="checkbox"/>
<b>J</b>	There are no criteria	<input type="checkbox"/>

<b>2.2</b>	<b>What is the method of selection? (multiple answers possible)</b>	
<b>A</b>	Official documents, e.g. Certificates, Diploma, recommendation (specify):	<input type="checkbox"/>
<b>B</b>	Allocation by education authority	<input type="checkbox"/>
<b>C</b>	Interviews	<input type="checkbox"/>
<b>D</b>	Practical tests	<input type="checkbox"/>
<b>E</b>	Theory tests	<input type="checkbox"/>
<b>F</b>	Health examination	<input type="checkbox"/>
<b>G</b>	Average grade	<input type="checkbox"/>
<b>H</b>	Other (specify):	

<b>2.3</b>	<b>Are there any trainees who applied but have not been admitted in your institution?</b>		
<b>A</b>	Yes	Please provide estimate percentage: %	
<b>B</b>	No	<input type="checkbox"/>	
<b>C</b>	If yes, what was (were) the reason(s):		
<b>2.4</b>	<b>Are there special procedures for admission of trainees with special needs?</b>		
<b>A</b>	Yes (explain):	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>2.5</b>	<b>Are there special procedures regarding vulnerable groups?</b>		
<b>A</b>	Yes (explain):	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>2.6</b>	<b>What percentage of selected trainees is sponsored by:</b>		
<b>A</b>	Government/Ministry (specify):	%	
<b>B</b>	Private sector (specify):	%	
<b>C</b>	Others (specify):	%	
<b>SECTION 3. Staff</b>			
<b>3.1</b>	<b>Do you have a sufficient number of trainers needed in your institution?</b>		
<b>A</b>	Yes	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>3.2</b>	<b>What are the criteria for determining the number and type of trainers?</b>		
<b>A</b>	Hours or periods of teaching required in each subject or programme	<input type="checkbox"/>	
<b>B</b>	Trainee-trainer ratio, by training programme	<input type="checkbox"/>	
<b>C</b>	Trainee-staff ratio, a whole	<input type="checkbox"/>	
<b>D</b>	Combination: + + (A, B, C)	<input type="checkbox"/>	
<b>E</b>	Other (specify):		
<b>3.3</b>	<b>What are the minimum criteria for appointment as trainer? (multiple choices are possible)</b>		
<b>A</b>	General education for years	<input type="checkbox"/>	
<b>B</b>	Professional education or vocational training for years	<input type="checkbox"/>	
<b>C</b>	Vocational teacher training course for years	<input type="checkbox"/>	
<b>D</b>	Professional/vocational/trade experience in the trained field for years	<input type="checkbox"/>	
<b>E</b>	Practical test before appointment	<input type="checkbox"/>	
<b>F</b>	Satisfactory personal interview	<input type="checkbox"/>	
<b>G</b>	Age (specify):	<input type="checkbox"/>	
<b>H</b>	Other (specify):		

<b>3.4</b>	<b>In your opinion, is it possible to recruit an adequate number of qualified and experienced trainers in your institution?</b>	
<b>A</b>	Yes [go to the question 3.7]	<input type="checkbox"/>
<b>B</b>	Mainly yes	<input type="checkbox"/>
<b>C</b>	Mainly not	<input type="checkbox"/>
<b>D</b>	No	<input type="checkbox"/>
<b>3.5</b>	<b>What are the obstacles for recruiting necessary trainers?</b>	
<b>A</b>	Poor reputation/image of the trainer's profession	<input type="checkbox"/>
<b>B</b>	Low salaries, which do not attract qualified specialist	<input type="checkbox"/>
<b>C</b>	Low attractiveness of this locality	<input type="checkbox"/>
<b>D</b>	Bad work conditions at AEP institutions	<input type="checkbox"/>
<b>E</b>	Other (specify):	
<b>3.6</b>	<b>What are the obstacles for involving professionals from the industry in the AEP institutions?</b>	
<b>A</b>	Absence of companies' interest towards the Adult Education	<input type="checkbox"/>
<b>B</b>	Low salaries, which do not attract qualified specialist	<input type="checkbox"/>
<b>D</b>	Bad work conditions at AEP institutions	<input type="checkbox"/>
<b>E</b>	Other (specify):	
<b>3.7</b>	<b>Currently, what is the nominal weekly teaching load for the whole staff in teaching hours?</b>	
<b>A</b>	hours	
<b>3.8</b>	<b>What is the present average weekly teaching duty for all staff, in hours?</b>	
<b>A</b>	%	
<b>3.9</b>	<b>What is the annual turnover of trainers , as a percentage of total teaching staff?</b>	
<b>A</b>	[if the answer is less than 10% go to question 3.11]	%
<b>B</b>	Comment:	
<b>3.10</b>	<b>If the turnover is greater than 10 percent a year, what is the principal reason?</b>	
<b>A</b>	Retirement, illness or death	<input type="checkbox"/>
<b>B</b>	Transfer to another AEP or vocational institution	<input type="checkbox"/>
<b>C</b>	Transfer to the private sector	<input type="checkbox"/>
<b>D</b>	Transfer to other jobs in public sector	<input type="checkbox"/>
<b>E</b>	Other (explain):	
<b>3.11</b>	<b>If your staff members are moving to private sector, what is the main reason for that?</b>	
<b>A</b>	Better payment	<input type="checkbox"/>
<b>B</b>	Better working conditions and benefits	<input type="checkbox"/>
<b>C</b>	Development (career promotion) prospective	<input type="checkbox"/>
<b>D</b>	Other (explain):	

<b>3.12</b>	<b>What is the need of your institution trainers' knowledge and skills upgrade?</b>	
<b>A</b>	The entire staff is in need of considerable training for upgrading of their knowledge and skills	<input type="checkbox"/>
<b>B</b>	Most of the staff is in need of considerable training for upgrading of their knowledge and skills	<input type="checkbox"/>
<b>C</b>	Some staff members need considerable training for upgrading of their knowledge and skills	<input type="checkbox"/>
<b>D</b>	All staff has a satisfactory level of knowledge and skills	<input type="checkbox"/>
<b>3.13</b>	<b>If staff is in need of training or experience (3.12 - A, B, C), in what areas? (multiple answers possible)</b>	
<b>A</b>	Pedagogical (teaching, training) skills	<input type="checkbox"/>
<b>B</b>	Technical (professional) knowledge related to the area of teaching	<input type="checkbox"/>
<b>C</b>	Key skills (communication, languages, IT, etc.)	<input type="checkbox"/>
<b>D</b>	Managerial skills	<input type="checkbox"/>
<b>E</b>	Other (explain):	
<b>3.14</b>	<b>Does your institution have a staff appraisal mechanism?</b>	
<b>A</b>	Yes. Please explain	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>3.15</b>	<b>Does your institution have a staff development plan?</b>	
<b>A</b>	Yes (If yes, please provide a copy)	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>3.16</b>	<b>If YES, does the plan include measures/activities for?</b>	
<b>A</b>	Professional technical upgrading through courses	<input type="checkbox"/>
<b>B</b>	Pedagogical/andragogic training	<input type="checkbox"/>
<b>C</b>	Orientation before starting to work as a trainer	<input type="checkbox"/>
<b>D</b>	In-service training	<input type="checkbox"/>
<b>E</b>	Peer learning from colleagues	<input type="checkbox"/>
<b>F</b>	Management training for senior staff	<input type="checkbox"/>
<b>G</b>	Assessment of the need for qualification	<input type="checkbox"/>
<b>3.17</b>	<b>If YES to (3.15), is the plan sufficient?</b>	
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	Comment:	
<b>3.18</b>	<b>If YES to (3.15), is there a monitoring of the plan implementation?</b>	
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	Comment:	

<b>3.19</b>	<b>If YES to (3.15), is there a budget for staff development?</b>	
<b>A</b>	Yes (how much):	<input type="text"/>
<b>B</b>	No	<input type="text"/>

#### **SECTION 4. External Relations and Industrial Activities**

<b>4.1</b>	<b>What are the most relevant economic sectors offering jobs in your region? (multiple answers possible)</b>	<b>Specify according with the priority ("1" is the top priority and 5 is lowest priority)</b>
<b>A</b>	Agriculture, Forestry, Fishery and Agro-food Processing	
<b>B</b>	Mining and Electricity, Gas and Water, Energy, Manufacturing	
<b>C</b>	Manufacturing (Processing) Industry	
<b>D</b>	Construction Industry	
<b>E</b>	Trade and Business Services	
<b>F</b>	Tourism and Hospitality	
<b>G</b>	Transport, Storing and Communication Services	
<b>H</b>	Education and Training	
<b>I</b>	Health Care Sector	
<b>J</b>	Other (specify):	
<b>4.2</b>	<b>Does your institution provide any training programme designed jointly with a company for that company's employees?</b>	
<b>A</b>	Yes	<input type="text"/>
<b>B</b>	No	<input type="text"/>
<b>4.3</b>	<b>If YES, give details of the nature, duration, frequency of those programmes and the number of trained people</b>	
<b>A</b>	Provide details:	
<b>4.4</b>	<b>What is the purpose of the above training programme? (multiple choices are possible)</b>	
<b>A</b>	Prepare specialist for the company	<input type="text"/>
<b>B</b>	Retrain the company's employees	<input type="text"/>
<b>C</b>	Prepare specialist for the sector in general	<input type="text"/>
<b>D</b>	Retrain the sector's employees	<input type="text"/>
<b>E</b>	Other (specify):	
<b>4.5</b>	<b>Does any company provide support to your institution? If Yes, please specify the forms of that support:</b>	
<b>A</b>	Provision of base for the trainee's practical training at the enterprises	<input type="text"/>
<b>B</b>	Fiscal investments	<input type="text"/>
<b>C</b>	Material support (equipment, tools, materials)	<input type="text"/>
<b>D</b>	Retraining of the institution trainers at the enterprise	<input type="text"/>

<b>E</b>	Contribution to curricula and/or didactic materials developments	<input type="checkbox"/>	
<b>F</b>	Participation in the trainee's instruction and/or assessment processes	<input type="checkbox"/>	
<b>G</b>	Other (specify):		
<b>H</b>	No	<input type="checkbox"/>	
<b>I</b>	Comment:		
<b>4.6</b>	<b>Does your institution provide any support (e.g. technical, financial), or the use of the facilities for graduates who are or want to become self-employed entrepreneurs?</b>		
<b>A</b>	Yes (describe the nature of the support):	<input type="checkbox"/>	
<b>B</b>	No (comment, if needed):	<input type="checkbox"/>	
<b>C</b>	Opportunities for future?		
<b>4.7</b>	<b>Does your institution provide any technical or other support to the private sector or local industry?</b>		
<b>A</b>	Yes (describe the nature of the support):	<input type="checkbox"/>	
<b>B</b>	No (comment, if needed):	<input type="checkbox"/>	
<b>C</b>	Opportunities for future?		
<b>4.8</b>	<b>Does your institution undertake production activities or provide services for which it receives income (other than training programmes)?</b>		
<b>A</b>	Yes	<input type="checkbox"/>	
<b>B</b>	No (please explain what are these obstacles):	<input type="checkbox"/>	
<b>C</b>	Opportunities for future?		
<b>4.9</b>	<b>If YES to (4.7) are the generated incomes used by your institution?</b>		
<b>A</b>	Yes (please explain for what purposes it is used):	<input type="checkbox"/>	
<b>B</b>	No (please explain what are these obstacles):	<input type="checkbox"/>	
<b>C</b>	Describe:		
<b>4.10</b>	<b>If YES, list the products or services, the amount of production or activity, and the value or income for the last year</b>		
	Product or Service	Output (physical units, or hours of services)	Value or Income, MKD
<b>A</b>			
<b>B</b>			
<b>C</b>			
<b>D</b>			
<b>4.11</b>	<b>If YES to (4.7), describe involvement of the staff and trainees in the activity</b>		
<b>A</b>	Describe:		
<b>4.12</b>	<b>Does your institution collaborate with other AEP or VET institutions in the country?</b>		
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>	

<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	Opportunities for future?	<input type="checkbox"/>
<b>4.13</b>	<b>Does your institution collaborate with a foreign AEP or VET institution?</b>	
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	Opportunities for future?	<input type="checkbox"/>
<b>8.2</b>	<b>Does your institution collaborate with an Gymnasium?</b>	
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	Opportunities for future?	<input type="checkbox"/>
<b>4.14</b>	<b>Does our institution collaborate with higher education institutions?</b>	
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	Opportunities for future?	<input type="checkbox"/>
<b>4.15</b>	<b>Does our institution collaborate with, or receive any support from the local and/or regional authorities?</b>	
<b>A</b>	Yes (describe the details of the collaboration):	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>C</b>	Opportunities for future?	<input type="checkbox"/>
<b>SECTION 5. Management</b>		
<b>5.1</b>	<b>Does your institution have a formal Board of Governors?</b>	
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	No	<input type="checkbox"/>
<b>5.2</b>	<b>If YES, is the Board:</b>	
<b>A</b>	Decision making body	<input type="checkbox"/>
<b>B</b>	Consultative body	<input type="checkbox"/>
<b>C</b>	Comment:	
<b>5.3</b>	<b>Please list below whom and/or what organisations the Board members represent:</b>	
<b>A</b>	11. 12. 13. 14. 15. 16. 17. 18. 19. 20.	

<b>5.4</b> <b>Please present the principal tasks of the Board:</b>			
<b>A</b>	1. 2. 3. 4. 5.		
<b>5.5</b> <b>How often does it meet?</b>			
<b>A</b>	Once per		
<b>B</b>	Comment:		
<b>5.6</b> <b>Would you assess this Boards effectiveness?</b>			
<b>A</b>	Yes	<input type="checkbox"/>	
<b>B</b>	Effective to some extent	<input type="checkbox"/>	
<b>C</b>	Rather not effective	<input type="checkbox"/>	
<b>D</b>	No	<input type="checkbox"/>	
<b>E</b>	Comment:		
<b>5.7</b> <b>Does your institution have an internal management team?</b>			
<b>A</b>	Yes (specify the title, the tasks, frequency of meeting, etc.)	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>C</b>	Comment:		
<b>5.8</b> <b>Does the institution have a Business Plan (Strategic Development Plan, Action Plan)?</b>			
<b>A</b>	Yes. Please specify the title and the period: <i>(Please provide a copy, if possible)</i>	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>C</b>	Comment:		
<b>5.9</b> <b>Is there a mechanism for monitoring of:</b>			
<b>A</b>	Implementation of the above Plan (describe)	<input type="checkbox"/>	
<b>B</b>	Institutions performance (describe)	<input type="checkbox"/>	
<b>C</b>	Comment:		
<b>5.10</b> <b>Who is responsible for:</b>		<b>Your institution</b>	<b>Other body (specify)</b>
<b>A</b>	Recruitment and appointment of trainers	<input type="checkbox"/>	
<b>B</b>	Recruitment and appointment of support staff	<input type="checkbox"/>	
<b>C</b>	Recruitment or selection of trainees	<input type="checkbox"/>	
<b>D</b>	Design of occupational standards	<input type="checkbox"/>	
<b>E</b>	Design of curricula	<input type="checkbox"/>	
<b>F</b>	Adaptation of curricula to local conditions	<input type="checkbox"/>	
<b>G</b>	Revision of occupational standards	<input type="checkbox"/>	

H	Revision of curricula	<input type="checkbox"/>	
I	Preparation of training materials	<input type="checkbox"/>	
J	Design of examinations	<input type="checkbox"/>	
K	Providing of formative (currents) assessment (exams, test)	<input type="checkbox"/>	
L	Providing of summative (final) assessment (exams, test)	<input type="checkbox"/>	
M	Awarding of certification to graduates	<input type="checkbox"/>	
N	Concluding cooperation contracts with other organisations, e.g. an employer or a university	<input type="checkbox"/>	
O	Purchase of equipment	<input type="checkbox"/>	
P	Purchase of consumable materials	<input type="checkbox"/>	
Q	Annual/midterm/long term planning	<input type="checkbox"/>	
R	Monitoring/evaluation planning	<input type="checkbox"/>	

#### 5.11 How is the teaching staff of your institution organised?

A	In subjects	<input type="checkbox"/>
B	In programmes	<input type="checkbox"/>
C	In departments	<input type="checkbox"/>
E	Explain:	
F	Are duties and terms of reference of staff given in writing?	<input type="checkbox"/>
G	How often are staff meetings held?	

#### 5.12 Organisation of instruction process

A	Is there a programme timetable/calendar for the year?	<input type="checkbox"/>
B	Is there a workshop workload chart?	<input type="checkbox"/>
C	Are there individual staff teaching timetables?	<input type="checkbox"/>
E	During what hours (or periods) your institution is open every day/week?	
F	How many weeks each year does your institution operate?	
G	Comment:	

#### 5.13 Data/Records

		Hard copy	Electronically
A	Does your institution have records of trainee's admission? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
B	Are attendance registers maintained? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
C	Are there registers for monitoring trainee progress (starting from admission until final examination) maintained? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
D	Is there another method for monitoring trainee progress? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
E	Are records kept of teaching staff qualifications,	<input type="checkbox"/>	<input type="checkbox"/>

	experience and professional development? Explain:		
<b>F</b>	Are records kept on teaching staff and trainees' absences? Explain:	<input type="checkbox"/>	<input type="checkbox"/>
<b>G</b>	Curricula	<input type="checkbox"/>	<input type="checkbox"/>
<b>I</b>	Annual or termly training programmes	<input type="checkbox"/>	<input type="checkbox"/>
<b>J</b>	Lesson plans - detailed training plan	<input type="checkbox"/>	<input type="checkbox"/>
<b>K</b>	Task sheets, instructional materials and information sheets to support learning	<input type="checkbox"/>	<input type="checkbox"/>
<b>L</b>	Comment:		

<b>5.14</b>	<b>Equipment, Spare Tools, and Consumable Materials</b>	
<b>A</b>	Is an inventory of equipment and materials maintained?	<input type="checkbox"/>
<b>B</b>	Comment:	

<b>5.15</b>	<b>Back Office services</b>	
<b>A</b>	Do you have an accounting system?	<input type="checkbox"/>
<b>B</b>	Do you have invoice processing?	<input type="checkbox"/>
<b>C</b>	Are costs analysed to give costs per student/trainee or graduate?	<input type="checkbox"/>
<b>D</b>	If yes, are these analyses used as a management tool?	<input type="checkbox"/>
<b>E</b>	Do you provide marketing of services? Describe:	<input type="checkbox"/>
<b>F</b>	Do you have Human Resources planning? Describe:	<input type="checkbox"/>
<b>G</b>	Comment:	

## SECTION 6. Availability and Use of Small Tools, Measuring Equipment and Consumables

<b>6.1</b>	<b>Is there a sufficient stock of small tools and measuring equipment to deliver training?</b>	
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	No. Give main reasons:	<input type="checkbox"/>
<b>C</b>	Partially	<input type="checkbox"/>
<b>D</b>	Comment:	

<b>6.2</b>	<b>Are the small tools and measuring equipment in regular use?</b>	
<b>A</b>	Yes	<input type="checkbox"/>
<b>B</b>	No. Give main reasons:	<input type="checkbox"/>
<b>C</b>	Partially	<input type="checkbox"/>
<b>D</b>	Comment:	

<b>6.3</b>	<b>Who is assigned/authorised for:</b>	Your institution	Other body (specify)
<b>A</b>	Determining the annual expenditures	<input type="checkbox"/>	
<b>B</b>	Selecting the material to be purchased	<input type="checkbox"/>	
<b>6.4</b>	<b>How long does it normally take to procure materials?</b>		
<b>A</b>	Specify:		
<b>SECTION 7. Innovations and Additional Services</b>			
<b>7.1</b>	<b>Would you say that your institution uses modern/innovative teaching, learning and/or assessment technologies, methodologies or techniques?</b>		
<b>A</b>	Yes. Please explain:	<input type="checkbox"/>	
<b>B</b>	No. Why?	<input type="checkbox"/>	
<b>7.2</b>	<b>Has your institution ever developed any innovative teaching/learning technologies, its own teaching/learning materials, handbooks, methodological guides, etc. Please describe.</b>		
<b>A</b>	Yes. Please describe:	<input type="checkbox"/>	
<b>B</b>	If YES, have you shared it with other institutions?	<input type="checkbox"/>	
<b>C</b>	No	<input type="checkbox"/>	
<b>7.3</b>	<b>Do you exercise project-based learning in your institution?</b>		
<b>A</b>	Yes. Please describe:	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>7.4</b>	<b>Is teaching/learning in your institution based on learning outcomes?</b>		
<b>A</b>	Yes. By which document they are defined? . Please provide.	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>7.5</b>	<b>Would you say that teaching/learning in your institution clearly leads to the development of competences?</b>		
<b>A</b>	Yes. Please justify/explain:	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>7.6</b>	<b>Does your institution implement VNFI or any of its elements?</b>		
<b>A</b>	Yes. Please describe:	<input type="checkbox"/>	
<b>B</b>	No	<input type="checkbox"/>	
<b>7.7</b>	<b>Does your institution provide or do you think it could provide to other similar institutions the following types of support?</b>	Does provide at present	Could provide in the future
<b>A</b>	Curricula development	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	Mentoring	<input type="checkbox"/>	<input type="checkbox"/>

<b>C</b>	Teaching, learning and/or assessment materials development	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	Training of trainers	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	Trainers exchanges	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	Sharing or renting facilities and/or equipment	<input type="checkbox"/>	<input type="checkbox"/>
<b>G</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>H</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>I</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>J</b>	Comment:		

7.8	Does your institution provide or do you think it could provide to other similar institutions the following types of support?	Does provide at present	Could provide in the future
		<input type="checkbox"/>	<input type="checkbox"/>
<b>A</b>	Labour market needs monitoring and analysis for identification of skills needs and design of relevant programmes	<input type="checkbox"/>	<input type="checkbox"/>
<b>B</b>	Development and provision of customised training programmes for employers	<input type="checkbox"/>	<input type="checkbox"/>
<b>C</b>	Retraining of a company's employees, carried out on employer's premises	<input type="checkbox"/>	<input type="checkbox"/>
<b>D</b>	Designing and provision of programmes or other activities promoting self-employment as well as contributing to civic, cultural, physical, moral and other aspects of individuals' development	<input type="checkbox"/>	<input type="checkbox"/>
<b>E</b>	Revision (development) of occupational/professional and educational standards	<input type="checkbox"/>	<input type="checkbox"/>
<b>F</b>	Implementation of formal education: secondary (gymnasium and/r vocational) education, post-secondary education, post-secondary VET studies, art education. Specify:	<input type="checkbox"/>	<input type="checkbox"/>
<b>G</b>	Joint provision of programmes with the higher educational institutions or with NGOs	<input type="checkbox"/>	<input type="checkbox"/>
<b>H</b>	Implementation of Validation of Non-formal and Informal Learning (VNFILE)	<input type="checkbox"/>	<input type="checkbox"/>
<b>I</b>	Identification, adaptation and dissemination of relevant best international Adult Education practices in the country	<input type="checkbox"/>	<input type="checkbox"/>
<b>J</b>	Development and implementation of innovative programmes (educational and other) for contributing to the improvement of socio-economic situation of the community/region	<input type="checkbox"/>	<input type="checkbox"/>
<b>K</b>	Staff appraisal (for own and other institutions)	<input type="checkbox"/>	<input type="checkbox"/>
<b>L</b>	Vocational orientation and career development for graduates and other community members	<input type="checkbox"/>	<input type="checkbox"/>
<b>M</b>	International projects	<input type="checkbox"/>	<input type="checkbox"/>
<b>N</b>	Implementation of projects and programmes that promote development of Adult Education	<input type="checkbox"/>	<input type="checkbox"/>
<b>O</b>	Provision of recommendations, consolidated opinions on, and participants in development of strategic and programming documents targeted to the reforms of Adult	<input type="checkbox"/>	<input type="checkbox"/>

	Education sector		
<b>P</b>	Taking measures promoting education and learning, contributing to increase of Adult Education attractiveness (“marketing” of AE), to development of multiculturalism, respect for diversity and democratic values, and ensuring inclusiveness, e.g. competitions, jobs fairs, visits	<input type="checkbox"/>	<input type="checkbox"/>
<b>Q</b>	Implementing activities targeted at strengthening social partnership	<input type="checkbox"/>	<input type="checkbox"/>
<b>R</b>	Provision of studies, surveys, researches, counselling and coaching, organisation of conferences, discussions, debates, contests, other types of events and campaigns	<input type="checkbox"/>	<input type="checkbox"/>
<b>S</b>	Incubators	<input type="checkbox"/>	<input type="checkbox"/>
<b>T</b>	Cooperation between AEP institutions to provide programmes jointly or cooperation between VET schools and AEP institutions	<input type="checkbox"/>	<input type="checkbox"/>
<b>U</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>V</b>	Other (specify):	<input type="checkbox"/>	<input type="checkbox"/>
<b>W</b>	Comment:		

## SECTION 8. Challenges

<b>8.1</b>	<b>Do you think that the points presented below, are challenges for Adult education? If yes, please comment.</b>
<b>A</b>	The impact of changing demography and migration. What strategies could be applied to deal with it?
<b>B</b>	Centralisation/decentralisation of Adult education governance, level of institutions' autonomy, budgets and institution management:
<b>C</b>	Decreasing attractiveness and relatively poor image of Adult education. What measures could be taken to Improve the situation with adult education?
<b>D</b>	Collaborating with other educational providers and with other stakeholders to support regional planning and development
<b>E</b>	Changing employment opportunities in area
<b>D</b>	Are there other matters or challenges that your institution faces and are not mentioned in the above list or in the basic information sheets or during this questionnaire? Please list: 10. 11. 12. 13. 14. 15. 16. 17. 18.

## ANNEX 2. STUDENTS, TEACHERS AND STUDENT/TEACHER RATIO AS BY VET SCHOOLS

VET school	City	Students	Teachers	Ratio
<b>Vardar region</b>		<b>4,035</b>	<b>435</b>	<b>9.3</b>
1. VET school /Gymnasium Dobri Daskalov	Kavadarci	751	58	12,94
2. VET school Kiro Spandzov Brko	Kavadarci	417	45	9,27
3. VET school Gjorche Petrov	Kavadarci	140	40	3,50
4. VET school Ss Cyril and Methodius	Negotino	631	71	8,89
5. VET school Kocho Racin	Sveti Nikole	474	70	6,77
6. VET school Dimitrija Cupovski	Veles	529	42	12,59
7. VET school Kole Nedelkovski	Veles	722	67	10,78
8. VET school Jovce Teslichkov	Veles	371	42	8,83
<b>Eastern region</b>		<b>4,698</b>	<b>498</b>	<b>9.4</b>
9. VET school Aco Ruskovski	Berovo	421	52	8,09
10. VET school Metodija M Brico	Delchevo	371	52	7,13
11. VET school Ljupco Santov	Kocani	649	57	11,38
12. VET school Gosho Vikentiev	Kocani	800	79	10,13
13. VET school Naum N Borche	Probishtip	313	43	7,28
14. VET school Jane Sandanski	Shtip	809	62	13,05
15. VET school Kole Nehtenin	Shtip	727	68	10,69
16. VET school Dimitar Miraschiev	Shtip	90	23	3,91
17. VET school Vancho Prke	Vinica	518	62	8,35
18. SOU "Mile Janevski-Djingar"	Makedonska Kamenica	n.a.	n.a.	n.a.
<b>Southwest region</b>		<b>4,150</b>	<b>476</b>	<b>8.7</b>
19. VET school Mirko Mileski	Kichevo	841	96	8,76
20. VET school Drita	Kichevo	650	90	7,22
21. VET school St Naum Ohridski	Makedonski Brod	175	25	7,00
22. VET school Ss Cyril and Metodius	Ohrid	436	40	10,90
23. VET school St Naum Ohridski	Ohrid	554	59	9,39
24. VET school Vancho Pitosheski	Ohrid	194	32	6,06
25. VET school Niko Nestor	Struga	1300	134	9,70
26. SU "Zdravko Chochkovski"	Debar	-	-	-
<b>Southeast region - 7</b>		<b>4,659</b>	<b>433</b>	<b>10.8</b>
27. VET school Bogdanci	Bogdanci	266	34	7,82
28. VET school Josif Josifovski	Gevgelija	711	70	10,15

29. VET school Kosta Susinov	Radovish	576	62	9,29
30. VET school Dimitar Vlahov	Strumica	876	67	13,07
31. VET school Jane Sandanski	Strumica	992	82	12,09
32. VET school Nikola Karev	Strumica	1016	85	11,95
33. VET school Goce Delchev	Valandovo	222	33	6,73
<b>Pelagonia region</b>		<b>5,662</b>	<b>623</b>	<b>9.1</b>
34. VET school Jane Sandanski	Bitola	493	32	15,40
35. VET school Dr. Jovan Kalauzi	Bitola	923	68	13,57
36. VET school Gjorgji Naumov	Bitola	646	60	10,77
37. VET school Taki Daskalo	Bitola	606	96	6,31
38. VET school Kuzman Shapkarev	Bitola	57	22	2,59
39. VET school Krste Petkov Misirkov	Demir Hisar	156	30	5,20
40. VET school Naum Naumovski Borche	Krushevo	183	30	6,10
41. VET school Gjorce Petrov	Prilep	790	64	12,34
42. VET school Riste Ristevski Richko	Prilep	758	73	10,38
43. VET school Kuzman Josifovski Pitu	Prilep	355	45	7,89
44. VET school Orce Chopela	Prilep	391	53	7,38
45. VET school Tsar Samoil	Resen	304	50	6,08
<b>Polog region - 8</b>		<b>7,397</b>	<b>816</b>	<b>9.1</b>
46. VET school Gostivar	Gostivar	1008	79	12,76
47. VET school Gostivar	Gostivar	528	91	5,80
48. VET school Gostivar	Gostivar	562	110	5,11
49. VET school Nikola Shtajn	Tetovo	2072	181	11,45
50. VET school 8 September	Tetovo	1100	108	10,18
51. VET school Gjoce Stojcheski	Tetovo	761	79	9,63
52. VET school Mosha Pijade	Tetovo	1149	145	7,92
53. VET school Negotino	Vrapciste	217	23	9,43
<b>Northeast region - 5</b>		<b>4,099</b>	<b>417</b>	<b>9.8</b>
54. VET school Mitko Pendzukliski	Kratovo	225	27	8,33
55. VET school Gjorce Petrov	Kriva Palanka	627	59	10,63
56. VET school Nace Bugjoni	Kumanovo	1909	141	13,54
57. VET school Pero Nakov	Kumanovo	886	125	7,09
58. VET school Kiro Burnaz	Kumanovo	452	65	6,95
<b>Skopje region</b>		<b>16,323</b>	<b>1,336</b>	<b>12.2</b>
59. VET school Ilinden	Ilinden	258	21	12,28
60. VET school Saraj	Saraj	395	25	15,80
61. VET school Koco Racin	Skopje	349	14	24,92
62. VET school Dr. Pance Karagjozov	Skopje	2322	136	17,07

63. VET school Georgi Dimitrov	Skopje	1238	78	15,87
64. VET school Vasil Antevski Dren	Skopje	1568	103	15,22
65. VET school Arsenij Jovkov	Skopje	1765	134	13,17
66. VET school Metodija M. Brico	Skopje	633	49	12,92
67. VET school Lazar Tanev	Skopje	684	55	12,44
68. VET school Vlado Tasevski	Skopje	1186	96	12,35
69. VET school Cvetan Dimov	Skopje	1141	98	11,64
70. VET school Mihailo Pupin	Skopje	522	48	10,87
71. VET school Marie Curie Sklodovska	Skopje	895	84	10,65
72. VET school Zdravsko Cvetkovski	Skopje	1155	125	9,24
73. VET school Shaip Jusuf	Skopje	285	31	9,19
74. VET school Boro Petrushevski	Skopje	721	79	9,13
75. VET school Dimitar Vlahov	Skopje	548	63	8,69
76. VET school Miladinovci Brothers	Skopje	429	60	7,15
77. VET school „8 Septemvri“	Skopje	229	37	6,19
<b>Total / Average</b>		<b>51,023</b>	<b>5,034</b>	<b>10.1</b>

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018.

## ANNEX 3. ENROLMENT DYNAMICS BY EDUCATION SECTORS

Sector	Qualification	2013/2014	2017/2018	+/-, %
Geology, mining and metallurgy	Metallurgy technician	32	14	-56.25
	Geology and mining technician	42	25	-40.48
Construction and geodesy	Architectural technician	98	148	51.02
	Geodesy technician	135	88	-34.81
	Construction technician	85	106	24.75
	Technical designed for interior design	65	72	10.77
Graphical	Graphic technician	58	20	-65.52
	Technician for trade and marketing	24	11	-54.17
Economy, law and trade	Bank technician	88	48	-45.45
	Business secretary	302	235	-22.18
	Economic technician	1627	1416	-12.97
	Legal technician	624	613	-1.76
	Technician for trade and marketing	162	104	-35.80
	Electro-technician - computer technique and automatics	1550	1504	-2.97
	Electro-technician - electronics and telecommunications	311	336	8.04
Electro-technical	Electro-technician - energy	201	182	-9.45
	Dental technician	131	148	12.98
	Medical nurse*	2135	3078	44.17
	Medical laboratory technician	66	68	3.03
	Pharmaceutical technician*	368	291	-20.92
Health	Physiotherapy technician	234	206	-11.96
	Veterinary technician	78	71	-8.97
	Vine and winery technician	104	76	-26.92
	Technician for agro-management	65	72	10.77
	Technician in farm production	146	108	-26.03
Agriculture-veterinary	Technician for horticulture	84	47	-44.05
	Cosmetic technician	186	305	63.98
	Optician - Technician	97	56	-42.27
	Auto mechanic - mechatronics	261	266	1.91
	Mechanic - energy technician*	339	345	1.77
Personal Services	Mechanic technician*	149	130	-12.75
	Mechanic technician for computer management*	509	470	-7.66
Mechanical				

Traffic	Technician for traffic logistics*	47	35	-25.53
	Technician for road traffic	190	154	-18.95
	Technician for transport and shipping	310	283	-8.71
Textile and leather	Computer operator for ready-made clothing	34	34	0
	Technician for ready-made clothing	221	179	-19.00
	Textile technician	14	20	-42.86
	Technician for clothing design	43	56	-30.23
	Shoe technician	20	5	-75.00
Catering and tourism	Catering technician	50	50	0
	Catering technician for rural tourism	27	26	-3.70
	Hotel and tourism technician	226	159	-29.65
Chemistry and technology	Food technician*	187	134	-28.34
	Technician - nutritionist	41	42	-2.44
	Chemistry and technology technician	201	179	-10.94
Forestry and wood processing	Technician for furniture and interior design	75	129	72.00
	Wood-processing technician	9	0	-100
	Technician for forestry and landscape design	56	41	26.78

Source: "Rationalisation of the VET School Network in the Republic of North Macedonia". MoES 2018.