

Cvna Gova Ministarstvo prosvjete i nauke

### MONTENEGRIN VOCATIONAL EDUCATION DEVELOPMENT STRATEGY (2010-2014)

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### 1. BASES FOR DEVELOPMENT OF THE VOCATIONAL EDUCATION DEVELOPMENT STRATEGY

#### 1. 1. Introductory notes

The Book of Changes defines the direction of changes in Montenegrin education system and is a general strategy for development of the education system to the level of university, with clearly defined goals, principles, contents and processes of the new concept of education. The guidelines defined in the Book of Changes, have been developed as a result of extensive discussions and agreements of representatives of schools, parents, companies, universities and others. These discussions were coordinated by the Ministry of Education of Science with the support of international experts and they served as a basis for development of a set of laws and basic methodological documents necessary for further work on the reform of education system for all the levels of education up to university.

As a follow up of the activities of implementation of the solutions envisaged in the Book of Changes, the Ministry of Education and Science made the Strategic Plan for the Education Reform for the Period 2003 – 2004. It was followed by the Strategic Plan for Education Reform for the Period 2005 – 2009 which defined the plan for development of vocational education system in the concerned period. Preparation of the Montenegrin Vocational Education Development Strategy (2010 – 2014) is a logical follow up aimed at development of the vocational education system in such a way that it provides individuals with the possibility to obtain qualifications necessary for equal participation in the labour market and for an advance in career, personal development and further education.

Montenegrin Vocational Education Development Strategy (2010-2014) was prepared by the Working Group consisting of the representatives of the Ministry of Education and Science, Vocational Education and Training Centre, Ministry of Labour and Social Welfare, Employment Office of Montenegro, Chamber of Commerce of Montenegro and Confederation of Trade Unions of Montenegro. In their work on the Strategy they were assisted by the Federal Ministry for Economic Cooperation of the Federal Republic of Germany through the GTZ project in Montenegro, which hired expert consultants from the Federal Institute for Vocational Education - BIBB.

#### 1.2. Vocational Education

According to the provisions of the General Law on Education and provisions of the Law on Vocational Education, vocational education in Montenegro is implemented as lower vocational education (two years), secondary vocational education (three or four years) and post-secondary vocational education (up to two years, which is a continuation of secondary vocational education). Vocational education also includes Master Craftsman's Exam.

Pursuant to the current legislation in the field of education, the Montenegrin education system has two types of qualifications: education level qualifications (degree) and vocational qualifications. Education level qualifications are obtained through completion of formal education curricula; they are confirmed by diplomas and they ensure both inclusion into the labour market and further education. Apart from that, completion of curricula means obtaining one or several vocational qualifications depending on whether the curricula is made on the basis of one or several occupational standards. Vocational qualifications that are confirmed by certificates will be obtained through completion of a module of a curriculum, by taking a test after the curriculum is completed or through direct testing of the knowledge obtained earlier. These qualifications ensure inclusion into the labour market and they can be recognised for attaining education levels.

A Diploma on lower vocational education is obtained after the completion of lower vocational education curriculum and after taking practical exam. The Diploma on three-year secondary vocational education is obtained upon completion of the curricula of three-year secondary vocational education and after taking final exam. The exam is internal and the school is responsible for its implementation. Further education is possible after certain additional exams are taken. A Diploma on four-year secondary vocational education is obtained upon completion of the curricula of four-year secondary vocational education and after taking vocational exam. Vocational exam consists of written exam in Mother Tongue and Literature, written exam in Mathematics or foreign language, written or oral exam in vocational-theoretical subject and practical work. From the school year 2009/2010 on the vocational exam is taken externally. From the same school year all the students of first grades of vocational schools are educated according to new curricula. Since the beginning of implementation of the legal solutions in the field of secondary vocational education, the total number of 83 curricula have been developed, for two-, three- and four-year education. Preparations for development of curricula for post-secondary vocational education are in progress.

The curricula developed so far are not modularised but there are legal and other preconditions for modularisation of curricula of lower, secondary and post-secondary vocational education.

#### 1.3. Vision and Mission

**Vision:** Develop Montenegro as a society of knowledge where vocational education, as the key factor of economic and social development will be of high-quality, flexible, efficient, with the professional human resources who will have competitive knowledge, skills and competences and who will be qualified to take part in the labour market, where each individual has equal opportunities for personal and professional development.

Mission: Establishing of the system of vocational education, developed in

cooperation with social partners, which will produce human resources qualified for efficient work according to contemporary standards of education levels, which will facilitate personal and social development of each individual.

### 1. 4. Goal of the Preparation of Vocational Education Development Strategy

Education is the key factor for development on the successful path to a society of knowledge and the knowledge-based economy. High quality of education system, and vocational education as one of its parts, is important for individuals and for the society. High-quality initial vocational education is the basis for upgrading of knowledge, skills and competences necessary for life and work of individuals who are facing challenges of fast technological changes, globalisation and demographic changes.

Montenegrin Vocational Education Development Strategy has a goal to determine the direction of development of vocational education through definition of goals and tasks the implementation of which will:

- facilitate faster response of vocational education to the labour market needs; develop qualifications based on learning outcomes in all sectors and on all the levels of complexity up to the level of university education; ensure accessibility of education, training and progression through the system for everybody (young and adults, early drop-outs, vulnerable groups, persons without any qualifications);
- ensure high-quality (initial and permanent) vocational education on the basis of defined indicators of education quality;
- help all students to develop throughout their education their vocational and key competences necessary for life and work;
- ensure conditions for making life-long learning and mobility of students (individuals) come true; ensure recognition of informal and non-formal education and connection of formal education and non-formal learning;
- ensure through vocational education personal, social and professional development of every individual, encouraging fairness, social cohesion and active participation of citizens;
- ensure comparability of qualifications obtained in Montenegro with the qualifications obtained in other countries.

### 1.5. Vocational Education Development Strategy in the Context of other Strategic Documents in Montenegro

Montenegrin Vocational Education Development Strategy is in compliance and full harmony with development priorities and strategic documents of the Government of Montenegro, including but not limited to:

- Strategy for Establishment of the National Qualification Framework in Montenegro (2008 2010), Ministry of Education and Science, 2008
- National Strategy on Employment and Human Resources Development for the Period 2007 2011, Ministry of Health, Labour and Social Welfare, 2008
- National Employment Action Plan for the Period 2010 2011, Ministry of Labour and Social Welfare, 2009
- Inclusive Education Strategy, Ministry of Education and Science, 2008
- Civic Education and Education Strategy (2007 2010), Ministry of Education and Science, 2008
- Strategy for Integration of Persons with Disabilities in Montenegro for the Period 2008 2016, Ministry of Health, Labour and Social Welfare, 2007
- Human Resources Development Montenegro 2017, CARDS Project 3, Labour Market Reform and Labour Development, Ministry of Health, Labour and Social Welfare, 2008
- Strategy of Life-long Entrepreneurial Learning, CARDS Project 3, Labour Market Reform and Labour Development, Directorate for Small and Medium Sized Enterprises, 2008
- Strategy for Development of Human Resources in Tourism in Montenegro, Ministry of Tourism, 2007
- Montenegrin Tourism Development Strategy by 2020, Ministry of Tourism and Environment Protection, 2008
- Montenegrin National Sustainable Development Strategy, Ministry of Environmental Protection and Physical Planning, 2006.
- Action Plan for Integration of Sustainable Development into the Education System for the Period 2007 2009, Ministry of Education and Science, 2007
- Montenegrin Agriculture and European Union Development Strategy for Food Production and Rural Areas, Ministry of Agriculture, Forestry and Water Management, 2006
- Information Society Development Strategy, Republic Development Secretariat, 2004

#### 1.6. Education in the European Union

Actions of the European Union in the field of education of the young and adults are based on the goals worded in Articles 149 and 150 of the EU Charter. These Articles say that European Union shall contribute to development of high-quality education encouraging cooperation between the states and, if necessary, through encouraging and supplementing their activities. EU respects the competence of the Member States for developing curricula and education systems, as well as their cultural and linguistic diversity. European Union develops programmes which encourage cooperation in the field of education. Such programmes include

SOCRATES, Leonardo da Vinci, Youth, Lifelong Learning Programme etc.

In Lisbon in March 2000 the Council of the European Union set a new strategic goal for the EU: "to become the most competent and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion". In order to achieve this goal, education and training systems have to adapt to the demands of the society based on knowledge and the need for greater and higher-quality employment.

Basic guidelines that refer to European cooperation in vocational education and training are given in the *communiqués* from Copenhagen, Maastricht, Helsinki and Bordeaux and they are mutually connected:

- 1. Increase attractiveness of vocational education, improve cooperation of key partners, open vocational education for the overall population of all ages through the perspective of life-long learning which is the most important factor for the development of the society of knowledge; identify the needs of persons with high qualifications and persons with low qualifications and of vulnerable groups; improve efficiency of vocational education, make investments in education more effective.
- 2. Strengthen the European dimension in vocational education and training through development and implementation of joint European instruments and tools for increasing transparency, quality and mobility (EQF, ECVET, counselling, recognition of knowledge acquired earlier, quality assurance, Europass). Provide the young and adults with the possibility to obtain competences for new jobs through education and training.

Vocational education in Montenegro will comply with the priorities and needs of economy, individuals and society, respecting tradition and the achieved development level of its education system, but also the recommendations set out in the documents of relevant international organisations and bodies and provisions of the European Qualification Framework.

### 1.7. Key Challenges of the Labour Market in Montenegro

Development of vocational education cannot be observed without taking into account the labour market situation or the overall economic system and education system trends. It is important to know what is going on in the overall/integral labour market and not only in the labour market for human resources produced by secondary vocational education, i.e. it is important to take into account the most important challenges of the overall labour market – the demand and supply.

Brief overview of the labour market development so far indicates to the fact that the transitional changes have had a decisive influence on the situation and trends because they caused changes in the economic structure. Transitional recession, made even worse in our region by sanctions and war, caused the loss of markets, delays in technical and technological development, financial exhaustion of the companies and led to the decline in employment and increases in unemployment.

Decrease of the share of industry and increase of the share of services in the gross domestic product caused the lack of demand for certain professions in industry, longer periods of waiting for employment, i.e. long-term unemployment with typical characteristics of structural unemployment.

These processes were particularly present in the underdeveloped region of Montenegro where labour-intensive branches were located. Jobs were lost there and it led to regional differences in the employment and unemployment levels and migrations from underdeveloped to more developed areas.

Stabilization of macro-economic environment and the process of harmonisation with the EU standards and norms facilitated establishment of more economic freedoms, openness of the system and liberalization of economic flows. In the last four to five years it has contributed to higher economic growth, particularly in the sector of services, as well as to development and encouragement of entrepreneurship and investment growth. After many years of stagnation these brought to positive trends in the labour market: increase in employment and decrease in unemployment.

The trend of decrease in employment was stopped in 2003. In 2007 employment reached the pre-transition level and the growth continued in 2008. However, in spite of that, in 2008 employment rate amounted to about 43% which means that employment was still low in that year. Therefore increasing employment remains a huge challenge for social and economic development.

The trend of decrease in unemployment lasts from the mid 2000 when the highest unemployment was registered (more than 86,000 unemployed people). At the end of 2008 the number of unemployed individuals was about 28,000 and the unemployment rate was 10.7% (from 6% to 16%, depending on the region).

In spite of many improvements there are still some problems to overcome. The most important include:

**Structural mismatch of supply and demand of labour.** Structural mismatch of supply and demand is manifested in three forms:

- In the labour market there is demand for labour of certain profiles, but education system does not produce a sufficient number of such profiles, primarily due to the lack of interest of students to obtain education in these profiles;
- In the labour market there is demand for labour of certain profiles, and there is sufficient supply of such profiles in the labour market but vacancies are not filled in;
- In the labour market there is supply of certain profiles but demand for labour of such profiles is not sufficient.

Differences in the employment and unemployment rates by regions. There are large differences in the level of development between regions and smaller territorial units - municipalities.

Hard-to-employ persons – vulnerable groups. Among the hard-to-employ, the most vulnerable groups are persons with disabilities, unemployed people with handicap, Roma, internally displaced persons and refugees, long-term unemployed (people waiting for job for more than three years), female labour and drop-outs.

Weak regional mobility. In the sectors and branches where there are vacancies there are factors that have a bad impact on regional mobility of labour (inadequate accommodation, working in shifts and seasonal jobs).

Low investments in training and specialisation. Montenegrin practice shows insufficient investments in education and training of employed people. This can be said equally for both investments made by employers and individual investments.

Significant employment in the informal sector/grey economy. Between 20% and 25% of labour in Montenegro is employed in grey economy. Informal employment is more present where demand is higher than supply, which is in the coastal municipalities and in Podgorica.

**Seasonal character of labour market.** The key place in the strategy of development of Montenegro belongs to: tourism, construction industry, trade and agriculture where the seasonal character of employment is strongly emphasised. Domination of these sectors with strongly emphasised seasonal fluctuations has a number of negative consequences in the labour market:

- In season demand for labour is very high, i.e. there is very strong need for seasonal employment,
- Out of season demand for labour/employment declines and it brings to large seasonal unemployment i.e. insufficient use of labour,
- There are huge differences in gender structure of demand for labour tourism, hospitality industry and trade employ female labour more, and female workers are less mobile. On the other side, construction industry and agriculture employ more male labour.

**Demographic challenges.** In the age pyramid in Montenegro the percentage of old population is growing. In order not to jeopardise growth and development and in order to achieve a decent standard of living it is necessary to increase the rate of employment of older population groups while increasing gradually the age required for retirement. Education, with vocational education and training as one of its parts, has a very important role and creates the basis of life-long learning.

## 2. PRIORITY AREAS OF ACTIVITIES IN VOCATIONAL EDUCATION

#### 2.1. Strengthening Institutional and Legal Framework

#### Background

Before the beginning of the reform, the education system in Montenegro was centralised with the Ministry of Education and Science being responsible for defining national policy in education, structuring and financing education, establishing and managing education institutions owned by the state, preparing legislation in the field of education and science, implementing legislation that refer to pre-school, primary school, secondary school, special school, high and adult education, teacher training, adoption of curricula and subject plans, approval of textbooks and reference books, development of research and science and research organisations and services.

Decentralisation, as the first motive, means higher democratisation of relationships. This means an increased participation of the representatives of local community, citizens, their associations and parents in all educational changes. They are allowed to have direct influence on the work in schools and on the education process. In the aim of decentralisation of the education system new institutions and bodies were established and the part of competencies of the Ministry was transferred to them. These are: Vocational Education and Training Centre, Bureau for Education Services, Examination Centre, Council for Vocational Education, Council for General Education and Council for Adult Education. In the aim of applying and developing the system consistently, several new laws were passed: General Law on Education, Law on Vocational Education, Law on Adult Education and Law on National Vocational Qualifications.

Larger number of institutions ensures better distribution of work, but at the same time it is a challenge in terms of coordination of activities and strategies for achieving the overall reform goals. In the situation in which every institution is responsible for its own sector, there is a danger of fragmentation of reform activities and lack of coherence in the implementation of the overall reform goals.

#### Strategic goals

- Timely adaptation of legislation to the current needs of the vocational education system with the view to improving the efficiency of the system; material and professional strengthening of key institutions that are holders of the activities in vocational education;
- Develop regional strategies for development of vocational education based on the National Vocational Education Development Strategy
- Establish intensive and synchronised cooperation among institutions with the aim of achieving overall goals defined in the strategic documents.

#### **Tasks**

- Monitor and analyse changes and harmonise vocational education system and legislation with the labour market trends;
- Establish a reliable database of all segments of the vocational education system that will ensure informed decision making which is a part of Montenegrin education information system;
- Innovate plans and programmes for specialisation of persons employed in key vocational education system institutions;
- Identify common goals of various strategies that refer to human resources development in the field of lower, secondary and post-secondary vocational education and establish cooperation between competent institutions with the view to harmonising the activities aimed at achieving the overall goals defined in the strategic documents.

# 2.2. Strengthening Social Partnership Background

Since the beginning of the education system reform, social partners and participants in the social dialogue have been involved on the national level in the processes of defining strategies of development and goals of changes in the education through the cooperation with the line Ministry. Participants in the social dialogue established the Vocational Education and Training Centre, Council for Vocational Education and Council for Adult Education. Social partners have their representatives in school boards of vocational schools.

General Law on Education stipulates that association of employers and Montenegrin Employment Office are not only included in managing the Vocational Education and Training Centre but they should also participate in financing the Centre. Representatives of employers and employees participate in working groups for development of new occupational standards and they are members of the bodies that adopt such standards. Representatives of the Chamber of Commerce of Montenegro, Union of Employers, Trade Union of Employees in Education and Confederation of Trade Unions of Montenegro participate in the accreditation of curricula and training programmes through their representatives in the Councils. Social partners are involved in development of curricula through expert discussions they participate in.

Department for adult education in the Vocational Education and Training Centre works on development of adult education and promotion of lifelong learning, trying to include all the social dialogue participants into that process: representatives of employers, trade unions, state institutions, NGOs.

#### Strategic goals

Participation of social partners in defining policy and in planning, implementation and monitoring and evaluation of vocational education.

#### **Tasks**

- Include employers in the activities of the labour market needs analysis and in planning of education implemented by educational institutions;
- Encourage social partners to participate actively in development of qualifications, ensuring material conditions for implementation of curricula through equipping cabinets, laboratories and workshops;
- Encourage employers to organise practical education connected with work to accept students to do a part of practical education in the working environment, in all education profiles on all the levels of vocational education;
- Involve employers in the external testing of achievements of students in the exams at the end of education levels;
- Establish the manner for providing higher participation of non-budget funds in education and create conditions for their practical implementation;
- Establish funds for scholarships for students educated according to the curricula for scarce occupations and establish the manner for providing funds for that;
- Encourage schools to cooperate with employers and local community.

#### 2.3. Decentralisation

#### **Background**

Decentralisation of education system is one of the key principles set out in the Book of Changes and operationalised through legislation for all levels of education. In the education system of Montenegro, including vocational education, decentralisation is implemented in several areas.

New institutions and bodies which ensure decentralisation have been established in the aim of better distribution of the responsibilities for decision making and development of the education system. These are: Vocational Education and Training Centre, Examination Centre, Council for Vocational Education and others. Annex 1 contains competences of these bodies and institutions in vocational education as defined in the current legislation.

Education sector puts efforts in starting the implementation of decentralisation in financing education, but the transfer of the part of competences for financing education to the level of local government has not yet been done. The overall education system in Montenegro is financed from the central level.

Schools are autonomous in development of their annual plans and programmes of work, which establishes the following: organisation of education related work;

internal quality assurance; forms, contents and distribution of tasks; enrolment plan; examination terms; teacher training; cooperation with employers and their associations etc.

Curricula developed and adopted on the national level and in line with occupational standards are designed in such a way that they define goals to be achieved through education process. Through development of annual and operational work plans the manner of achieving the goals defined in the curricula and programmes of individual subjects are set, choosing the forms and methods of work for achieving the set goals.

#### Strategic goals

Improve the decision-making procedures that are of strategic importance for the overall development of vocational education (in the field of financing, managing, development of qualifications, quality assurance, enrolment policy, textbook publishing).

#### **Tasks**

- Include local communities in financing vocational education, and distribution of responsibilities in managing the schools in line with that;
- Improve the procedures for adopting occupational standards, curricula and textbooks;
- Encourage local communities to take part in planning the needs for initial and permanent education;
- Create conditions for schools to prepare part of curricula, together with social partners, so that the curricula correspond to the needs of local communities.

#### 2.4. Connecting Vocational Education and Labour Market

### 2.4.1. Montenegrin qualifications framework Background

The key goal for the education system of every country is to provide every individual with the possibility to develop through the education system the knowledge, skills and competences which will enable him/her to learn and have personal development, satisfaction and advance throughout his/her life, as well as to ensure their participation in the labour market, easier employability and prevention of social exclusion. This strategic goal is also the goal of the Montenegrin system and establishing of Montenegrin qualification framework should support it and help its achievement through development of links among partners, connecting vocational education with other types of education in the country and making the vocational education closer to the labour market. Montenegrin qualifications framework will support recognition of knowledge,

skills and competences of individuals regardless of the way in which they are acquired. Qualifications will be described through learning outcomes and that will improve their transparency. The paths and possibilities of advancing through the education system will be clearer. Apart from that, all the activities in the process of establishing Montenegrin qualifications framework have direct impact on improvements in the quality of vocational education.

#### Strategic goal:

Establish Montenegrin qualifications framework, which will increase consistency of qualifications by clearly defining the levels through knowledge, skills and competencies and facilitate classification of qualifications according to learning outcomes; enable recognition of non-formal and informal learning and encourage life-long learning; make the procedure of obtaining qualifications transparent; develop mechanisms for quality assurance.

#### Tasks

- Define the levels and their descriptions;
- Define competences of institutions and bodies in the process of development of qualifications that are not a part of Montenegrin qualification framework;
- Establish the body to be in charge of Montenegrin qualification framework;
- Develop methodology/guidelines for classifying qualifications;
- Introduce the system of credit transfer in secondary and post-secondary vocational education;
- Introduce Europass;
- Develop common principles and procedures for:
  - Quality assurance
  - Recognition of formal and informal learning
  - Vocational guidance and counselling
  - Acquiring key competences in education;
- Establish National information system for qualifications.

#### 2.4.2. Sectoral Qualifications

#### Background

Among other things the reform of vocational education brought a comprehensive approach to development of categories in various sectors. This approach is reflected in the document bearing the title Sectoral Qualifications Framework (Structure). This document shows the connections and relations between the types of qualifications and their levels in a sector. It also shows mobility, possibility of promotion within the sector, possibility to acquire the same qualifications in different way. Sectoral qualification framework shows whether curriculum is made on the basis of one or several occupational standards and whether the standards comprising the curriculum are of the same or different level of difficulty.

In vocational education qualifications in Montenegro are classified in 14 sectors and for each of them a qualification framework is made by sectoral commissions on the basis of the analysis of situation in the labour market, possibilities for acquiring qualifications, perspectives of development of activities in the country and comparisons with other countries. Sectoral qualification frameworks are based on development and open for adding new occupations as required according to the needs and changes in the labour market.

#### Strategic goal

Develop coherent qualification frameworks for all sectors, confirmed by social partners and develop sectoral qualifications in line with the sectoral qualifications frameworks.

#### **Tasks**

- Establish sectoral commissions which comprise representatives of employers, education and other partners in qualifications development;
- Develop instruments for preparation of sectoral labour market surveys;
- Develop guidance for development of sectoral qualification frameworks;
- Develop sectoral qualifications on the basis of the defined levels and sublevels on the national level and adopted classification of qualifications, including all the qualifications up to the level of university.

#### 2.4.3. Occupational Standards

#### Background

Occupational standard is the basis for obtaining qualifications in vocational education and it defines the contents of vocational qualifications at a certain level of difficulty, as well as necessary knowledge, skills and competences.

In order to prepare students who complete vocational education curricula as well as for the labour market and in order to have the contents of their qualifications correspond to the labour market demand, curricula are developed on the basis of occupational standards. Through the occupational standards employers express their requests for key tasks in certain vocations and for the knowledge, skills and competences necessary to do such tasks.

An occupational standard comes together with the appropriate explanation stating the situation in the labour market in the sector to which the occupational standard belongs, as well as the existing possibilities for acquiring the qualification, prospects of the development of the sector and its compliance with the current legislation. Explanation of an occupational standard also contains a comparison with similar documents from EU countries, since comparability of qualifications is the basis for mobility and employability not only on the national but also on the

European labour market. Every occupational standard has its place in the sectoral qualification framework.

Occupational standards connect formal education and the system of certifying vocational qualifications which can be obtained through testing after a curriculum is completed or through direct testing of the knowledge acquired earlier or through completion of a module of certain curricula.

#### Strategic goal

Develop occupational standards for the occupations needed in the labour market, in cooperation with the social partners and on the basis of a comprehensive analysis of the situation in the sector and of prospects of sectoral development and comparison with other countries.

#### **Tasks**

- Monitoring and analysis of the changes in the labour market which, among other things, include the analysis of education structure of employed and unemployed persons and the analysis of national sectoral development documents;
- Coordinated preparation of occupational standards which assumes:
  - Compliance with the defined sectoral qualifications framework;
  - Introduction of a comprehensive approach, which means development of occupational standards and examination catalogues for certifying vocational qualifications for the whole sector, according to the sectoral development strategy;
- Analysis by the sectoral commissions of the occupational standards prepared three to five years ago and, as needed, supplementing them or developing new occupational standards (revision of occupational standards);

#### 2.4.4. Curricula

#### Background

Structure of vocational education (formal education) in Montenegro is the following: lower vocational education, secondary vocational education and post-secondary vocational education, which is a continuation of secondary vocational education.

Curricula are developed on the basis of one or several occupational standards, according to the methodology established on the national level. The curricula are then discussed by the appropriate teachers' conference and curriculum commission, adopted by the Council for Vocational Education and promulgated by the Ministry of Education and Science.

#### Strategic goals

- Improve flexibility and responsiveness of curricula to the labour market needs through development of modularised, competence-based, credit-valued curricula of wide profile, for lower, secondary and post-secondary vocational education, which ensures the possibility of choice and gradual obtaining of education levels;
- Connect general, theoretical and practical knowledge with clearly defined learning outcomes through adopted vocational and key competences;
- Structure curricula in such a way which will ensure that early drop-outs can obtain basic vocational qualification;
- Encourage the developmental role of the school and school autonomy through development of a framework curriculum on the national level and its elaboration on the school level (school curriculum) and through development of the open part of curriculum in line with the needs of local community (up to 20%);
- Recognise verified, informally acquired knowledge in the procedure of obtaining education levels;
- Envisage that in every curriculum a part of practical education is implemented with the employer in a real working environment.

#### **Tasks**

- Improve methodology for development of curricula;
- Develop the concept of inclusion of key competences in curricula;
- Develop the concept of modularisation and credit valuation of curricula for adult education;
- Develop modularised, (key and vocational) competences-based, credit-valued curricula;
- Provide expert support to schools and teachers for development of school curriculum and open part of curriculum;
- Provide expert support to schools in the implementation of curricula;
- Develop minimum standards for equipment for implementation of certain curricula;
- Systematically collect information on the implementation of curricula in schools and evaluation of curricula;
- Improve/revise the developed curricula after evaluation.
- Develop textbooks, manuals and other teaching materials for vocational-theoretical subjects and practical work classes
- Raise the quality of evaluation of knowledge and skills:
- Introduce new manners of testing and evaluation of students' knowledge in the education process;
- Raise the quality of examinations at the end of education, introducing external nature of final exams for three-year schools.

#### 2.4.5. Recognising non-formal and informal learning

The Law on National Vocational Qualifications (Official Gazette of Montenegro 80/08) opened the way for recognising non-formally acquired knowledge within formal education. This enabled adults without formal education and with appropriate knowledge to prove that they posses such knowledge and obtain publicly valid certificates of national vocational qualification.

Adults who have the qualification of the level of education which is not required in the labour market can obtain the qualification which will give them a better position in the labour market through certification process. The system of certifying vocational qualifications is a generator of qualifications, which brings to improvement and specialisation in certain sectors, thus extending the basic expert knowledge of individuals.

Certifying vocational qualifications enables people with a lower level of education, unemployed persons and early drop-outs to obtain basic vocational qualification (qualification for the first occupation) or to obtain different qualification through re-training an additional training.

#### Strategic goals

- Promote the concept of life-long learning, making life-long learning and mobility real;
- Develop mechanisms for connecting formal education with informal learning.

#### **Tasks**

- Strengthen capacities in the institutions that will implement the Law on National Vocational Qualifications and create conditions for its implementation;
- Develop modularised and credit-valued curricula, which will enable early dropouts, children with developmental disorders and adults to obtain national vocational qualifications and level of education gradually;
- Develop new forms of learning and use of new technologies in teaching and learning;
- Strengthen the services for informing and counselling that exist on the level of education providers, as well as their permanent training and specialisation.

#### 2.5. Accessibility of Education

#### 2.5.1. Enrolment policy

#### **Background**

After finishing compulsory primary school education students choose either to enrol to a gymnasium or a vocational school.

If we analyse different sectors, we can notice different levels of students' interest for certain sectors, i.e. education profiles. In three-year schools there is the highest interest for service occupations, for certain profiles in the field of electrical engineering, transport and administration, while the interest is much lower for the fields of forestry, mechanical engineering and metal processing, textile industry, leather industry and construction. The trend of decrease in the number of students for these sectors is upwards.

In the four-year vocational education there is the highest interest for education profiles in the sectors of medicine, economy and tourism, where every year there is a larger number of students applying than there are vacant places. The situation is the same also for education profiles in the sector of electrical engineering and transportation. In other sectors the number of places is much larger than the number of students that apply.

#### Strategic goal

Enrolment policy oriented to the labour market needs and strategic commitments of Montenegrin development.

#### **Tasks**

- Implement cooperation between the Ministry of Education and Science and line ministries, Union of Employers, local government, schools and Vocational Education and Training Centre in the aim of considering the needs for human resources and defining the enrolment policy in line with the labour market needs and the strategic plans of local, regional and national development;
- Promotion of vocational education;
- Define and introduce score limit (threshold) for enrolment of students in the four-year education profiles;
- Establish mechanisms in school for monitoring students after they complete education.

#### 2.5.2. Network of Schools, Equipment in Schools

#### **Background**

The school network for conducting secondary vocational education comprises 26 vocational and 11 combined schools. Every school year students are offered about 80 education profiles – 35 three-year and about 45 four-year programmes. In vocational schools there are about 21,000 students, which is 68% of the total

number of students in all secondary schools. Teaching is conducted by about 2,000 teachers. The existing school network ensures acceptance of all the students willing to continue education after finishing primary school, but the selection of education profiles is still not in line with labour market needs and plans for development of municipalities or regions.

#### Strategic goals

- Establish labour-market oriented school network according to territorial principle, strategic directions for development of the municipality the network belongs to, regional development and national interests.
- Establish a school network which by its material, human resources and spatial capacities corresponds to the modern teaching standards defined in curricula with the aim to create competent and competitive human resources in the labour market.

#### **Tasks**

- Harmonise the school network with the enrolment policy;
- Develop minimum standards for equipment for all education profiles;
- Improve equipment in schools: classrooms for theoretical subjects and workshops and laboratories for practical teaching, classrooms for foreign languages, computer workshops etc;
- Develop teaching aids in schools;
- Open high vocational schools.

#### 2.5.3. Vocational Guidance

#### Background

In the education system of Montenegro the services of vocational guidance are provided by pedagogues or psychologists, but it could be said that so far these services have not been decisive for the students' choice of further education. For now, neither employers nor individuals have been able to get a full picture on the supply of learning opportunities and development of labour. A significant step forward in that direction is the recently introduced service of vocational guidance in the Centres for Information and Vocational Counselling.

One of the basic goals of the Centres for Information and Vocational Counselling is establishment of an appropriate mechanism to act on the policy of vocational guidance, increasing the possibility for vocational training and motivating psychological and pedagogic services in schools and other institutions to work in this field, raising awareness on vocational guidance and encouraging vocational education among the young with the emphasis on the significance of proper and timely information.

Vocational counselling is provided by psychologists – advisers for vocational guidance. Their role is primarily to provide support when working with users who have the wish and need to get additional education, who are seeking employment, who choose regular schools, who have problems with the choice of career or adaptation to work or society. In this way these advisers have a role in the reduction of problems regarding choice of further education and transition to the labour market.

#### Strategic goals

- Develop and establish mechanisms of vocational guidance, counselling and information;
- Establish appropriate mechanisms for acting on the policy of vocational guidance;
- Increase the possibility for training and motivation of psychological and pedagogical services in schools and other institutions to work in the field of vocational guidance, counselling and information;
- Raise the awareness on the importance of vocational guidance and encourage vocational education among the young with the emphasis on the importance of proper and timely information.

#### **Tasks**

- Train pedagogical and psychological services, teachers and management in schools in the field of vocational guidance, counselling and information;
- Introduce polls in final grades of primary schools with the questions about the choice of education profile and establish electronic data processing aimed at timely information of students about the possibilities for enrolment in the desired profile;
- Promote the importance of vocational guidance, promote demanded occupations and successful companies and employers;
- Establish cooperation with pedagogical and psychological services in schools and Centres for Information and Vocational Counselling;
- Ensure development of the network of Centres for Information and Vocational Counselling;
- Provide students with the possibility to make connections with companies and entrepreneurs and learn about various occupations.

#### 2.5.4. Social Inclusion

#### Background

Goals of education of students with special needs are to develop their capabilities

for full participation in the society to the extent to which their potentials allow and in line with the skills they have.

Current situation in secondary vocational schools in the field of inclusive education is not on a desired level. According to the data of the Ministry of Education and Science from the school year 2006/2007 the total number of children with special needs on the level of secondary education in Montenegro was 196 (109 girls and 87 boys). There are no data about what percentage of children is included in vocational education.

Teachers that work in vocational education are not adequately prepared to work with the students with special needs, and schools are mostly not equipped in a high quality manner to accept these children so that they could acquire knowledge and skills envisaged in the curricula in the appropriate manner. Apart from that, the practice has shown that teachers in vocational schools are much less involved in the inclusive education process, that they do not know the principles of inclusive education and that they do not see clearly what their roles, positions and functions in the whole process are.

#### Strategic goals

- Include as large percentage of children with special needs as possible in vocational education and create adequate conditions in schools for their high quality work and training which will result in knowledge and skills required by certain knowledge standards;
- Improve the basic teacher training for work with children with special educational needs;
- Promote secondary education and focus more attention and activities in the field of vocational education that can promote vulnerable groups and provide them with the opportunity for active training for work and life;
- Create conditions for implementation of the Law on National Vocational Qualifications which will provide vulnerable groups with the opportunity to obtain vocational qualifications.

#### **Tasks**

- Develop a database of children with special needs;
- Train human resources to work with children with special learning needs;
- Meet the required standards in terms of architecture;
- Establish cooperation among institutions for the purposes of exchange and flow of information between relevant institutions (school health institutions social protection institutions);
- Establish connections with special institutions in order to implement the so called "partial inclusion";
- Set the form of education related work for education fields for every individual child within individual curricula and set the manner of providing additional

- expert support, adaptation to the organisation, testing, evaluation of knowledge, achievements and progress;
- Create conditions for implementation of the Law on National Vocational Qualifications which will provide vulnerable groups with the opportunity to obtain vocational qualifications.

#### 2.6. Quality of Vocational Education

#### 2.6.1. Quality Assurance in Vocational Education

#### **Background**

Quality assurance is supported in the General Law on Education, Law on Vocational Education, Rulebook on establishing quality in the education and institutions, Rulebook on education levels of teachers in vocational schools and other regulations.

Joint teams of the Vocational Education and Training Centre and the Bureau for Education Services establish the quality of education related work in vocational schools. In the process of evaluation and self-evaluation the quality is established in the following fields: achievement of knowledge and skills according to education standards, quality of planning curriculum and extra curriculum activities in school, quality of teaching, ethos of the community, human resources management and ensuring material, technical and safety conditions for work, support that the institution provides for students, cooperation of school with parents, institutions and local community.

For the purposes of efficient organisation and implementation of self-evaluation each school has established a Group for Quality. Such groups consist of: principal of the institution, coordinator of the group, IT person, representative of pedagogical and psychological service and a friend-critic. Group for Quality prepares an action plan which is included in the annual work plan of the school.

There are established procedures for licensing education providers. Rulebook on licensing institutions in the field of education defines the conditions that education providers have to meet in order to be granted operation licence.

#### Strategic goal

Establish sustainable system of quality assurance in vocational education on the national level and on the level of schools.

#### **Tasks**

- Develop methodological framework which supports establishment and implementation of the system of quality assurance on the national level and on the level of schools;
- Develop national indicators for measuring quality of education;
- Have regular evaluations of work of educational institutions done by competent institutions and define mechanisms and procedures for improving the process of work in line with the results of evaluation;
- Improve the procedures and measurements for self-evaluation of educational institutions and for their implementation;
- Establish methodology for evaluation of curricula, develop tools for evaluation of curricula, implement evaluation and analysis and give recommendations to schools, authorities and bodies;
- Develop guidance for improvement evaluation of the students' knowledge and quality of teaching processes;
- Develop guidelines for setting the minimum standards of knowledge which include key competences (for all thematic units of subject curricula);
- Develop guidance for improving the quality of practical teaching.

# 2.6.2. Teaching and Learning Process Background

The Book of Changes established the foundation for development model of education process and introduction of the teaching-oriented planning of education, where the emphasis has moved from the contents of teaching to the goals and outcomes of education, with the view to providing children with the possibility to build a system of permanent and applicable knowledge.

In the future a completely new working environment will be created within the schools. It will be enriched by adherence to a different time schedule; teaching that is different from classical teaching in which the dominant form of work was lecturing — examination — evaluation; much more extra-curriculum activities; individual learning; research and cooperation within the process of teaching and learning. Students will alone obtain much information from various sources, frequently unsystematised and unorganised. Introduction of information technology into schools changes completely the classical approach to teaching and learning. All of these put different and more complex tasks before the teachers. Teacher becomes a person who guides, advises, motivates and socializes, encourages students to explore, acquire new knowledge and structure it, he teaches students how to learn. The knowledge that students acquire gives a new quality, necessary for development of lifelong learning. Activities of students in the process of acquiring knowledge, skills and competences should be in the focus and the whole process of teaching and learning should be subjected to that.

#### Strategic goal

Create conditions for activities of students to dominate in teaching practices (like problem solving, projects, research etc) in developing the system of knowledge for the purposes of creating conditions for improvement of the quality of knowledge, its sustainability and applicability.

#### **Tasks**

- Organise education process through the principles of interactive teaching dominated by creative learning, creative thinking, problem solving and development of social skills, with the application of contemporary education technology;
- Introduce various forms and methods of work aimed at increasing the active role of students;
- Introduce continual and development-analytical consideration of students' progress;
- Use textbooks, manuals and other teaching aids for teachers and students which meet the criteria of quality in terms of methodology;
- Modernise the system of initial teacher training, and create conditions for their permanent methodological and professional training.

#### 2.7. Teachers and School Management

#### **Background**

Development of human resources in the education system is set by the Ministry and the Government of Montenegro to the position of one of the priority goals in all the strategic documents adopted so far which create the basis for the overall education reform: The Book of Changes, Strategic Plans of Education Reform, Strategy of Adult Education for the Period 2005-2015.

Development of human resources is the best guarantee to respond in the most effective manner to constant changes in the society. Since this strategy assumes and proposes changes in many segments of vocational education, we could say with certainty that the success of its implementation will primarily depend on the quality of human resources in the vocational education system. Our experience has shown that the success in the implementation of all the reforms has depended on the quality of work, knowledge and competences of the key factors of their implementation.

According to the responsibilities defined in the Law, Vocational Education and Training Centre implements teacher training and training for principals of vocational schools.

Training and specialisation of teachers in vocational education is carried out in two directions:

- 1. Training teachers to improve their pedagogical knowledge and use modern methods to transfer knowledge;
- 2. Training teachers to improve their teaching methodology knowledge in theoretical subjects.

Training and specialisation of principals is done through seven compulsory modules and a final paper. 20 principals of vocational schools went through this training.

#### Strategic goal

Establish high quality system of teacher training for the purposes of extending and deepening general, vocational, pedagogical and general-education knowledge.

#### **Tasks**

- Promote the importance of life-long teacher training using the examples of good practice;
- Train management structures in schools for new methods of work and organisation in schools;
- Develop a strategic plan for training teachers in vocational education and adult education;
- Prepare new teacher training programmes modules;
- Train trainers to develop teacher training modules;
- Train trainers to implement new teacher training modules;
- Train instructors of practical education that work at the employers in adult education and pedagogy and in how to use contemporary methods for transferring knowledge to the young and adults;
- Develop database on training of teachers and other human resources employed in vocational and adult education;
- Provide conditions for teacher training with the view to promoting teachers according to the applicable legislation;
- Implement various forms of training for teachers and other human resources, principals and expert associates that are occasionally hired in the process of vocational and adult education.

### 2.8. Financing Vocational Education Background

Since the beginning of the education system reform the Ministry of Education and Science has been aspiring to decentralize financing of education and to transfer a part of the responsibilities for financing to the level of municipalities. The conditions for that have not yet been created and the total financing of the education system is still done from the central level. The Ministry of Education and Science covers all the costs for education, including the salaries of employees,

operational costs, expenditures for energy, investment maintenance, capital expenditures etc.

Apart from these, the Government allocates special funds for the education system through the "Capital Budget" – a significant part of it for the improvement of school infrastructure.

Starting from the fiscal year 2005 the Ministry of Education and Science has been applying the programme budget which contains 10 programmes, one of which is the program for secondary education.

In order to achieve financing per student, higher autonomy of schools, schools oriented to development, to take responsibility on all levels, stimulate internal motivation in schools and enhance partnership among the factors that influence operation of schools, we need to do the following in the field of financing education:

- Eliminate inefficiencies in education system and direct saved funds to the education reform;
- Introduce new methods of calculation of the needed funds for all education levels;
- Identify the manners for ensuring higher participation of non-budget funds in education and create conditions for budget financing per student.

#### Strategic goal

Achieve consensus on the national level and prepare the model of financing per student according to the positive legislation.

#### **Tasks**

- Start dialogue between education institutions, local community, social partners and the state about the method for financing vocational education;
- Develop the model of financing per student on the basis of which the Budget of the Ministry of Education and Science would be prepared;
- Ensure that school managements assume responsibilities for development of education institutions and encourage the motivation of schools to raise funds.

#### 2. 9. International Cooperation

Cooperation between education institutions and proper international partners has been established on all levels, both on the European level and on the level established on the basis of bilateral agreements with the countries interested in giving their contribution to establishing high-quality system of vocational education in Montenegro. The scope and diversity of international cooperation,

which is extremely important for education institutions in Montenegro, are the results of the systematic support to international cooperation on the national level. International cooperation has become an integral part of the work plans of education institutions on the level of contents, organisation, and finances and on the level of human resources development.

#### Strategic goals

- Encourage on the national level international cooperation and connections of education institutions with relevant international institutions;
- Ensure competitiveness of knowledge acquired by students in Montenegro with the needs of the European labour market;
- Introduce multi-culturalness and promotion of Montenegrin knowledge and culture.

#### **Tasks**

- Coordinate activities on the national level;
- Improve cooperation and connection of institutions and bodies dealing with vocational education with the appropriate institutions and bodies of European countries:
- Compare achievement of students on international level;
- Exchange experience and examples of good practice;
- Check the quality and verify the achieved education level;
- Connect schools, exchange students and teachers and joint participation in international projects.
- Introduce European dimension in education, training and employment.

# 3. IMPLEMENTATION OF MONTENEGRIN VOCATIONAL EDUCATION DEVELOPMENT STRATEGY

Montenegrin Vocational Education Development Strategy (2010- 2014) contains goals and tasks based on expert knowledge and needed for enhancement, modernization and improvement of the quality of vocational education in Montenegro.

Measures and activities necessary for achieving the goals and identified within the priority areas for enhancement of vocational education in the Vocational Education Development Strategy will be defined in the action plans. Apart from specifying the activities, the action plans will identify holders for every activity, deadlines for implementation of each activity and financing.

Development of the Action Plan for Implementation of Montenegrin Vocational

Education Development Strategy (2010 – 2014) should start immediately after the Strategy is adopted by the Government of Montenegro.

#### 4. ANNEX

#### Responsibilities of bodies and institutions in vocational education

Ministry of Education and Science carries the activities related to establishing national policy in education, setting the framework of the education system, financing education, implementation of the national policy of education in coordination with other institutions, establishing and managing national education institutions, preparing legislation in the field of education and science, implementing legislation, international cooperation in the field of education, support and coordination of the activities of education institutions responsible for research, development, counselling and other activities.

Relevant education inspection is in charge of inspection control of the work of institutions.

Vocational Education and Training Centre carries out the advisory, research and expert activities in the field of vocational and adult education: expert activities of monitoring, analysing and developing education system; works in cooperation with the institutions on the enhancement of education related work; prepares expert tasks in the fields decided upon by the responsible councils and Ministry of Education and Science; carries out expert activities in preparing curricula, catalogues and standards of knowledge, occupational standards, norms and standards for teaching aids and equipment; carries out research and monitoring experiments; carries out advisory work in the institutions in the field of vocational and adult education and in the institutions connected with education; prepares education and pedagogic and methodological standards for textbooks and manuals for vocational subjects in vocational education; prepares professional standards for teachers; organises trainings for teachers and principals.

Examination Centre is responsible for external testing of the achieved standard of knowledge and skills. It is also responsible for the following: preparation of tasks, organisation and implementation of exams according to the law; training institutions for preparation for external examinations; advising and providing services related to external examination; research and development of the external evaluation of knowledge; international comparability of the education system quality and other tasks according to the law and memorandum of association.

Council for Vocational Education as an expert body is in charge of: passing subject syllabi and examination catalogues for practical, vocational, final, master craftsman's, graduation exams and other exams to be taken in the field of vocational education; passing curricula for vocational education, curricula for vocational education of children and the young with special needs; proposing the general part of curricula for vocational education and vocational education for

children and the young with special needs, occupational standards, catalogues for standards of knowledge and competences, etc. Occupational standards are promulgated by the Ministry of Labour and Social Welfare.

Institutions are managed by a school board which, among other things, adopts the development programme; adopts the annual work plan and report on the implementation of such a plan; discusses curricula and results of extra-curriculum activities; passes the statute, document on the internal organisation and job escription and other general documents; passes annual financial plans; adopts periodical and annual calculations; decides as a second instance body on the rights of employees, students and users of services according to the law.

Public institutions in the field of education are managed by principals who are pedagogical managers. Principles plan, organise and manage operation of the institutions.

Each institution establishes expert bodies: council of teachers, homeroom council, teachers' conference, grand teacher and other bodies envisaged in the statute of the institution. Responsibilities and the manner of work of these expert bodies are regulated by the statute of the institution.

In order to achieve their interests in an organised manner, parents establish a council of parents in the institution. Students of all classes establish a community of students. Responsibilities and manner of operation of the students' community are established in the school statute.

All the above responsibilities of institutions and bodies are defined in the General Law on Education.

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Montenegrin Vocational Education Development Strategy (2010-2014) was prepared by the Working Group:

- Marko Jokić, Ministry of Education and Science, chairman;
- Zora Bogićević, Ministry of Education and Science, coordinator;
- Duško Rajković, Vocational Education and Training Centre;
- Dušan Bošković, Vocational Education and Training Centre;
- Vladimir Radovanić, Ministry of Labour and Social Welfare;
- Nada Radovanić, Employment Office of Montenegro;
- Mladen Perazić, Chamber of Commerce of Montenegro;
- Branka Martinović, Confederation of Trade Unions of Montenegro;

Consultants: Michael Wiechert and Melanie Hoppe, German Federal Institute for Vocational Education and Training (BiBB).