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Ministry of Education and Science

# EQF Referencing Report of the Macedonian Qualifications Framework and Self-Certification to the QF-EHEA



**EQF Referencing Report of the Macedonian  
Qualifications Framework  
and  
Self-Certification to the QF-EHEA**

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# 1 INTRODUCTION

The quality of the human capital is crucial for socio-economic growth, competitiveness and employment in the Republic of Macedonia.

The development and implementation of the National Qualifications Framework is part of a broader context of change, related to implementing the Recommendation of the European Parliament and Council from 28 April 2008 on the establishment of the European Qualifications Framework for lifelong learning (EQF).

The Macedonian Qualifications Framework (MQF) was adopted in 2013. The MQF has the ambition to combine the roles of communication and support to reforms. It was established with the aim to improve education and training systems through the implementation of the learning outcomes approach; to make easier the access to learning in every context and its results explicit for every citizen; to raise the overall level of qualifications of the population; and to strengthen the links between qualifications and employment prospects. The level of stakeholders' awareness on the principles and goals of the MQF has grown markedly in 2015, as concrete actions for the implementation of the MQF have gained pace and visibility, namely:

- Establishment and staffing of the NQF Unit – under the Sector of General Affairs and Support to Minister of Education and Science
- Launch of the MQF website
- Publication of the comprehensive Inventory of all qualifications on the MQF website
- Experimentation: analysis and levelling of existing qualifications of secondary vocational education and training, and their description in learning outcomes. Lessons from the experimentation will be used in the mainstream phase of this process of analysis and levelling
- Started establishment of Sectoral Qualifications Councils
- Establishment of the National NQF Board.

The transparency and international comparability of qualifications are key in the referencing process. Successful EQF referencing will facilitate the adaptation of qualifications to the expectations of the employers and will contribute to the freedom of movement within the European labour market.

With the adoption of the Law for the National Qualifications Framework for Lifelong Learning in 2013 and the designation of an official representative as full member of the Advisory Group of the European Qualifications Framework (AG EQF), Republic of Macedonia had committed to reference its MQF to the EQF.

With the establishment of the multi-stakeholder Referencing Group under the leadership of the Ministry of Education and Science, Republic of Macedonia started the referencing process in May 2014.

One comprehensive EQF Referencing Report of the MQF and Self-Certification to the QF-EHEA has been elaborated, emphasising the strong commitment of all stakeholders to the effective implementation of the lifelong learning principle.

The Report includes information about the baseline status of the Macedonian Qualifications System, the Macedonian Qualifications Framework, the referencing and self-certification process with explanation of the preparatory, development and implementation phases, with emphasis on the next steps and activities to be implemented. Chapter 5 presents the discussion on the compliance with the ten referencing criteria set out by the EQF Advisory Group.

The Report is designed with the purpose to make the education and training system more transparent and understandable for various users in the country and internationally. Illustrations and tables serve that purpose by presenting summaries of key information.

The Report is divided into chapters.

Chapter 2 presents the entire national education system. It includes description of the education system from pre-school to higher education, description of the system for adult education and the recognition of foreign qualifications. Chapter 2 provides the following: a general description, legal framework, governance, teacher qualifications, learning outcomes, quality assurance and a summative presentation of each sub-system. The tables on qualifications awarded within each sub-system present the respective NQF level.

Chapter 3 explains the MQF development and referencing/self-certification process by addressing the role of the Macedonian Qualifications Framework (MQF), the preparatory phase, the development phase, the implementation phase, as well as the visibility of the process and the activities for further development.

Chapter 4 presents the Macedonian Qualifications Framework through its principles, objectives and functions. The MQF governance, structure, classification of qualifications and quality assurance are prescribed by the Law on the National Qualifications Framework.

Chapters 5 and 6 present the response of MQF to the EQF referencing criteria and to the QF-EHEA self-certification criteria and procedures.

Chapter 7 explains the system for validation and non-formal and in-formal learning and presents the road map for future development.

Chapter 8 presents the targeted next steps and challenges for further development of MQF.

The Report contains a set of annexes which provide more details on relevant topics.

The Referencing Report includes the opinions of the international experts involved.

The Referencing Report is result of a transparent process of analysis, meetings, consultations, public debates and conferences (national and international) with representatives of various professional groups, trade unions, employer organisations, representatives of the education system, students, training companies, governmental institutions and European experts. The European Training Foundation (ETF) has continuously supported the whole referencing process in partnership with the Ministry of Education and Science and the multi-stakeholder Working Group on Referencing by providing expertise, advice, knowledge sharing and capacity building realised by teams of international experts, including members of the EQF AG. The visibility of the referencing process was increased by presenting the work at numerous national, regional and international events. A key output of the ETF collaboration with numerous national stakeholders is the Inventory and Analysis of Existing Qualifications, carried out to strengthen the evidence basis of the referencing process and transparent levelling and insertion of the existing qualifications in the MQF.

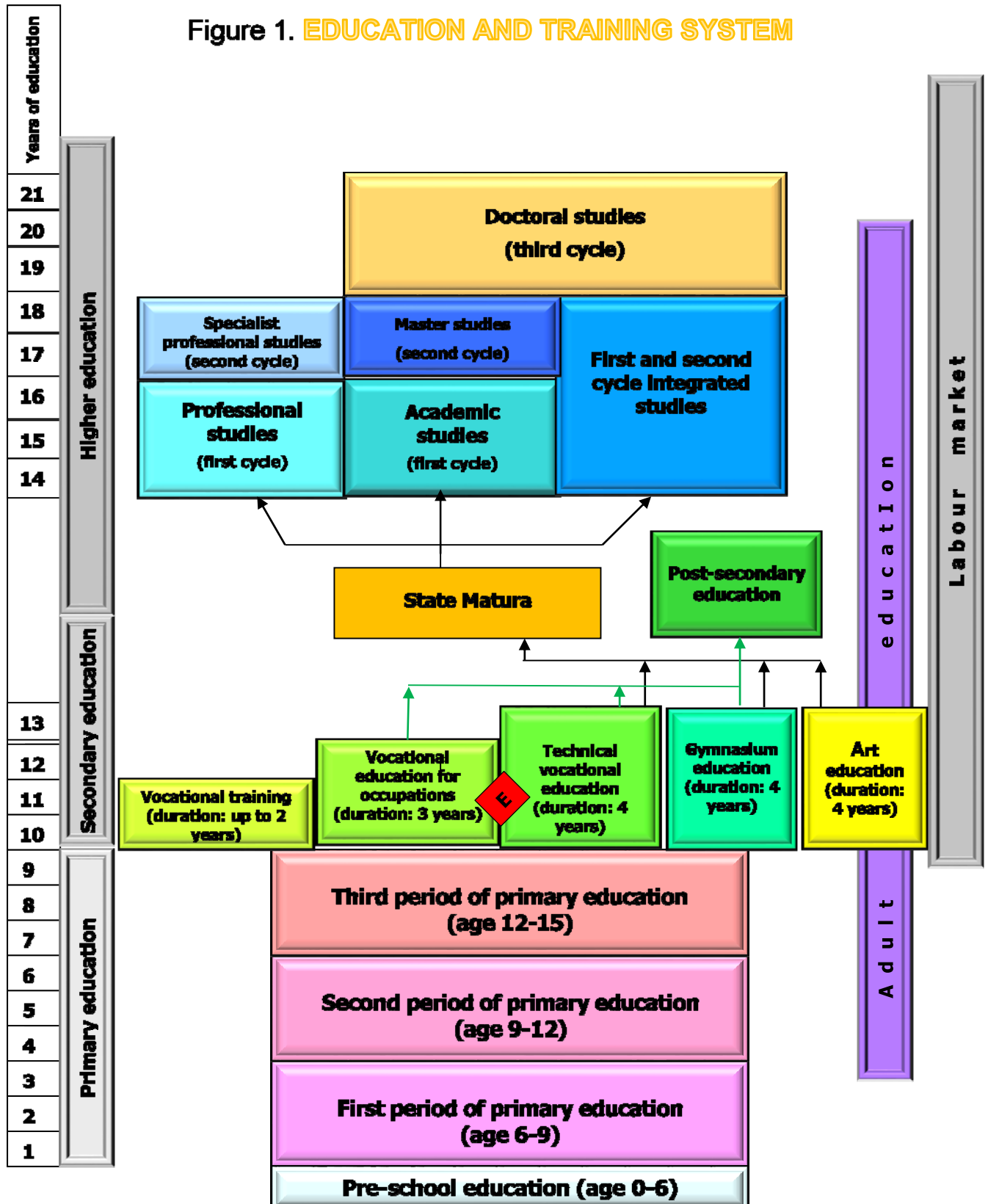
The current version of the Register of existing qualifications can be accessed on the official MQF website [http://mrk.mk/?page\\_id=408&lang=mk](http://mrk.mk/?page_id=408&lang=mk)

With support of the British Council documents for implementing MQF were developed and capacity building of employers for their increased role in MQF has continued.

The Macedonian Qualifications Framework is the key tool for changing the approaches to learning and investing in human capital in the Republic of Macedonia. The Macedonian Qualifications Framework and the Referencing Report are part of the process of development of a transparent qualifications system. They contribute towards transforming the education and training system and reforming labour market mechanisms and policies, and will ensure that certificates and diplomas issued in the Republic of Macedonia will be internationally comparable and will facilitate mobility within the Macedonian and European labour markets.

## 2 NATIONAL QUALIFICATIONS SYSTEM OF THE REPUBLIC OF MACEDONIA

### 2.1. Description of the Education and Training System



E – additional exams to be passed for entering from 3- to 4-year VET.



The education and training system of the Republic of Macedonia aims at accomplishing its' role in support to the development of a contemporary democratic society by strengthening the socio-economic, scientific, technological, cultural and civic aspects of the society. The system aims to be the driver of an inclusive, innovation-based society and high quality of life. This lifelong learning system is anticipatory and responsive to the dynamic and mobile labour market and promotes the constructive dialogue of socially responsible stakeholders.

The formal education and training system consists of preschool education, primary, secondary, post-secondary and higher education, as well as adult education. Detailed description of these sub-systems is provided in the sub-chapters below.

## 2.2.1. Preschool education

### o General description

Preschool education (ISCED 0) includes children aged between 0 and 6 years, i.e. until their enrolment in school. The curricula familiarize the children with life in society and prepare them for reading, writing and mathematics, developing language competencies and other skills for drawing, colouring, modelling, singing and dancing. This education also includes children with special needs.

Curricula are implemented in kindergartens and in early childhood development centres. The institutions for care and education of children can be public (state and municipal) or private. Upon a prior call, a domestic legal or natural person may establish an agency for preschool childcare services. Natural persons may perform certain works for care and education of preschool children as a professional activity in the parent's home or in their own homes. Abridged (non-institutional) forms of care and education may be organized for children who do not attend kindergartens. This education is also provided in hospitals, special schools or training centres.

### Statistics on preschool education:

**Table 1. Coverage in institutions for care and education of children - kindergartens (gross rates)<sup>1</sup>**

		Gross rate					
		Total			female		
age		total children	population at the same age, 31.12 (02,03,04...)	gross rate	total children	population at the same age, 31.12 (02,03,04...)	gross rate
2003/2004	from 0 to 7+ years	36605	228 193	16,04	17 659	110 292	16,01
2004/2005		36392	222 598	16,35	17 740	107 594	16,49
2005/2006		20967	216 865	9,67	10 268	104 998	9,78
2006/2007		21525	213 143	10,10	10 622	103 258	10,29
2007/2008		20564	209 924	9,80	10 136	101 624	9,97
2008/2009		21 711	208 458	10,42	10 803	100 986	10,70
2009/2010		22 213	206 232	10,77	10 896	99 823	10,92
2010/2011	from 0 to 6+ years	23 157	183 145	12,64	11 427	88 559	12,90
2011/2012		25 056	182 451	13,73	12 254	88 200	13,89
2012/2013		26 885	182 734	14,71	13 081	88 364	14,80
2013/2014		29 113	183 505	15,86	14 345	88 429	16,22

Source: State Statistical Office

<sup>1</sup>The gross rate equals the overall number of children in kindergartens, regardless of age, divided by the number of the population usually covering that specific age group.

**Table 2: Coverage in institutions for care and education of children - kindergartens (net rates)<sup>2</sup>**

	age	Total			female		
		total children	population at the same age, 31.12 (02,03,04...)	net rate	total children	population at the same age, 31.12 (02,03,04...)	net rate
2003/2004	0-6	34 486	171 844	20,07	16 659	83 139	20,04
2004/2005	0-6	34 608	168 928	20,49	16 844	81 655	20,63
2005/2006	0-6	20 442	165 387	12,36	10 019	80 087	12,51
2006/2007	0-6	20 256	163 431	12,39	10 026	79 224	12,66
2007/2008	0-6	20 490	160 297	12,78	10 101	77 652	13,01
2008/2009	0-6	21 638	158 658	13,64	10 769	76 873	14,01
2009/2010	0-6	22 185	159 086	13,95	10 879	77 002	14,13
2010/2011	0-6	23 103	159 932	14,45	11 405	77 288	14,76
2011/2012	0-6	25 024	159 458	15,69	12 237	77 176	15,86
2012/2013	0-6	26 864	160 657	16,72	13 071	77 517	16,86
2013/2014	0-6	29 009	161 271	17,99	14 310	77 627	18,43

Source: State Statistical Office

The kindergarten activity is implemented through the following types of programmes:

- *Full-day stay* (with duration from 9 to 11 hours);
- *Half-day stay* (with duration from 4 to 6 hours);
- *Abridged programmes* (with duration from 260 to 600 hours) for children aged between three and six years. The programmes include care and education of children. They are also designed for children in long-term hospital care.
- *Pilot programmes* – implemented in public kindergartens upon an approval by the Minister of Labour and Social Policy and upon a prior opinion from the Bureau for Development of Education.
- *Non-institutional forms of activities for children* approved by the Minister of Labour and Social Policy and upon a prior opinion from the Bureau for Development of Education – abridged programmes consisting of three hours a day: games, creative workshops, children’s workshops in the field of art and culture, sports activities. They are designed for children at age between three until the enrolment in primary school. They are implemented in public kindergartens.

The document Standards for Early Childhood Learning and Development of Children Aged 0 – 6 Years is provided on the website: [http://mrk.mk/wp-content/uploads/2015/07/Standardi\\_za\\_ran\\_detski\\_razvoj.pdf](http://mrk.mk/wp-content/uploads/2015/07/Standardi_za_ran_detski_razvoj.pdf)

#### o **Legal framework**

- **Law on Child Protection** (Official Gazette of the Republic of Macedonia No. 23/13,12/14, 44/14, 144/14, 10/15 and 25/15);
- Rulebook on the manner of work and provision of conditions for implementing teaching and methodical practice for the university students from the appropriate studies for pre-primary education and from other appropriate university faculties in the public child institutions (Official Gazette of the Republic of Macedonia No. 61/2013);
- Rulebook on the form, content and manner of maintaining the Central registry of child institutions, Registry of public child institutions established by a municipality and a municipality within the city of Skopje, Registry of agencies for provision of services for childcare of preschool children and the Registry of natural persons who individually perform works from the activity childcare and education as professional activity (Official Gazette of the Republic of Macedonia No. 61/2013);
- Rulebook on the manner of professional development of child institution employees (Official Gazette of the Republic of Macedonia No. 61/2013);
- Rulebook on the manner of provision of public kindergarten services in other premises (Official Gazette of the Republic of Macedonia No. 61/2013);

<sup>2</sup>The net rate equals the overall number of children in kindergartens at certain level of age complying with the age defined by law, and divided by the number of the population usually covering that specific age group.

- Rulebook on the manner of issuance, extension, renewal and revoking of the work license for child institution directors, professional workers, professional associates, preschool teachers and caretakers in the system for care and education of preschool children, the manner of training delivery and the form and content of the Working License Form (Official Gazette of the Republic of Macedonia No. 62/13, 154/13);
- Rulebook on the form, content and the manner of maintaining pedagogical documentation and records in kindergartens and in early childhood development centres (Official Gazette of the Republic of Macedonia No. 87/13, 154/13 and 127/2014);
- Rulebook on the indicators for evaluating the success of the planned activities from the development plans of the institutions for care and education of preschool children (Official Gazette of the Republic of Macedonia No. 87/13);
- Rulebook on performing the activity of child institutions (Official Gazette of the Republic of Macedonia No. 28/14, 40/14, 136/14 and 71/15).

### Strategies and other documents

- Programme for early learning and development (Official Gazette of the Republic of Macedonia No. 46/14);
- Programme for early learning and development of children with development disabilities (Official Gazette of the Republic of Macedonia No. 82/15);
- Early learning and development standards, Skopje 2009: [www.mtsp.gov.mk/WBStorage/Files/ran\\_detski\\_razvoj.doc](http://www.mtsp.gov.mk/WBStorage/Files/ran_detski_razvoj.doc);
- Programme for educating the preschool children in child care and education institutions about the process of growing and consuming healthy food (Official Gazette of the Republic of Macedonia No. 98/14).

### o Governance

*The Ministry of Labour and Social Policy* (website: <http://www.mtsp.gov.mk/pocetna.nsp>) adopts Standards for early learning and development, programmes in the field of preschool education, and supervises the child care, education, stay and food.

*The Bureau for Development of Education* (website: <http://bro.gov.mk/>) proposes programmes and curricula; performs and organizes research in the field of education; performs professional advisory work for improving the quality of education; performs professional monitoring of the manner of planning and implementation of the learning units.

Public kindergarten/early childhood development centre is established by the municipal council and the Government of the Republic of Macedonia upon prior opinion obtained from the Ministry of Labour and Social Policy (MLSP). The managing authority of this institution is the *Management Board*, consisting of seven members (representatives of the founder, public institution, parents and municipality). This institution is managed by a director with higher educational attainment, minimum of 5 years of work experience and child institution director license. Professional Council is established for the professional work and conducting the public activity involving children. The establishment of Parents' Council is mandatory, which will monitor, review and provide opinion on the institution's work.

*The State Education Inspectorate* performs supervision of the implementation of the educational work.

### o Teacher qualifications

The teaching staff (preschool teachers) is with higher education in preschool education and holds appropriate license.

### o Learning outcomes

The educational work is carried out in accordance with the Programme for Early Learning and Development, which is based on the Standards for Early Learning and Development. The Programme enables acquiring the following competences: motor development and healthy and safe behaviour; social and emotional development; development of language, communication and preparation for literacy; cognitive development and general knowledge acquisition, as well as access to learning.

### o Quality assurance

*Accreditation of the Programme for Early Learning and Development* – prepared by the Bureau for Development of Education and adopted by the Minister of Labour and Social Policy.

*Accreditation of childcare institution* – the institution may start operating as soon as the minister establishes that the conditions prescribed with a Rulebook have been fulfilled.

*Long-term development plan with goals and work quality evaluation indicators* – prepared by the institutions. Domains: development achievements of children; inclusive teaching practices; developing human resources and professional development for the teaching staff; ethical codes of conduct: children-preschool teacher-parents-family; curriculum addressing the development needs and interests of the children in the group and individually, etc.

*Supervision of the educational work* – performed on continual basis by the State Education Inspectorate. The supervision includes organization and implementation of the programmes and curricula, maintaining pedagogical records and documentation, as well as appropriateness of the teaching staff (preschool teachers).

*Licensing directors and other persons to work in the system of child care and education of preschool children* – the licensing is carried out by a Commission established by the Minister of Labour and Social Policy. The licensing includes training and taking professional exam. The license is issued by the Minister.

**Table 3. Summative presentation of pre-school education**

Entry requirements	Aged between 0 and 6 years (until enrolment in primary school).
Education and training	The process is realized under the Programme for Early Learning and Development in accordance with the children's age (under 2 years, 2 - 3 years, 3 - 4 years, 4 - 5 years and 5 - 6 years). The curricula familiarize the children with life in society and prepare them for reading, writing and mathematics, developing language competencies and other skills for drawing, colouring, modelling, singing and dancing. This education also includes children with special needs.
Financing	From the Budget of the Republic of Macedonia, and the budgets of the local-self-government units, parent co-financing, private donations, etc.
Teachers qualifications	The teaching staff (preschool teachers) is with higher education in preschool education and holds appropriate license.
Expected learning outcomes	Programme for Early Learning and Development, based on the Standards for Early Learning and Development. The Programme enables the acquisition of the following competences: motor development, and healthy and safe behaviour; social and economic development; development of language, communication and preparation for literacy; cognitive development and general knowledge acquisition, as well as attitude towards learning.
Assessment and awards	The child's level of development is assessed during their entry in each of the age groups. Portfolios maintained for every child, containing the following: Lists of achievements, anecdotal notes, case studies; photos of different activities; video and audio records; observation protocol; evaluation sheets prepared by the preschool teacher. The progress is measured at the end. Child's individual development and achievements are monitored. The file is communicated to the primary school at enrolment.
Progression routes	Entry in primary education.
Labour Market	/
Quality assurance	<ul style="list-style-type: none"> <li>• Accreditation of the Programme for Early Learning and Development – adopted by the Minister of Labour and Social Policy</li> <li>• Accreditation of the childcare institution</li> <li>• Self-evaluation of the institution by measuring the achievements according to the following indicators: development achievements among children; inclusive teaching practices; developing human resources and professional development; ethical codes of conduct children-preschool teacher-parents-family; curriculum addressing the development needs and interests of the children.</li> <li>• Supervision of the educational work performed by the State Education Inspectorate.</li> <li>• Licensing directors, teaching staff and other persons to work in the system for childcare and education of preschool children.</li> </ul>

## 2.2.2 Primary education

### ○ General description

Primary education<sup>3</sup> (ISCED 1 and 2) is compulsory and free-of-charge for all students.

The Law on Primary Education (Official Gazette of the Republic of Macedonia No. 103/2008) introduced nine-year primary education in three educational periods: first period – first to third grade, second period – fourth to sixth grade, and third period – seventh to ninth grade.

- In the initial three years the students acquire basic knowledge and skills in reading, writing, mathematics, which are required for further development. Self-confidence, awareness of individuality, responsibility and creative thinking is developed. Due to differences in individual development, children learn from their own

<sup>3</sup> Primary education as a term in national context is used for elementary education .

experiences, experiment, handle items, use symbols, ask questions, seek answers and compare their findings with other children. The interactive teaching and active learning enable the teachers to adjust the learning process to the individual differences of each student.

- In the second period (IV-VI grade) the student is trained for logical operations of higher degree (classifying, grouping, distributing, etc.). In this period the student is not always able to think abstractly.
- In the third period (VII-IX grade) the students are trained to draw conclusions based on deductive reasoning, give explanations and interpretations, and develop hypotheses.

The primary education is implemented in municipal and state primary schools. Municipal schools are established by the municipalities. State schools are established by the Government for students with special educational needs. The municipality, i.e. the Government, may also establish international public school implementing curricula and programmes in one of the world languages (English, French, and German). The students with special educational needs are included in the regular class sections of the primary schools or in special class sections in the mainstream schools. Furthermore, primary education is also delivered in the special primary schools. Primary education is also provided in healthcare, social, penal-correctional and juvenile correctional institutions.

Teaching in special class sections in the mainstream schools and in the special schools is delivered in accordance with adapted programmes and curricula that are appropriate to the type and degree of children's educational needs. The educational work in special schools and the special class sections in primary schools is performed by teachers, defectologists, upbringers, school pedagogues and psychologists with appropriate higher educational attainment. The type of professional qualification of the persons performing the educational work in special schools and in special class sections in primary schools is regulated with a Norm for teaching staff in special schools and special classes in primary schools, as established by the Minister.

Teaching in one school year lasts 38 weeks, i.e. 180 school working days distributed in two semesters.

Total of 360 primary schools have been verified, of which 335 are municipal, 14 primary music schools, 10 state schools (4 schools for students with special needs, 5 institutes and 1 public childcare institution) and 1 school for adult education.

The curriculum is structured by subjects: compulsory, elective, supplementary and additional classes. The National educational plan for 9-year primary education is provided in Annex 1.

In the school year 2014/15, adapted curricula in mathematics and natural sciences for the first period (first to third grade) were introduced in all primary schools in accordance with the education programmes of UK's Cambridge International Examination Centre. Specifics of the adapted curricula: spiral curriculum, research and problem-solving. Train-the-trainer course and training of primary school teachers (class teachers) were delivered. The following publications were prepared: Manual for teaching mathematics and natural sciences, Guidelines on planning teaching and textbooks. Adapted curricula for the students in the second and third period of primary education will be also introduced by 2016.

**IB (International Baccalaureate) Programme** – Since the school year 2013/14, two municipal schools have been implementing the Primary Years Programme (PYP), and as of the school year 2014/15, these schools have been also implementing the Middle Years Programme (MYP). The Programme is delivered in Macedonian language.

#### Primary music education

Primary music education is not mandatory. Students attend these classes along with their regular classes. Classes are held in state schools for music and ballet education, municipal primary music schools, as well as in class sections within mainstream primary schools. Classes are held individually and as a group, depending on the type of the subject.

#### o **Legal framework**

- **Law on Primary Education** (Official Gazette of the Republic of Macedonia No. 03/08; 33/10; 116/10; 156/10; 18/11; 42/11, 51/11; 6/12, 100/12, 24/13, 41/14, 116/14, 135/14, 10/15 and 98/15);
- Rulebook on the manner of accreditation of primary schools and the form, content and manner of maintaining Central registry and Municipal registry of primary schools (Official Gazette of the Republic of Macedonia No. 19/14);
- Rulebook on the Programme for preparation and taking the primary school director exam, the manner of exam delivery and the form and content of the certificate for passed primary school director exam (Official Gazette of the Republic of Macedonia No. 78/10 и 73/11);
- Rulebook on the manner and procedure for taking the professional exam for class teacher, subject teacher and upbringer in primary school (Official Gazette of the Republic of Macedonia No. 27/96);

- Rulebook on the manner of monitoring teaching, taking the exams for pedagogical, psychological and methodical competence, as well as the manner of accreditation of higher education institutions (Official Gazette of the Republic of Macedonia No. 56/14 and 62/14);
- Rulebook on the form, content and manner of maintaining professional files of teachers and professional associates in primary schools (Official Gazette of the Republic of Macedonia No. 115/10);
- Rulebook on the form and content of the pedagogical documentation and records in primary schools, as well as the manner of their maintenance (Official Gazette of the Republic of Macedonia No. 41/09; 44/09; 64/09; 147/09; 115/09; 26/11 and 132/12);
- Rulebook on the manner and domains for performing self-evaluation of primary schools (Official Gazette of the Republic of Macedonia No. 19/14);
- Rulebook on the form and content of the annual work programme of the primary school (Decision No. 11-7664/1 of 24.12.2013)  
<http://www.mon.gov.mk/images/pdf/pravilnik%20za%20fromata%20i%20sodrzinata%20scan.pdf>;
- Rulebook on the manner of conducting student excursions and other free activities of primary school students (Decision No. 07-9992/2 of 05.06.2014); <http://www.mon.gov.mk/index.php/propisi/regulations/1800-pravilnici-za-ekskurzii-2014>;
- Rulebook on the manner and the specific criteria for organizing and conducting student competitions in certain subjects at municipal, regional and state level in primary education (Decision No. 19-2252/1 of 05.03.2013)  
[http://www.mon.gov.mk/images/pdf/natprevari\\_osnovno.pdf](http://www.mon.gov.mk/images/pdf/natprevari_osnovno.pdf);
- **Law on Primary and Secondary School Teachers** (Official Gazette of the Republic of Macedonia No. 10/15);
- Rulebook on the basic professional competences of teachers in primary and secondary schools by domains (Decision No. 01-1015/1 of 2015);
- **Law on the Bureau for Development of Education** (Official Gazette of the Republic of Macedonia No. 37/06, 142/08, 148/09, 69/13, 120/13, 148/13 and 41/14);
- **Law on the National Examination Centre** (Official Gazette of the Republic of Macedonia No. 142/08, 148/09 and 41/14);
- **Law on Education Inspection** (Official Gazette of the Republic of Macedonia No. 52/05; 81/08, 148/09, 57/10, 51/11, 24/13, 137/13, 164/13, 41/14 and 33/15);
- **Law on Pedagogical Service** (Official Gazette of the Republic of Macedonia No. 18/11 and 41/14);
- **Law on Primary and Secondary Education Textbooks** (Official Gazette of the Republic of Macedonia No. 98/08, 99/09, 83/10, 36/11, 135/11, 46/12, 24/13, 120/13 and 29/14).

### Strategies and other documents

- National Programme for Education Development in the Republic of Macedonia 2005 – 2015, with accompanying programme documents, Skopje 2005;
- Concept for nine-year primary education, February 2007;  
[http://bro.gov.mk/docs/Koncepcija\\_po\\_javna\\_rasprava\\_so\\_izmeni\\_i\\_doplnuvanja.pdf](http://bro.gov.mk/docs/Koncepcija_po_javna_rasprava_so_izmeni_i_doplnuvanja.pdf);
- Programme for counselling parents of primary school students (Official Gazette of the Republic of Macedonia No. 4/12);
- Programme for counselling primary school students (Official Gazette of the Republic of Macedonia No. 160/13);
- Assessment standards: <http://bro.gov.mk/?q=osnovno-obrazovanie-standardi>;
- Student achievement assessment criteria: [http://bro.gov.mk/docs/kriteriumi/Kriteriumi\\_za\\_ocenuvanje.pdf](http://bro.gov.mk/docs/kriteriumi/Kriteriumi_za_ocenuvanje.pdf);
- Curriculum for children of immigrants: <http://bro.gov.mk/docs/programa%20za%20iselenici.pdf>;

### o Governance

*The Ministry of Education and Science* (website: [mon.gov.mk](http://mon.gov.mk)) designs policies and monitors their implementation on all levels of education. It has the competence over the organizing, financing, promoting and developing education, as well as verifying programmes and curricula and institutions.

*The Bureau for Development of Education* proposes to the Minister of Education and Science concepts for development, programmes and curricula for primary education and education of children with special educational needs; organizes and performs activities for professional development of teaching staff and managerial staff; performs and organizes research in the field of education; performs professional advisory work for improving the quality of educational institutions; performs professional insight of the manner of planning and implementation of the learning units; prepares educational standards, standards for student achievements and implements activities for evaluation of children's achievements; prepares textbook concepts, programme for publishing textbooks and methodology for professional evaluation of textbook manuscripts and textbook quality assessment; performs publishing activities related to the development of educational activities.

The decentralization of primary and secondary education started in 2005. Establishing and managing schools is under the competence of the local-self-government (municipalities).

School managing authority is the *School Board*, composed of 9 members (representatives of the teachers, professional associates, upbringers, parents, the founder and the Ministry of Education and Science). The School Board adopts Programme for School Development, proposes Annual Work Programme and submits School Activity Report to the Municipal Council. The Board proposes financial plan and submits final financial report to the founder.

**Professional bodies are as follows:** Teachers' Council, Council of class teachers, Council of subject teachers and teachers' expert body. The Teachers' Council provides opinions on the development programme and on the annual work programme, and monitors their implementation; reviews and determines the grades of students and the work of the other expert bodies; reviews the delivery of the curriculum, and undertakes measures for their implementation; adopts decisions upon student complaints on final marks; reviews the report on the implementation of the annual work programme, on the self-evaluation and on the performed integral evaluation and proposes appropriate measures; provides opinion on the school's annual financial plan.

#### ○ **Teacher qualifications**

The education work is performed by teachers, professional associates (pedagogue, psychologist, sociologist, social worker, defectologist, and librarian) and upbringers with appropriate higher education and passed professional exam. Classes in primary schools for music and ballet education are held by teachers, accompaniments, librarians, school pedagogues and psychologists with appropriate education. The type of professional training is regulated with a Norm for the teaching staff of the primary school, which is prescribed by the Minister.

Class instructions may be held by a person with a university degree in a non-teaching field who acquired pedagogical and psychological, as well as methodical training at an accredited higher education institution.

**Teacher career development** – teachers and professional associates are developed, trained and promoted in titles: teacher-beginner, teacher, teacher-mentor and teacher-adviser. For professional associates: professional associate-beginner, professional associate, professional associate-mentor and professional associate-adviser.

#### ○ **Learning outcomes**

Learning outcomes are defined in the curriculum as learning objectives for each curricular domain in each subject based on Bloom's taxonomy.

Example of the educational programme for English language for VII grade of primary education is provided on the website [http://bro.gov.mk/docs/angliski\\_jazik\\_VII\\_odd\\_IX.pdf](http://bro.gov.mk/docs/angliski_jazik_VII_odd_IX.pdf).

#### ● **Statistics on primary and lower secondary education**

**Table 4: Primary and lower secondary schools, class sections, students and teachers**

School year	Students				Teachers	
	Total	Females	Graduated students		Total	
			Total	Females	all	females
2008/2009	215 078	104 012	26 915	13 092	16 205	10 359
2009/2010	208 980	101 150	25 730	12 316	16 403	10 703
2010/2011	201 914	98 006	24 512	11 969	16 946	11 092
2011/2012	197 859	96 367	23 786	11 642	17 233	11 382
2012/2013	194 055	94 309	22 955	11 147	17 424	11 650
2013/2014	190 541	92 542	21 355	10 365	17 624	11 820

Source: State Statistical Office

**Table 5: Primary and lower secondary schools according to the language of instruction - end of school year 2013/2014**

Total	Students		Graduated students	Teachers
	Total	Females	Total	
	190 541	92 542	21 355	17 624
Macedonian	122 962	60 120	13 531	11 474
Albanian	61 298	29 312	7 171	5 447
Turkish	5 821	2 884	589	620
Serbian	493	226	64	83

1) The number of the schools according to the language of instruction does not correspond with the data in "total" because of bilingual or trilingual instruction in some schools

## o Quality assurance

### *Accreditation of programmes and curricula*

The Bureau for Development of Education proposes curriculum, which is approved by the Minister of Education and Science. The curriculum contains compulsory and elective subjects, supplementary and additional classes.

The programmes are prepared based on the curriculum. The programmes set out the learning objectives, content, basic terms, activities and methods of teaching, mandatory use of ICT, assessment of student achievements (diagnostic checks and assessment, formative assessment, micro summative assessment, summative assessment, portfolio accessibility and mobility and manner of checking and evaluation), conditions for implementing the curriculum (premises and norm for teaching staff) and expected outcomes. The programme is prepared by a Commission composed as follows: university professors, teachers and advisors from the Bureau for Development of Education.

Classes on mother tongue and culture are organized for the children of citizens of the Republic of Macedonia staying abroad and in accordance with the ratified agreements. The classes are held in accordance with a programme and curriculum prepared by the Bureau for Development of Education and approved by the Minister of Education and Science. Children with foreign citizenship or children without citizenship who are staying in the Republic of Macedonia are entitled to primary education under the same terms and conditions as the children who are citizens of the Republic of Macedonia. The children who are citizens of EU and whose parents reside in the Republic of Macedonia, performing individual activity, i.e. self-employed or employed on the territory of the Republic of Macedonia, are entitled to acquisition of knowledge of the mother tongue and culture of their country of origin.

### *Primary school accreditation*

The accreditation is conducted in accordance with rulebooks. The Commission for accreditation of the fulfilment of the criteria for accreditation of state primary school is composed of three members: from the Ministry of Education and Science, the Bureau for Development of Education and the State Education Inspectorate. The Commission for examination of the fulfilment of the criteria for accreditation of municipal primary school is composed of four members: from the Ministry of Education and Science (MoES), the Bureau for Development of Education, the State Education Inspectorate and the municipality.

Thus verified state or municipal primary school is then registered into the Central registry of primary schools, which is maintained by MoES. Municipal primary schools are also registered in the Municipal registry of primary schools, which is maintained by the municipality for the primary schools within its territory.

### *Assessment*

The monitoring and checks of student progress and achievement are conducted by means of internal and external assessment. Internal assessment is performed by the teachers throughout the school year by means of oral or written assessment, or by doing projects. Starting from IV grade onwards, external electronic assessment is performed at the end of the school year by means of question pool. The external assessment covers two subjects for each student, except for the subjects that enable the students to acquire skills. The draft question pool is prepared by the Bureau for Development of Education. The control, final approval of questions and the administering of the testing are carried out by the National Examination Centre. The results are recorded in the certificate for completed year.

Besides national assessments the Republic of Macedonia participates in the international assessments TIMSS and PIRLS. The students of the final year of primary education have taken part in three rounds of the international assessment TIMSS (Trends in International Mathematics and Science Study): TIMSS-R 1999, TIMSS 2003 and TIMSS 2011. The nine and ten-year-old pupils have been involved in the PIRLS 2001 and PIRLS 2006 rounds.

Parent and student counselling has been performed since 2013 in accordance with appropriate programmes.

**Table 6: Qualifications awarded in primary education**

Type of school	Public document	Institution awarding the qualification	Qualification level according to NQF
Primary school	Certificate for completed appropriate grade ( <b>svidetelstvo</b> )	School	I



Example of certificate for primary education (svidetelstvo) is provided on the MQF website: [http://mrk.mk/wp-content/uploads/2015/07/Svidetelstvo\\_osnovno\\_MK-Copy.pdf](http://mrk.mk/wp-content/uploads/2015/07/Svidetelstvo_osnovno_MK-Copy.pdf)

### *Self-evaluation and integral evaluation of schools*

Each school performs biannual self-evaluation in 7 domains: programmes and curricula, student achievements, learning and teaching, student support, school climate, resources and management and administration. Self-evaluation results are published on the websites of the school and the municipality. They serve as basis for the integral evaluation, which is conducted by the State Education Inspectorate every three years for the same 7 domains.

Example of a Self-Evaluation Report of the primary school “Mirce Acev” – Gjorce Petrov, Skopje is provided on the link <http://oumirceacev.edu.mk/dokumenti.html4>

### *Licensing of directors of primary and secondary schools*

School director must be a person with higher educational attainment who fulfils the conditions for teacher/professional associate, and has at least 5 years of experience in educational work and who has passed director exam. Since 2010, the National Examination Centre has been responsible for training director candidates, administering the exam for directors of primary and public secondary schools and issuing certificates for passed exams. The Programme is implemented through the following modules: Introductory module; Theory of Organization; People in the organization; the director as a pedagogical manager; Planning and decision-making; Legislation and Finance. The exam is taken in front of an Examination Commission.

In accordance with the Law on Training and Exam for Director of Primary School, Secondary School, Secondary-School Student Dormitory and Open Civic University for Life-Long Learning, as of 2016, the licensed school directors will be attending training in duration of at least 4 seminar days (minimum 32 hours) throughout the year.

**Table 7: Summative presentation of primary education**

Entry requirements	Compulsory for children of age 6 by the end of the current calendar year. Exceptionally, upon parent request, and positive opinion of a pedagogue or psychologist, a child can be enrolled in first grade if he/she will be six years old until January 31 of the next year. Upon parent request, a relevant health institution can postpone the enrolment of the child for one year. Students with special needs can enrol in primary education. For primary music or ballet education, the age is determined according to the type of instrument and prescribed in the programme.
Education and training	Duration of 9 years, in three periods. The educational process is realized according to curricula developed by the Bureau for Development of Education and adopted by the Minister of Education and Science. The educational process is enriched with: free activities in which the students can participate by choice/interest; municipal, regional and national competitions for talented students are organized by accredited associations of teachers. Free student activities are organized in the field of science, technology, art, sports, self-protection, health promotion or by student participation in cultural and artistic, and social and humanitarian activities (school choir, orchestra, dramatic or recital clubs, activities to assist other persons, etc.). Teaching in special class sections in the mainstream schools and in the special schools is delivered in accordance with adapted programmes and curricula that are appropriate to the type and degree of children’s educational needs. Individual work plan is prepared for each student. Teaching is delivered in the primary schools. It is delivered by one teacher during the first period and the two years of the second period. Subject teachers deliver classes on foreign language for all students and on Macedonian for the students that belong to the communities. Classes are held by the subject teachers in the last year of the second period and in the third period. Primary education for students with special needs is organized in mainstream primary schools (in regular class sections or in special class sections) and in special state primary schools.
Financing	From the Budget of the Republic of Macedonia in accordance with the Law on Budget of the Republic of Macedonia, the Law on Budget Execution of the Republic of Macedonia (for the current year) and the Law on Financing the Local Self-Government Units.
Teachers qualifications	Higher educational attainment, pedagogical-psychological and methodical additional qualification for candidates from non-teaching faculties and passed professional exam in accordance with the Law on Primary Education.
Expected learning outcomes	They are defined through the objectives and expected outcomes in the curricula for each subject separately. In the first period (I-III grade), the student acquires new knowledge and skills in reading, writing, mathematics required for further development. Self-confidence, awareness of individuality, responsibility and creative thinking is developed. Due to differences in individual development,

<sup>4</sup>The text on the website is in the Macedonian language.

	students learn from their own experience, experiment, handle items, use symbols, ask questions, seek answers and compare their findings with other children. The interactive teaching and active learning enable the teachers to adjust the learning process to the individual differences of each student. In the second period (IV-VI grade) the student is skilled for logical operations of higher degree (classifying, grouping, distributing, etc.). In this period the student is not always able to think abstractly. In the third period (VII-IX grade) the students are trained to draw conclusions based on deductive reasoning, give explanations and interpretations, and develop hypotheses.
Assessment and awards	Assessment of knowledge and achievements is continuous by means of oral and written assessments and tasks, as well as tests. In the first period descriptive assessment of students' achievements is applied. In the second period descriptive and numerical assessment is applied. In the third period numerical grading is applied. Assessment is performed according to Standards developed by the Bureau for Development of Education, adopted by the Minister of Education and Science. From grade IV to IX, electronic external assessment of students' achievements for two subjects per student is performed by the National Examination Centre. For music education a yearly exam is organized. For each completed grade the student receives a certificate ( <i>svidete/stvo</i> ). The certificate for completed IX grade is the leaving document for primary education.
Progression routes	Certificates for completed V-IX grade are presented for entering secondary education. The students who failed to complete the primary education within the prescribed period of time can be included in the primary education for adults. After the completion, they can enrol in secondary education.
Labour Market	N.A.
Quality assurance	<p>Curricula and programmes adopted by the Minister of Education and Science;</p> <ul style="list-style-type: none"> <li>• Schools for primary education verified by the Ministry of Education and Science;</li> <li>• Self-evaluation of school;</li> <li>• Professional exam for teachers;</li> <li>• Training and professional exam for directors;</li> <li>• External (integral) evaluation of school based upon the findings of the self-evaluation report. Performed by the State Educational Inspectorate;</li> <li>• Monitoring advisory visits, performed by the Bureau for Development of Education;</li> <li>• External assessment of student achievements, performed by the National Examination Centre;</li> <li>• Continuous in-service teacher training, planned and organized by the Bureau for Development of Education; In-service teacher training, performed according to the yearly work plan of the school; Individual re-training according to the personal needs for professional improvement of teachers.</li> </ul>

Example of Certificate for completed professional exam by teacher, psychologist, pedagogue, librarian, upbringing for primary/secondary education (Уверение за положен стручен испит/Uverenie za polozen struchen ispit) is provided on the website: [http://mrk.mk/wp-content/uploads/2015/07/Sertificate\\_strucen\\_ispit.pdf](http://mrk.mk/wp-content/uploads/2015/07/Sertificate_strucen_ispit.pdf).

## 2.2.3. Secondary education

### o General description

Since the school year 2008/09, the secondary education (ISCED 3<sup>5</sup>) has been mandatory for each citizen under equal conditions. Secondary schools are as follows: public (municipal secondary school and secondary school of the City of Skopje, and state secondary school) and private. State secondary schools are established for the purpose of implementing secondary education programmes and curricula for certain categories of students of special interest to the state.

Secondary education is implemented through programmes and curricula for the following:

- Gymnasium education;
- Vocational education;
- Secondary art education; and
- Secondary education for students with special educational needs.

<sup>5</sup>In accordance with the education system for in the Republic of Macedonia in accordance with 2011 ISCED, Classifications, methodologies, nomenclatures and standards, International Standard Classification of Education MSKOB 2011. This level of education in the Republic of Macedonia starts with the completion of mandatory primary education. Student specialization is expected at this level, unlike ISCEL level 2. Teaching staff has higher educational attainment of ISCED level 6, 7 or 8 and pedagogical qualifications. The curricula at this level require completion of the nine-year primary education (from beginning of level 1), which provides access to gymnasium education, as prescribed with the Law on Secondary Education, and access to vocational or technical education as set out in the Law on Secondary Educations and the Law on Vocational Educational and Training, as well as minimum conditions for entry with completed level 2. The successful completion of these curricula provides students with qualifications relevant for the labour market at this level or for entry into higher education.]

Students with special educational needs can be included in the mainstream secondary schools on equal basis or in state schools for students with special educational needs.

The classes in the special class sections in the mainstream schools or in the special schools are delivered in accordance with adapted programmes and curricula appropriate to the type and level of children's educational needs. The programmes and curricula for children with special educational needs for general subjects are prepared by the Bureau for Development of Education. The programmes and curricula for children with special educational needs for vocational subjects in vocational education are prepared by the Vocational Education and Training Centre. Secondary education for students with special educational needs provides classes to students according to suitable curricula for appropriate occupations, i.e. educational profiles or work qualification. Depending on the attendance of the suitable programmes for appropriate occupations, i.e. educational profiles, the students with special educational needs may take state Matura or final exam.

In 2014, Handbook on Working with Special Educational Needs Students – Inclusion in Secondary Vocational Education and Training was prepared in cooperation with the British Council: [http://www.britishcouncil.mk/sites/britishcouncil.mk/files/inclusion\\_in\\_secondary\\_vocational\\_education\\_handbook\\_eng.pdf](http://www.britishcouncil.mk/sites/britishcouncil.mk/files/inclusion_in_secondary_vocational_education_handbook_eng.pdf)

Total of 105 schools have been verified (gymnasia, schools with mixed gymnasia and vocational curricula, vocational, art schools and schools for education of students with special needs).

Classes are held in two semesters (180 school days). The educational activity is implemented and delivered in class sections, groups and individually.

### **Gymnasium education**

The gymnasium education has general educational nature, enabling the students to acquire in-depth knowledge and understanding of a group of subjects from the fundamental and derivative sciences thereof, developing scientific and critical opinion, training for applying the acquired knowledge in practical situation and preparation for further education on a higher level.

Programmes and curricula are implemented in the following domains: Natural sciences and mathematics; social and humanitarian; and linguistic and artistic domain. The sports gymnasium has been in existence since 2006.

Gymnasium education enrolls regular full-time students who completed primary education.

International Matura programme could also be delivered in the gymnasium education, which is subject to approval by the Minister. One of the schools delivers in English the Diploma Programme, DP from IB Programme, including students aged 16-19.

Following the completion of the gymnasium education, the students take the state Matura or the school Matura exam, thus acquiring *Diploma*.

Example of the DIPLOMA (Диплома/Diploma) for completed State Matura is provided on the website [http://mrk.mk/wp-content/uploads/2015/07/Diploma-sredno\\_MK.pdf](http://mrk.mk/wp-content/uploads/2015/07/Diploma-sredno_MK.pdf)

### **Vocational education**

The vocational education delivers curricula and programmes for vocational training (up to 2 years), vocational education for occupations (three years), technical education (four years) and post-secondary (specialist education and master of crafts exam).

### **Vocational training (strucno osposobuvanje)**

Vocational training lasts up to two years and provides training for work with lower requirements and practical knowledge and skills. Students with completed primary education are eligible for enrolment. Persons with uncompleted primary education can also enrol, but with an obligation to complete their primary education in parallel. It is delivered in vocational schools or in institutions for adult education in accordance with appropriate programmes and curricula. Following the completion of the vocational training, the students take exam to obtain a *certificate*.

The Rulebook on the manner and procedure for transfer from one to another type of vocational education has been prepared.

Example of the educational programme for the profile *Plasterer (gypsum) assembler* (II year) is provided on the website [http://mrk.mk/wp-content/uploads/2015/07/Obrazovna\\_programa\\_so\\_lspitna\\_programa\\_Gipser\\_monter.pdf](http://mrk.mk/wp-content/uploads/2015/07/Obrazovna_programa_so_lspitna_programa_Gipser_monter.pdf)

### **Vocational education for occupations (Strucno obrazovanie za zanimanja)**

Vocational education for occupations lasts three years and enables entry in the labour market or continuation of education. Students with completed primary education can enrol in the vocational education for occupations. Classes are held in vocational schools or in institutions for adult education. Practical training is delivered in schools and/or at employers.

The graduates can continue with fourth year of technical education. They can be included in post-secondary education with at least three years of appropriate work practice. Following the completion of the vocational education for occupations, the students take final exam and obtain a *Diploma*.

Example of the educational programme for vocational education for occupation for the profile Gardener – florist (Gradinar–cvekar) is provided on the website:

[http://mrk.mk/wp-content/uploads/2015/07/III\\_godina\\_Cvekarstvo\\_Gradinar\\_cvekar\\_09\\_2013.pdf](http://mrk.mk/wp-content/uploads/2015/07/III_godina_Cvekarstvo_Gradinar_cvekar_09_2013.pdf).

### Technical education

The technical education lasts four years and prepares students for the labour market and for continuation of the education. Students with completed primary education are eligible for enrolment. The classes are held in vocational schools. Practical training is delivered in schools and/or at employers.

Programme are realized through 52 educational profiles distributed in 14 sectors.

**Table 8: Professions (sectors) and profiles (qualifications) in vocational education and training**

Profession (sector)	Profiles (qualifications)
1. Geology, Mining and Metallurgy (Geoloshko-rudarska i metalurshka struka)	<ul style="list-style-type: none"> <li>• Geological and mining technician</li> <li>• Metallurgical technician</li> </ul>
2. Civil Engineering and Geodesy (Gradezno-geodetska struka)	<ul style="list-style-type: none"> <li>• Architectural technical</li> <li>• Geodetic technician</li> <li>• Civil engineering technician</li> <li>• Interior architecture designer technician</li> </ul>
3. Graphics (Grafichka struka)	<ul style="list-style-type: none"> <li>• Graphic technician</li> </ul>
4. Economy, Law and Trade (Ekonomsko-pravna i trgovska struka)	<ul style="list-style-type: none"> <li>• Business secretary</li> <li>• Economic technician</li> <li>• Legal technician</li> <li>• Trade and marketing technician</li> <li>• Banking technician</li> </ul>
5. Electrotechnical Engineering (Elektrotehnicka struka)	<ul style="list-style-type: none"> <li>• Electrical – energy technician</li> <li>• Electrotechnician for electronics and telecommunications</li> <li>• Electrotechnician for computer technology and automatics</li> </ul>
6. Health (Zdravstvena struka)	<ul style="list-style-type: none"> <li>• Dental technician</li> <li>• Nurse</li> <li>• Medical laboratory technician</li> <li>• Pharmaceutical laboratory technician</li> <li>• Physiotherapy technician</li> </ul>
7. Agriculture and Veterinary (Zemjodelska-veterinarna struka)	<ul style="list-style-type: none"> <li>• Veterinary technician</li> <li>• Viticulture and wine technician</li> <li>• Pharmaceutical production technician</li> <li>• Hydro-melioration technician</li> <li>• Agro-management technician</li> <li>• Agricultural management technician</li> </ul>
8. Personal Services (Lichni usluzi)	<ul style="list-style-type: none"> <li>• Cosmetic technician</li> <li>• Optical technician</li> </ul>
9. Mechanical Engineering (Mashinska struka)	<ul style="list-style-type: none"> <li>• Automotive technician-mechatronics technician</li> <li>• Mechanical aircraft technician</li> <li>• Mechanical technician</li> <li>• Mechanical and energy technician</li> <li>• Computer control technician</li> </ul>
10. Transport (Soobrakajna struka)	<ul style="list-style-type: none"> <li>• Road transport technician</li> <li>• Transport and forwarding technician</li> <li>• Rail transport technician</li> <li>• Engine driver of diesel and electrical hauling rail vehicles</li> <li>• Logistics and insurance technician</li> </ul>
11. Textile and Leather Processing (Tekstilno-	<ul style="list-style-type: none"> <li>• Ready-made garment technician</li> <li>• Textile technician</li> </ul>

kozarska struka)	<ul style="list-style-type: none"> <li>• Footwear technician</li> <li>• Ready-made garment computer technician</li> </ul>
12. Tourism and Hospitality (Ugostitel'sko-turistichka struka)	<ul style="list-style-type: none"> <li>• Hotel tourism technician</li> <li>• Catering technician in rural tourism</li> <li>• Catering technician</li> </ul>
13. Chemical Engineering (Hemisko-tehnoloshka struka)	<ul style="list-style-type: none"> <li>• Food technician</li> <li>• Production process technician</li> <li>• Chemical engineering technician</li> <li>• Nutritionist technician</li> </ul>
14. Forestry and Wood Processing (Shumarsko-drvo prerabotuvachka struka)	<ul style="list-style-type: none"> <li>• Furniture and interior technician</li> <li>• Wood processing technician</li> <li>• Forestry and landscaping technician.</li> </ul>

Following the completion of the technical education, the students take the state Matura exam or final exam. They obtain *Diploma for passed state Matura*, i.e. *Diploma for passed final exam*.

Example of the educational programme for the subject Materials and Constructions for the profile Technician Designer of Internal Architecture for the Civil Engineering and Geodetic Sector in secondary technical education is provided on the website: [http://mrk.mk/wp-content/uploads/2015/07/IV-godina-Materijali\\_i\\_konstrukcii.pdf](http://mrk.mk/wp-content/uploads/2015/07/IV-godina-Materijali_i_konstrukcii.pdf).

### Art education

Art education enables gaining theoretical and practical knowledge and understanding, skills and competence in the domain of arts, which are required for continuing the education to a higher level or entry into the labour market. Art education enrolls regular students in fine arts, music and ballet with completed primary education. Gifted students who still have not completed their primary education could also enrol, but after prior approval by the Ministry of Education and Science. These students have the obligation to complete their primary education in parallel. Curricula are structured in three orientations: Fine arts, music and ballet. Following its completion the students take state or school Matura exam, thus obtaining *state Matura diploma* or *school Matura diploma*.

Example of the secondary art school "Lazar Licenoski" – Skopje <http://lazarlicenoski.mk/5>

Example of the DMBUC "Ilija Nikolovski Luj" – Skopje <http://www.dmbuc.edu.mk/5>

### • Statistics on secondary education

**Table 9: Regular upper secondary schools, class sections, students and teachers**

School year	Students				Teachers	
	total	females	Graduated students		total	
			total	females	all	women
2008/2009	93 164	44 643	24 210	11 170	6 832	3 953
2009/2010	94 284	45 725	25 345	11 941	7 008	4 041
2010/2011	92 848	44 773	24 846	11 551	7 197	4 225
2011/2012	91 167	43 760	25 758	11 996	7 298	4 238
2012/2013	88 582	42 506	25 546	11 916	7 442	4 382
2013/2014	84 827	40 649	23 936	11 100	7 421	4 335

Source: State Statistical Office

**Table 10: Regular upper secondary schools according to the language of instruction, school year 2013/2014**

Total of which in:	Students		Graduated students <sup>2)</sup>	Teachers Total
	Total	Females		
		<b>84 827</b>	<b>40 649</b>	<b>23 936</b>
Macedonian	56 746	27 450	16 350	4 972
Albanian	24 823	11 658	6 831	1 985
Turkish	1 710	812	432	226
English	1 548	729	320	238

- 1) The number of the schools according to the language of instruction does not correspond with the data in "total" because of bilingual or trilingual instruction in some schools  
 2) The data refer to full-time and part-time students  
 Source: State Statistical Office

**Table 11: Distribution of students in upper secondary education by type of education**

School year Type of education	2012/2013	2013/2014
VET 2 years duration	No data	No data
VET 3 years duration	4 139	3 627
VET 4 years duration	51 411	48 186
<b>Total VET</b>	<b>55 550</b>	<b>51 813</b>
<b>General upper secondary</b>	<b>34 856</b>	<b>35 123</b>
<b>Art education</b>	<b>1 287</b>	<b>1 208</b>
<b>TOTAL upper secondary (VET+GENERAL+ART)</b>	<b>90 693</b>	<b>88 144</b>

Source: State Statistical Office

### Legal framework

- **Law on Secondary Education** (Official Gazette of the Republic of Macedonia No. 44/95, 24/96, 34/96, 35/97, 82/99, 29/02 40/03, 42/03, 67/04, 55/05, 113/05, 35/06, 30/07, 49/07, 81/08, 92/08, 33/10, 116/10, 156/10, 18/11, 51/11, 6/12, 100/12, 24/13, 41/14, 116/14, 135/14, 10/15 and 98/15);
- Rulebook on the manner of accreditation of secondary schools and the manner of maintaining registries (Official Gazette of the Republic of Macedonia No. 81/07 and 98/13);
- Rulebook on the conditions and manner of taking professional exam for teachers and professional associates in public secondary schools (Official Gazette of the Republic of Macedonia No. 27/96);
- Rulebook on international Matura (Official Gazette of the Republic of Macedonia No. 27/98);
- Rulebook on the manner of monitoring, assessment and grading, taking exams and progression of students in secondary schools (Official Gazette of the Republic of Macedonia No. 39/02 and 86/10);
- Rulebook on the manner of taking exams and evaluating student results from state Matura exams in general, vocational and secondary art education (Official Gazette of the Republic of Macedonia No. 66/10 and 63/12)
- Rulebook on the manner of taking exams and evaluating student results from school Matura exams in secondary art education (Official Gazette of the Republic of Macedonia No. 78/10);
- Rulebook on the manner of taking exams and evaluating student results from final exams in secondary four-year vocational education (Official Gazette of the Republic of Macedonia No. 45/08, 78/10);
- Rulebook on the manner of maintaining, form and content of the pedagogical records and documentation in secondary schools (Official Gazette of the Republic of Macedonia No. 41/09, 44/09, 64/09, 147/09, 115/10, 26/11, 132/12 and 182/13);
- Rulebook on the manner of conducting student excursions and other free activities of primary school students Decision No. 07-9992/05.06.2014): <http://www.mon.gov.mk/index.php/propisi/regulations/1800-pravilnici-za-ekskurzii-2014>
- Rulebook on the manner and domains for performing self-evaluation of primary schools (Official Gazette of the Republic of Macedonia No. 11/14);
- Rulebook on the manner and the specific criteria for organizing and conducting student competitions in certain subjects at municipal, regional and state level in secondary education (Decision No. 19-2249/1 of 05.03.2013): [http://www.mon.gov.mk/images/pdf/natprevari\\_sredno.pdf](http://www.mon.gov.mk/images/pdf/natprevari_sredno.pdf)
- **Law on the Vocational Education and Training** (Official Gazette of the Republic of Macedonia No. 71/06, 117/08, 148/09, 17/11, 24/13, 137/13 and 41/14);
- Rulebook on the form, content and manner of maintaining the Registry for accreditation of employers for practical student training (Official Gazette of the Republic of Macedonia No. 31/08);
- Rulebook on the structure, organization and administering Master of Crafts exam (Official Gazette of the Republic of Macedonia No. 36/08);
- Rulebook on the structure, organization and administering vocational competence exam (Official Gazette of the Republic of Macedonia No. 29/09);
- Rulebook on the form, content and manner of maintaining the Registry of students who concluded practical training contracts with the vocational education and training institution and the employer (Official Gazette of the Republic of Macedonia No. 41/14);
- Rulebook on the manner of selection of best student in the profession from the senior years of vocational education;
- **Law on Adult Education** (Official Gazette of the Republic of Macedonia No. 7/08, 17/11, 51/11, 74/12, 41/14, 144/14 and 146/15);

- **Law on Craftsmanship** (Official Gazette of the Republic of Macedonia No. 62/04, 55/07, 115/10, 36/11, 53/11 and 164/13);
- Rulebook on the form, content and the manner of Registry for certificates of passed workmanship exam (Official Gazette of the Republic of Macedonia No. 77/08);
- **Law on the Bureau for Development of Education** (Official Gazette of the Republic of Macedonia No. 37/06, 142/08, 148/09, 69/13, 120/13, 148/13 and 41/14);
- **Law on the National Examination Centre** (Official Gazette of the Republic of Macedonia No. 142/08, 148/09 and 41/14);
- **Law on Education Inspection** (Official Gazette of the Republic of Macedonia No. 52/05; 81/08, 148/09, 57/10, 51/11, 24/13, 137/13, 164/13, 41/14 and 33/15);
- **Law on Pedagogical Service** (Official Gazette of the Republic of Macedonia No. 18/11 and 41/14);
- **Law on Primary and Secondary Education Textbooks** (Official Gazette of the Republic of Macedonia No. 98/08, 99/09, 83/10, 36/11, 135/11, 46/12, 24/13, 120/13 and 29/14).

#### Educational strategies and other documents

- National programme for development of education in the Republic of Macedonia 2005 – 2015, with accompanying programme documents, Skopje 2005;
- Strategy for vocational education and training in the context of lifelong learning 2013-2020, Skopje 2013;
- Concept for vocational training with duration up to two years, Skopje 2010;
- Concept for vocational education for professions, Skopje, April 2010;
- Concept for graduation and final exam in secondary education lasting four years in the Republic of Macedonia, Skopje 2015;
- International Standard Classification of Education ISCED 2011;
- National classification of professions (NCP 2008);
- Programme for counselling parents of secondary school students (Official Gazette of the Republic of Macedonia No. 4/12);
- Programme for counselling secondary school students (Official Gazette of the Republic of Macedonia No. 160/13);
- Methodology for preparation of occupation standards (Skopje, 2009);
- Methodology for preparation of programmes and curricula (2013);
- Methodology and instruments for analysis of the network of secondary schools in the Republic of Macedonia (Skopje, 2014);
- Standards for preparation of vocational subject textbooks (2010);
- Standards for delivery of practical student training at employers (2014);
- Standard for professional and other staff for practical training delivery at employers (2014);
- Standards for equipment and premises for realization of practical training at employers (2014).

#### ○ **Governance**

*The Ministry of Education and Science* designs policies and monitors their implementation. It has the competence over the organization, financing, promotion and development of the education. The Ministry verifies/accredits programmes<sup>6</sup>, curricula<sup>7</sup> and institutions; adopts concepts for development of the educational system, examination programmes for the final exam, school and state Matura exams, standards for educational profiles, standards for professions and student achievement standards; proposes to the Government a network of secondary education institutions; in cooperation with the chambers, monitors employers for compliance with the requirements for delivery of practical training and the compliance with the concluded contracts between the vocational education and training institution, the employer and the student, i.e. parent/guardian with regard to the practical training delivery.

*The Bureau for Development of Education* proposes concepts for education system development, curricula, programmes, and examination programmes for secondary education; organizes and performs activities for professional development of teachers, professional associates and managerial staff; performs and organizes research; performs advisory work for improving the quality of educational institutions and professional insight; prepares educational standards, standards for student achievements and implements activities for assessing students' achievements; prepares textbook concepts, programme for publishing textbooks and methodology for professional evaluation of textbook manuscripts and textbook quality assessment; performs publishing activities related to the development of educational activities.

<sup>6</sup> According to the *Vocational Education and Training Glossary, Skopje, 2014* programmes are public documents which define educational outputs (knowledge, skills and competence) for a particular subject or area that learners acquire and develop in the educational process and prove at examinations. Educational outputs (knowledge, skills and competence) in the programmes are based on the subject curriculum objectives for the corresponding subjects or areas.

<sup>7</sup> According to the *Vocational Education and Training Glossary, Skopje, 2014*, curriculum is a broader concept than the terms national curriculum, subject curriculum and study programme. This concept includes: educational outputs/learning outputs as a result of implementation of subject curricula (or groups) of related modules/subjects/one subject, as well as description of methods of ensuring that the student will acquire envisaged competences.

*The Ministry of Labour and Social Policy* participates in the implementation of the state policy in the field of vocational education and training; assesses the needs for VET graduates by means of labour market analyses and submits opinion on the enrolment policy to the Vocational Education and Training Council; participates in the preparation and alignment of professional qualifications according to standards; initiates development of standards of occupations and qualifications in cooperation with the Vocational Education and Training Centre; adopts standards of occupations prepared by the Vocational Education and Training Centre upon a proposal by the Ministry of Education and Science and prior opinion provided by the Vocational Education and Training Council; participates in organizing professional orientation for students and performs supervision of the regulations regarding the protection conditions during practical training delivery; publishes the List of standards of occupations for vocational education and training.

*Vocational Education and Training Council* – established by the Government of the Republic of Macedonia. It is an advisory body for strategic topics in the field of the policy for vocational education and training development (provides opinion on a strategy for development of the vocational education and training; It proposes to the Ministry of Education and Science: Amendments to the List of standards of occupations, qualifications and standards of occupations, and in cooperation with the municipalities, it submits proposal for development of the network of vocational education and training institutions and provides opinion on the standards of occupations, standards for educational profiles and the standards for professions). Members of the Council are representatives of: Ministry of Education and Science, Bureau for Development of Education, Ministry of Labour and Social Policy, Ministry of Economy, Ministry of Finance, chambers, majority trade union, Association of Local Self-Government Units and the Employment Service Agency (website: <http://www.avrm.gov.mk/>) of the Republic of Macedonia.

*The Vocational Education and Training Centre* (website: <http://csoo.edu.mk/>) is a public institution established by the Government of the Republic of Macedonia. The Centre: prepares concepts for vocational education and training; proposes and develops curricula; prepares model programmes for the vocational subjects; conducts public procurements for preparing new and updating the existing curricula; it prepares: Standards of occupations; Standards for premises and equipment in schools; Standard for professional and other staff for practical training delivery at employers, and Standards for equipment and premises; proposes Standards for achievements of vocational education and training students, Standards for educational profiles, Standards for professions and List of standards of occupations; supports the social partnership; links education and work in the context of lifelong learning; develops the European orientation of the vocational education; conducts labour market research in cooperation with the social partners; proposes examination programmes, tests for external assessment of students in vocational subjects, measures for improving the quality of the instructions and evaluation of the teachers of vocational subjects; provides support to the vocational education by means of counselling and mentoring teachers and trainers in vocational subjects; mediates in the career development and professional orientation of students in vocational education and training.

*The Municipal Council, or the City of Skopje:* Performs analyses of the labour market needs at local level and provides the findings to the VET Centre and to the institutions for vocational education and training; submits proposals to the Ministry of Education and Science and the Vocational Education and Training Centre on the needs for amending the current and introducing new programmes and curricula; submits proposals to the Ministry of Education and Science regarding the enrolment policy in vocational education and training.

*The chambers:* Provide proposals for new standards of occupations, programmes and curricula, and updating the existing ones to the Vocational Education and Training Centre; participate in final exam commissions; adopt the Standard for equipment and premises and the Standard for professional and other staff for practical training delivery at employers. The chambers maintain Registry for accreditation of employers for practical student training and Registry of concluded practical training contracts between the vocational education and training institutions and the employers. Every year, the chambers submit to the Ministry of Education report on the verified employers for delivery of practical training.

*The majority trade union* submits proposals for improving the conditions for delivery of practical training at employers.

*Vocational education and training institutions* – The management body of a public secondary school is the School Board, which is composed of: teachers, student parents/guardians, founder representatives, Ministry of Education and Science and the business community. The Board submits to the founder: Annual work programme, activity report, financial plan and final report.

The management authority of the public secondary school is its director, who is appointed and dismissed by the school founder. The director is responsible for: lawfulness of the operations, material and financial operations, organizing and planning work in the school.

School's Council of Parents is established for the purpose of organized fulfilment of students' interests.

## ○ **Teacher qualifications**



*Teacher qualifications for gymnasium:* higher educational attainment and passed professional exam. Pedagogical and methodical additional qualification from accredited higher educational institutions for candidates from non-teaching faculties and passed professional exam in accordance with the Law on Secondary Education.

*Teacher qualifications for vocational education and training:* higher educational attainment and passed professional exam. Pedagogical and methodical additional qualification from accredited higher education institutions for candidates from non-teaching faculties and passed professional exam in accordance with the Law on Secondary Education. As an exception, teachers for practical training may also be persons with completed specialist secondary education, or higher professional school, with pedagogical - psychological and methodical qualifications from appropriate faculties and passed professional exam. One component of the continuous professional development of VET teachers (for vocational subjects and for practical work) is training in companies. The training covers: technological novelties, security and protection at work place, communication, organisation, design of the work place etc.

*Teacher qualifications for art schools:* higher educational attainment and passed professional exam. Pedagogical and methodical additional qualification from accredited higher educational institutions for candidates from non-teaching faculties and passed professional exam in accordance with the Law on Secondary Education. As an exception, in the secondary ballet education, teachers of professional theoretical and practical classes can also be persons with completed secondary ballet school and five years of practicing ballet, who have acquired pedagogical - psychological and methodical qualifications from appropriate faculty and passed professional exam.

**Career development of teachers** is described in the subchapter 2.2.2. Primary education.

## ○ **Quality assurance**

### *Accreditation of programmes and curricula*

The programmes are prepared according to a model adopted by the Minister of Education and Science upon proposal of the Bureau for Development of Education and the Vocational Education and Training Centre. The programmes define: Objectives, teaching domains, topics and contents, activities and methods of teaching, including mandatory use of ICT, education standards, teaching staff profile, teaching aids and equipment, and assessment of student achievements. Model programmes provide possibility for flexibility in their implementation.

New VET-3 curricula (implemented since 2013) are based on qualification standards, coherently linked with relevant occupational standards. The three elements (curriculum, qualification standard and occupational standard) were designed in a synchronised manner and followed a coherent methodology. This is an innovation introduced by the reform of 2013, which will be generalised to all levels of VET programmes in 2016-2017. This approach reinforces the quality assurance framework of VET qualifications, notably by adding an important new role for representatives from the industry / sectors / employers, alongside with teachers and methodologists, in a process that can be considered of co-construction of the qualifications. Moreover, with this approach the documentation of a VET qualification becomes more homogeneous and integrated in terms of components and their format, which contributes to enhance transparency of VET qualifications.

### *Accreditation of secondary schools*

Secondary school accreditation is prescribed with the Rulebook on the manner of accreditation of secondary schools and the manner of maintaining registries (Official Gazette of the Republic of Macedonia No. 81/07 and 98/13). The Accreditation Commission is composed of members from the Ministry of Education and Science, Bureau for Development of Education/Vocational Education and Training Centre, State Educational Inspectorate and local self-government representatives. The verified school is registered into the Central registry of secondary schools, which is maintained by the Ministry of Education and Science and in the Municipal registry of secondary schools, which is maintained by the municipality for the secondary schools within its territory.

### *Assessment*

The monitoring and checks of student progress and achievement is conducted by means of internal and external assessment. Internal assessment is performed continuously by means of oral or written assessment, or by doing projects. External electronic assessment is performed at the end of the school year by means of pool of questions. For the students in the final year the assessment takes place at the end of the first semester. The external assessment covers two subjects for each student, except for the subjects that enable the students to acquire skills. The draft pool of questions is prepared by the Bureau for Development of Education and the Vocational Education and Training Centre. The control, final approval of questions and the administering of the testing are carried out by the National Examination Centre. The results are recorded in the certificate for completed year.

Upon completion of vocational training, the students take vocational exam in front of a Commission consisting of teachers and in most cases representatives of employers, delegated by the chambers. They obtain a public document – *certificate for vocational training (sertifikat za struchna osposobenost)*.

Upon successful completion of vocational education for occupations, students pass Final Exam consisting of theoretical and practical part. The theoretical part is passed internally. The practical part is passed in front of a Commission consisting of teachers and representatives of employers, delegated by the chambers.

Following completion of gymnasias, technical education and arts, the education ends with passing State Matura, School Matura or Final exam. Completed State Matura enables graduates to continue in higher education, or to enter the labour market. Completed School Matura and Final exam enable entering the labour market. For entering higher education, the graduates have to pass State Matura exam. Examination programmes for State Matura, School Matura, Final Exam and International Matura are adopted by the Minister upon a proposal by the Bureau for Development of Education and the Vocational Education and Training Centre.

**Matura** – The Concept for State Matura, School Matura and Final Exam in public secondary education, which is prepared by the National Examination Centre upon proposal of the State Matura Board, is adopted by the Minister. State Matura has certifying and selective role.

**1 State Matura** consists of:

- *Compulsory part* – one subject, in particular: Macedonian language and literature/Albanian language and literature/Turkish language and literature.
- *Elective part* – three general subjects for gymnasium education, or two general subjects and one vocational subject for vocational and art education. For gymnasium and for secondary vocational education the student chooses mathematics or foreign language as first elective subject, while the others are selected by the student from a given list of subjects. The first elective subject for art education is either foreign language or aesthetics/philosophy, while the others are selected from a given list of subjects.
- *Project assignment* – examining a problem chosen by the student from the subjects or from wider educational domains. This is to check student's competence for: Independent planning, examining and researching certain problems, using sources of information and information technology, planning and conducting experiments, and presenting the findings obtained.

The checks and assessment for the compulsory and the first and second elective subject are done externally, and are organized by the National Examination Centre. The checks and assessment for the third elective subject, as well as the project task, are conducted internally.

The test for each matura exam is prepared according to an examination programme.

**2 School Matura/final exam** – students who do not take state Matura in gymnasium and in secondary art education take *school Matura*, and *final exam* in vocational education. School Matura/final exam consists of: *compulsory part, elective part and project assignment*.

- *The compulsory part* consists of a single subject: Macedonian language and literature/Albanian language and literature/Turkish language and literature.
- *The elective part* consists of one general subject for students in gymnasium education, or one vocational subject for vocational and art education students, selected by the student from a given list of subjects.
- *Project assignment* – this is to check student's competence for: independent planning, examining and researching certain problems, using sources of information and information technology, planning and conducting experiments, and presenting the findings obtained.

The checks and assessment are done internally both for the School Matura and for the Final Exam. The Final Exam in vocational education assesses the student's vocational knowledge and competence.

The test for each matura exam is prepared according to an examination programme.

**Table 12: Qualifications awarded in secondary education**

Type of secondary education	Type of school	Exam	Title of public document	Institution awarding the qualification	Qualification level according to NQF
Gymnasium education	Secondary school		Certificate for completed year Svidetelstvo za završena godina	School	
	Gymnasium	State Matura	Diploma for State Matura	School	IV

			Diploma za drzavna matura		
		School Matura	Diploma for School Matura Diploma za ucilisna matura	School	IV
Vocational education	Secondary school (Technical education)		Certificate for completed year Svidetelstvo za završena godina	School	
		State Matura	Diploma for State Matura Diploma za drzavna matura	School	IV
		Final exam	Diploma for Final Exam Diploma za završen ispit	School	IV
	Secondary school (Vocational education for occupations)		Certificate for completed year Svidetelstvo za završena godina	School	
		Final exam	Diploma for Final Exam Diploma za završen ispit	School	III
	Secondary school (Vocational training)		Certificate for completed year Svidetelstvo za završena godina	School	
Vocational competence exam		Certificate for vocational training Uverenje za stručna osposobnost	School	II	
Art education	Secondary school		Certificate for completed year Svidetelstvo za završena godina	School	IV
		State Matura	Diploma for State Matura Diploma za drzavna matura	School	IV
		School Matura	Diploma for School Matura Diploma za završen ispit	School	IV

Besides national assessments, the 15-year-old pupils have been involved in the PISA 2001 and PISA 2015 rounds.

#### *Self-evaluation and integral evaluation of schools*

Each school performs biannual self-evaluation in 7 domains: Programmes and curricula, student achievements, learning and teaching, student support, school climate, resources and management and administration. Self-evaluation results are published on the websites of the school and the municipality. They serve as basis for the integral evaluation, which is conducted by the State Education Inspectorate every three years for the same 7 domains. In vocational schools, subject to monitoring are also the organization and delivery of practical training in schools and at employers, as well as the free classes.

Example: The Self-evaluation report of the VET school “Boro Petrushevski” of Skopje Town is provided on the website: <http://mrk.mk/wp-content/uploads/2015/07/samoevaluacija-20161.pdf>

#### *Licensing of Directors of Primary and Secondary schools*

The part on primary education contains information regarding this matter.

Example of Certificate for Completed Exam for Director of Public Secondary School is provided on the website: <http://mrk.mk/wp-content/uploads/2015/07/Uverenje-direktor-sredno.pdf>.

#### *Other measures in support to quality of education*

Since 2013, there is counseling for parents and students, in accordance with the Programme for counseling of parents and Programme for counseling of students.

In accordance with a Rulebook, school excursions are being organized to develop the different interests and practical skills of students.

Those students who show good results in different subjects are involved into competitions on a municipal, regional and national level, organized by accredited associations of teachers.

**Table 13: Summative presentation of gymnasia education**

Entry	Regular students with completed primary education, not older than 17 years. Students with special educational needs, not older than 25 years.
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requirements	
Education and training	<p>Duration of 4 years.</p> <p>The educational process is realized according to curricula developed by the Bureau for Development of Education and adopted by the Minister of Education and Science.</p> <p>The lectures are realized in secondary schools, according to curricula and programmes with defined objectives, educational fields, topics and content, activities and methods in teaching, including mandatory use of ICT, educational standards, profile of the teachers and evaluation of the students' performance. Curricula are prepared according to a model adopted by the Minister of Education and Science, upon proposal of the Bureau for development of education, and for students with special educational needs there is a special individual working plan.</p>
Financing	From the Budget of the Republic of Macedonia, according to the Law on Budget of the Republic of Macedonia, the Law on Implementation of the Budget of the Republic of Macedonia (for the current year) and the Law on Funding the Local Self-Government Units. Private schools are funded by the founder and co-funded by the students.
Teachers qualifications	Completed higher education and professional exam. For candidates coming from non-teaching faculties, pedagogical-psychological and methodical additional qualification in accredited higher educational institutions and passed professional exam, in accordance with the Law on Secondary Education.
Expected learning outcomes	Defined through the objectives and expected outcomes in the curricula, for each particular subject.
Assessment and awards	Assessment of knowledge and achievements is continuous, by monitoring through the process of learning, with oral tests, written and other tasks, standardized test of knowledge, preparing projects. Besides this assessment, external assessment for two subjects is performed by the National Examination Centre. The results of the external assessment are recorded in a certificate ( <i>svidetelstvo</i> ) for each completed year of education. For each completed grade the student receives a certificate ( <i>svidetelstvo</i> ). Upon completion of fourth year of education, the students pass State Matura or School Matura and acquire a public document <i>Diploma for State Matura (diploma za drzavna matura)</i> , or <i>Diploma for School Matura (diploma za ucilisna matura)</i> .
Progression routes	In higher education, with completed State Matura. Graduates with School Matura <sup>8</sup> , have to pass State Matura exam before applying for higher education. The certificates for completed I-IV grade and the diploma for completed State Matura are presented to the higher education institution when applying for enrollment.
Labour Market	Yes, with diploma for State Matura and School Matura.
Quality assurance	<ul style="list-style-type: none"> <li>• Curricula and programmes adopted by the Minister of Education and Science;</li> <li>• Schools verified by the Ministry of Education and Science;</li> <li>• Self-evaluation of school;</li> <li>• External (integral) evaluation of school based upon the findings of the self-evaluation report; Performed by the State Educational Inspectorate;</li> <li>• Monitoring advisory visits, performed by the Bureau for Development of Education;</li> <li>• Professional exam for teachers</li> <li>• Training and professional exam for the Director</li> <li>• External assessment of student achievements, performed by the National Examination Centre;</li> <li>• Continuous in-service teacher training, planned and organized by the Bureau for Development of Education;</li> <li>• In-service teacher training, performed according to the yearly work plan of the school;</li> <li>• Re-training according to the individual needs for professional improvement of teachers. According to the existing offer of respective providers.</li> </ul>

**Table 14: Tabular presentation of the vocational training (strucno osposobuvanje) with duration up to 2 years**

Entry requirements	<p>Completed primary education. Students with special needs can enroll.</p> <p>Also, students with incomplete primary education may enroll, under the condition they complete it during the vocational training.</p>
Education and training	<p>Duration up to two years.</p> <p>The educational process is realized according to curricula developed by the Bureau for Development of Education and the VET Centre, and adopted by the Minister of Education and Science.</p> <p>Teaching is performed in vocational schools, or institutions for adult education. Practical learning is performed in schools and/or with an employer. Curricula and programmes contain objectives, educational fields, topics and content, activities and methods in teaching, including mandatory use of</p>

<sup>8</sup>The State Matura and the School Matura are presented in greater details in the part Quality Assurance in secondary education.

	ICT, educational standards, profile of the teachers and evaluation of the students' performance.
Financing	From the Budget of the Republic of Macedonia, according to the Law on Budget of the Republic of Macedonia, the Law on Implementation of the Budget of the Republic of Macedonia (for the current year) and the Law on Funding the Local Self-Government Units. Private schools are funded by the founder and co-funded by the students.
Teachers qualifications	Completed higher education and professional exam. For candidates coming from non-teaching faculties, pedagogical-psychological and methodical additional qualification in accredited higher educational institutions and passed professional exam, in accordance with the Law on Secondary Education. As an exception, teachers for practical training may also be persons with completed specialist secondary or higher professional school (vise obrazovanie), with pedagogical - psychological and methodical qualifications from respective faculties and passed professional exam. One component of the continuous professional development of VET teachers (for vocational subjects and for practical work) is training in companies. The training covers: technological novelties, security and protection at work place, communication, organisation, design of the work place etc.
Expected learning outcomes	Defined through the objectives and expected outcomes in the programmes for each particular subject individually. Within the reformed vocational training, for the profile plaster worker-installer in the construction and geodetic profession, the programme is based on learning outcomes.
Assessment and awards	Assessment of knowledge and achievement is continuous, by monitoring through the learning process, with oral and written assessment, and preparation of projects. Monitoring the progress of the skills acquired through the practical training is done by the teacher and mentor with the employer. Besides this, external assessment for two subjects is performed by the National Examination Centre. The results of this assessment are recorded in a certificate (svidetelstvo), for each completed year of education. For each completed grade the student receives a certificate (svidetelstvo). Upon completion of the vocational training, participants take an exam for vocational training in front of a Commission of teachers and employers, delegated by the Chambers. A <i>Certificate for Vocational Training</i> is acquired as public document.
Progression routes	According to the draft Rulebook on the Manner and Procedure for Progression from One into Another Type of VET, students with completed vocational training in duration of one year, may continue their education in the second year in an adequate educational profile of vocational training, in duration of two years, without having to take any additional exams. Students with completed first year of vocational training may continue education in second year within the relevant educational profile of vocational education for occupation by taking additional exams: One general subject and one vocational theoretical subject from the curricula for the educational profile where the student is continuing his/her education.  Students with completed second year of vocational training may continue education in third year within the relevant educational profile of vocational education for occupation by taking additional exams: two general subjects and two vocational theoretical subjects from the curricula for the educational profile where the student is continuing his/her education.
Labour Market	Yes, with certificate for vocational training ( <i>уверение за стручна оспособеност</i> ).
Quality assurance	<ul style="list-style-type: none"> <li>• Curricula and programmes adopted by the Minister of Education and Science;</li> <li>• Schools verified by the Ministry of Education and Science;</li> <li>• Self-evaluation of school;</li> <li>• External (integral) evaluation of school based upon the findings of the self-evaluation report. Performed by the State Educational Inspectorate;</li> <li>• Monitoring advisory visits, performed by the Bureau for Development of Education and the VET Centre;</li> <li>• Professional exam for teachers</li> <li>• Training and professional exam for the Director</li> <li>• External assessment of student achievements, performed by the National Examination Centre;</li> <li>• Continuous in-service teacher training. Planned by the Bureau for Development of Education, VET Centre, the State Education Inspectorate and organized by the Bureau for Development of Education;</li> <li>• In-service teacher training, performed according to the yearly work plan of the school;</li> <li>• Re-training according to the individual needs for professional improvement of teachers. According to the existing offer of respective providers.</li> </ul>

**Table 15: Tabular presentation of the vocational education for occupations (Struchno obrazovanie za zanimanja)**

Entry requirements	Completed primary education. Students with special needs can enroll.
Education and training	Duration of three years. The educational process is realized according to curricula developed by the Bureau for Development of Education and the VET Centre, and adopted by the Minister of Education and Science.

	<p>Teaching is performed in vocational schools, or institutions for adult education. Practical work is performed in schools and/or with an employer. Curricula and programmes contain objectives, educational fields, topics and content, activities and methods in teaching, including mandatory use of ICT, educational standards, profile of the teachers, premises and equipment, and evaluation of the students' performance.</p> <p>New VET-3 curricula (implemented since 2013) are based on qualification standards, coherently linked with relevant occupational standards. The three elements (curriculum, qualification standard and occupational standard) were designed in a synchronised manner according to a coherent methodology.</p>
Financing	<p>From the Budget of the Republic of Macedonia, according to the Law on Budget of the Republic of Macedonia, the Law on Implementation of the Budget of the Republic of Macedonia (for the current year) and the Law on funding the local self-government units.</p> <p>Private schools are funded by the founder and co-funded by the students.</p>
Teachers qualifications	<p>Completed higher education and professional exam. For candidates coming from non-teaching faculties, pedagogical-psychological and methodical additional qualification in accredited higher educational institutions and passed professional exam, in accordance with the Law on Secondary Education. As an exception, teachers for practical training may also be persons with completed specialist secondary or higher professional school (vise obrazovanie), with pedagogical - psychological and methodical qualifications from respective faculties and passed professional exam. One component of the continuous professional development of VET teachers (for vocational subjects and for practical work) is training in companies. The training covers: technological novelties, security and protection at work place, communication, organisation, design of the work place etc.</p>
Expected learning outcomes	<p>Defined through the objectives and expected results in the programmes, for each particular subject.</p> <p>For the reformed vocational education for occupations (implemented since 2013), programmes for 12 educational profiles for 12 occupations have been defined according to learning outcomes. These curricula are based on qualification standards, linked with relevant occupational standards.</p>
Assessment and awards	<p>Assessment of knowledge and achievement is continuous, by monitoring through the learning process, with oral and written assessment, and preparation of projects. Monitoring the progress of the skills acquired through the practical training is done by the teacher and mentor with the employer. Besides this, external assessment for two subjects is performed by the National Examination Centre. The results of this assessment are recorded in a certificate (svidetelstvo), for each completed year of education. For each completed grade the student receives a certificate (svidetelstvo).</p> <p>Upon completed vocational education for occupations, there is a <i>final exam</i> with theoretical and practical part. The theoretical part is taken internally. The practical part is conducted in front of a Commission of teachers and employers, delegated by the Chambers. Participants receive <i>Diploma for final exam (diploma za završen ispit)</i>.</p>
Progression routes	<p>In technical VET, with completed final exam, and by passing additional subjects (three general subjects and two vocational theoretical subjects).</p>
Labour Market	<p>Yes, with diploma for final exam.</p>
Quality assurance	<ul style="list-style-type: none"> <li>• Occupational standards developed by the VET Centre with active involvement of employers, VET providers, higher education experts and relevant stakeholders adopted by the Ministry of Labour and Social Policy</li> <li>• Curricula and programmes developed by representative teams with active participation of VET advisors, VET providers, higher education and employers adopted by the Minister of Education and Science;</li> <li>• Schools verified by the Ministry of Education and Science;</li> <li>• Self-evaluation of school;</li> <li>• Professional exam for teachers;</li> <li>• Training and professional exam for the Director;</li> <li>• External (integral) evaluation of school based upon the findings of the self-evaluation report. Performed by the State Educational Inspectorate;</li> <li>• Monitoring advisory visits, performed by the Bureau for Development of Education and the VET Centre;</li> <li>• External assessment of student achievements, performed by the National Examination Centre;</li> <li>• Continuous in-service teacher training, planned and organized by the Bureau for Development of Education; in-service teacher training, performed according to the yearly work plan of the school; re-training according to the individual needs for professional improvement of teachers. According to the existing offer of respective providers.</li> </ul> <p>This approach reinforces the quality assurance framework of VET qualifications, notably by adding an important new role for representatives from the industry / sectors / employers, alongside with teachers and methodologists, in a process that can be considered of co-construction of the qualifications. Moreover, with this approach the documentation of a VET qualification becomes more homogeneous and integrated in terms of components and their format, which contributes to enhance transparency of VET qualifications.</p>

**Table 16: Tabular presentation of the technical education (Tehnichko obrazovanie) with duration of 4-years**

Entry requirements	Completed primary education. Students with special needs can enroll.
Education and training	Duration of 4 years. The educational process is realized according to curricula for technical education, developed by the Bureau for Development of Education and the VET Centre, and adopted by the Minister of Education and Science. Teaching is performed in the vocational schools. Practical learning is performed in schools and/or with an employer. Curricula and programmes contain objectives, educational fields, topics and content, activities and methods in teaching, including mandatory use of ICT, educational standards, profile of the teachers, premises and equipment, and evaluation of the students' performance.
Financing	From the Budget of the Republic of Macedonia, according to the Law on Budget of the Republic of Macedonia, the Law on Implementation of the Budget of the Republic of Macedonia (for the current year) and the Law on Funding the Local Self-Government units. Private schools are funded by the founder and co-funded by the students.
Teachers qualifications	Completed higher education and professional exam. For candidates coming from non-teaching faculties, pedagogical-psychological and methodical additional qualification in accredited higher educational institutions and passed professional exam, in accordance with the Law on Secondary Education. As an exception, teachers for practical training may also be persons with completed specialist secondary or higher professional school (vishe obrazovanie), with pedagogical - psychological and methodical qualifications from respective faculties and passed professional exam. One component of the continuous professional development of VET teachers (for vocational subjects and for practical work) is training in companies. The training covers: technological novelties, security and protection at work place, communication, organisation, design of the work place etc.
Expected learning outcomes	Defined through the objectives and expected results in the teaching programs, for each subject individually. VET-4 programmes are not yet described in learning outcomes – the process of redesign of these qualifications (learning outcomes) had been initiated end 2015.
Assessment and awards	Assessment of knowledge and achievement is continuous, by monitoring through the learning process, with oral and written assessment, and preparation of projects. Monitoring the progress of the skills acquired through the practical training is done by the teacher and mentor with the employer. Besides this, external assessment for two subjects is performed by the National Examination Centre. The results of this assessment are recorded in a certificate (svidetelstvo), for each completed year of education. For each completed grade the student receives a certificate (svidetelstvo). Upon completion of fourth year of education, the students pass State Matura or Final Exam and acquire a public document <i>Diploma for State Matura</i> , or <i>Diploma for Final Exam</i> .
Progression routes	In higher education, with completed State Matura. Graduates with Final Exam have to pass State Matura exam before applying for higher education. The certificates for completed I-IV grade and the diploma for completed State Matura are presented to the higher education institution when applying for enrollment.
Labour Market	Yes, with diploma for completed State Matura and with diploma for completed Final Exam.
Quality assurance	<ul style="list-style-type: none"> <li>• Curricula and programmes adopted by the Minister of Education and Science;</li> <li>• Schools verified by the Ministry of Education and Science;</li> <li>• Self-evaluation of school;</li> <li>• Professional exam for teachers;</li> <li>• Training and professional exam for the Director;</li> <li>• External (integral) evaluation of school based upon the findings of the self-evaluation report. Performed by the State Educational Inspectorate;</li> <li>• Monitoring advisory visits, performed by the Bureau for Development of Education and the VET Centre;</li> <li>• External assessment of student achievements, performed by the National Examination Centre;</li> <li>• Continuous in-service teacher training, planned and organized by the Bureau for Development of Education; In-service teacher training, performed according to the yearly work plan of the school; Re-training according to the individual needs for professional improvement of teachers. According to the existing offer of respective providers.</li> </ul>

**Table 17: Tabular presentation of Art education**

Entry requirements	Completed primary education, and students not older than 17 years. Students with special educational needs, not older than 25 years. With consent from the Ministry of Education and Science, talented students may enroll with incomplete primary school, under the obligation to complete primary school.
Education and training	Duration of 4 years. Curricula are structured for the three profiles in the Art profession: Painting, music and ballet. The educational process and the extra - curricular activities are realized according to curricula and

	programmes developed by the Bureau for Development of Education and adopted by the Minister of Education and Science. The lectures are realized in public schools, according to curricula and programmes with defined objectives, educational fields, topics and content, activities and methods in teaching, including mandatory use of ICT, educational standards, profile of the teachers and evaluation of the students' performance. Teaching is within groups and individual, and it is performed by teachers of individual subjects.
Financing	From the Budget of the Republic of Macedonia, according to the Law on budget of the Republic of Macedonia, the Law on implementation of the Budget of the Republic of Macedonia (for the current year) and the Law on funding the local self-government units. Private schools are funded by the founder and co-funded by the students.
Teachers qualifications	Completed higher education and vocational exam. Pedagogic and methodic additional qualification in accredited higher educational institutions for candidates coming from non-teaching schools and passed vocational exam, in accordance with the Law on Secondary education. By way of derogation, in the secondary ballet education within the vocational theoretical and practical education, teachers may also be persons with completed secondary school of ballet and five years practice in ballet dancing, with pedagogic and psychological and methodological training at accredited schools and passed vocational exam.
Expected learning outcomes	Defined through the objectives and expected outcomes in the programmes, for each subject individually.
Assessment and awards	Assessment of knowledge and achievement is continuous, by monitoring through the whole learning process, through oral and written exams for the general subjects (Mother tongue, Macedonian language for the communities, foreign language, aesthetics, informatics, history, history of art, business and entrepreneurship and Italian language for the profile musician - performer). Individual education is assessed through public performances, colloquial exams and final exams in front of a Commission. Besides this assessment, external assessment for two subjects is performed by the National Examination Centre. The results are recorded in the certificate (svidetelstvo) for each completed year of education. For each completed grade the student receives a certificate (svidetelstvo). Upon completion of fourth year of education, the students of art education pass State Matura or School Matura and acquire a public document <i>Diploma for State Matura</i> , or <i>Diploma for School Matura</i> .
Progression routes	In higher education, with completed State Matura. Graduates with School Matura, have to pass State Matura exam before applying for higher education. The certificates for completed I-IV grade and the diploma for completed State Matura are presented to the higher education institution when applying for enrollment.
Labour Market	Yes, with diploma for State Matura and for School Matura.
Quality assurance	<ul style="list-style-type: none"> <li>• Teaching plan and teaching programme adopted by the Minister of Education and Science;</li> <li>• Schools verified by the Ministry of Education and Science;</li> <li>• Self-evaluation of school;</li> <li>• Vocational exam for teachers;</li> <li>• Training and vocational exam for the Director;</li> <li>• External (integral) evaluation of school based upon the findings of the self-evaluation report. Performed by the State Educational Inspectorate;</li> <li>• Monitoring advisory visits, performed by the Bureau for Development of Education and the VET Centre;</li> <li>• External assessment of student achievements, performed by the National Examination Centre;</li> <li>• Continuous in-service teacher training, planned and organized by the Bureau for Development of Education; In-service teacher training, performed according to the yearly work plan of the school; Re-training according to the individual needs for professional improvement of teachers. According to the existing offer of respective providers.</li> </ul>

## 2.2.4 Post-secondary education

Post-secondary education (ISCED 4<sup>9</sup>) provides deeper knowledge and understanding, skills and competence for working with more complex technology, specialized top quality services, organization of work, managerial positions of first level, instructorship, mentorship, etc.

Post-secondary education is realized through curricula and programmes for

- Specialized education, and

<sup>9</sup> This level of education prepares cadres for particular professional tasks for particular segments of the working process.



- Master exam.

The curricula and programmes for specialized education are proposed by the VET Centre, and they are adopted by the Minister of Education and Science. Enrollment with: Completed technical, vocational education for occupations, gymnasium or art education, with or without working experience. Education is realized in accredited public and private institutions (secondary schools, higher vocational schools, specialized institutions for post-secondary education and institutions for post-secondary education as part of chambers, employers' organizations, work associations and companies).

The curricula and programmes for the Master exam are prepared by the VET Centre and they are adopted by the Chamber of Crafts of the Republic of Macedonia, upon prior positive opinion by the Ministry of Education and Science. So far, 183 masters who have fulfilled the special criteria and attended training, have acquired Diploma for Master Exam.

The conditions for the teachers are regulated with the Law on Secondary Education, the Law on Vocational education and training, the Law on Higher Education (higher vocational schools), the Law on Craftsman Activities, the Law on Adult Education, and the standards applicable for teaching staff. The staff must also have a special andragogic education.

#### o Legislation

- **Law on Vocational Education and Training** (Official Gazette of the Republic of Macedonia, No. 71/06, 117/08, 148/09, 17/11, 24/13, 137/13 and 41/14)
- **Law on Adult Education** (Official Gazette of the Republic of Macedonia, No. No. 7/08, 17/11, 51/11, 74/12, 41/14, 144/14 and 146/15);
- **Law on Craftsman's activities** (Official Gazette of the Republic of Macedonia, No. 62/04, 55/07, 115/10, 36/11, 53/11 and 164/13)
- Rulebook on the structure, organization and realization of the Master exam (Official gazette of RM, No. 36/08)
- Rulebook on the form, content and manner of maintaining the Registry which contains the Certificate for completed Master exam (Official gazette of the Republic of Macedonia, No. 77/08)

#### Strategic and other documents

- Concept for Post-Secondary Education (2010).

#### o Quality assurance

Post-secondary education is conducted in public and private institutions accredited by the Ministry of Education and Science.

The attendees of the post-secondary education take exams:

- Upon completion of the specialized education, the participants take a specialist exam, and obtain a *Diploma for Specialized Education* (diploma za specijalisticko obrazovanie). Exams are conducted in front of a Commission composed of teachers of theory and practical work, and a representative from the employers.
- Upon completion of the Master exam program, the candidate takes the Master exam. The Law on Craftsman's Activities defines the conditions for conducting the Master exam. The exam is conducted according to the Rulebook on the structure, organization, and realization of the Master exam, based on which, the candidate receives *Diploma for completed Master exam* (diploma za polozen majstorski ispit). At the moment, the preparation of a Rulebook on taking the Master exam is in progress, in accordance with the existing Concept for Post-Secondary Education.

**Table 18: Qualifications acquired in post-secondary education**

Type of institution	Exam	Title of the public document	Institution issuing the qualification	Level of qualification according to NQF
Accredited institution for post-secondary education	Specialist exam	Diploma for specialized education (Diploma za specijalisticko obrazovanie)	Accredited institution	VB
	Master exam	Diploma for completed Master exam (Diploma za polozen majstorski ispit)	Accredited institution	VB

**Table 19: Tabular presentation of post-secondary vocational education and training (VB)**

Entry requirements	Completed technical education, vocational education for occupations, gymnasium or art education, with or without working experience.
Education and training	<p>Post-secondary education is realized through curricula and programmes for</p> <ul style="list-style-type: none"> <li>• Specialized education, and</li> <li>• Master exam.</li> </ul> <p>The curricula and programmes for specialized education are proposed by the VET Centre, and they are adopted by the Minister of Education and Science. The curricula and programmes for the Master exam are prepared by the VET Centre and they are adopted by the Chamber of Crafts of the Republic of Macedonia, upon prior positive opinion of the Ministry of Education and Science. Education is realized in accredited public and private institutions (secondary schools, higher vocational schools, specialized institutions for post-secondary education and institutions for post-secondary education within chambers, employers' organizations and labour associations and companies).</p>
Financing	Self-financing by the candidates or employers.
Teachers qualifications	Higher education and special andragogic education. Education and training are realized by several types of teachers: General education teachers, vocational-theoretical education teachers, and teachers for specialized practice – instructors.
Expected learning outcomes	The programmes have been programmed based on the old Concept for Specialized Education. A new Concept has been adopted for post-secondary education, which shall be the basis for reforms in this type of education with programmes based on learning outcomes.
Assessment and awards	<p>Examination programmes for specialist exams are prepared by the VET Centre in cooperation with the chambers, and are adopted by the Minister of Education and Science. Candidates take the specialist exam in front of a Commission composed of teachers of theory and practical work, and a representative from the employers. They acquire a <i>Diploma for specialized education (diploma za specijalisticko obrazovanie)</i>.</p> <p>Examination programmes for Master exam and those for vocational competence for crafts are adopted by the Chamber of Crafts of the Republic of Macedonia, upon prior approval by the Minister of Education and Science. Candidates take the Master exam in accordance with a Rulebook on the structure, organization and realization of the Master exam, and acquire a <i>Diploma for Master Exam (diploma za polozen majstorski ispit)</i>.</p>
Progression routes	They may continue to higher education.
Labor Market	YES, with diploma for specialized education and diploma for craftsmen.
Quality assurance	<ul style="list-style-type: none"> <li>• Curricula adopted by the Chamber of Crafts of the Republic of Macedonia upon positive opinion of the Ministry of Education and Science;</li> <li>• Public and private institutions verified by the Ministry of Education and Science;</li> <li>• Exams are conducted in front of a Commission composed of teachers of theory and practical work, and a representative from the employers.</li> </ul>
Example	Master exam for Goldsmith.

Example of post-secondary curriculum for specialized education for Car Mechanic Specialist is provided on the website [http://mrk.mk/wp-content/uploads/2015/07/Specijalisticki\\_ispit.pdf](http://mrk.mk/wp-content/uploads/2015/07/Specijalisticki_ispit.pdf).

Example of post-secondary curriculum for Master of Crafts for Gold is provided on the website <http://mrk.mk/wp-content/uploads/2015/07/STRUCNA-ZLATARSTVO.pdf>

## 2.2.5. Higher education

### ○ General description

In accordance with the Bologna Process requirements<sup>10</sup>, the study programmes in higher education are organized in three cycles, based on ECTS credits. Issuing Diploma Supplement is compulsory. Since the academic year 2008/2009, all first and second cycle study programmes are reformed and students can no longer enroll in pre – Bologna programmes. The implementation of the reformed third cycle doctoral studies started in the academic year 2011/2012. The study programmes are based on learning outcomes.

The duration of first cycle university studies, as a rule, is three to four years (180 to 240 ECTS credits). This qualifies the successful graduates for entry into the second cycle and gives them opportunity to enter the labour market. Upon completion of the first cycle (baccalaureate/bachelor), the graduate receives a Diploma in the specific area and a Diploma Supplement. The professional studies last three years with 180 ECTS credits. There is the possibility for

<sup>10</sup>The Republic of Macedonia joined the Bologna Process in 2003.

professional studies to last four years with 240 ECTS credits. The Law on Higher Education foresees the development of short first cycle professional study programmes corresponding to 60 - 120 ECTS credits.

As an exception, the durations of the studies for regulated professions are:

- Medicine, 360 ECTS credits (6 years)
- Dentistry, 300 ECTS credits (5 years)
- Pharmacy, 300 ECTS credits (5 years)
- Veterinary Medicine, 330 ECTS credits (5 ½ years)
- Architecture, 300 ECTS credits (5 years).

The academic university studies of second cycle last from one to two years (from 60 to 120 ECTS credits). The studies may last longer if they are in accordance with internationally accepted standards for a relevant profile. The total number of credits acquired at the first and second cycle of university studies amount 300 ECTS credits. The academic degree *magister* is acquired with completed second cycle of studies. In English, the acquired academic degree is “master”. With completed second cycle of specialized studies, the title *specialist in a respective profession* is acquired.

In general, doctoral studies last at least three years (minimum 180 ECTS credits). Academic degree *doctor of sciences (dr.sc) (doktor na nauki)*, or *doctor of art (dr.art) (doktor na umetnost)* is acquired by public defense of a doctoral thesis. The study programme for doctoral studies mainly covers active research work under mentoring and includes:

- organized academic training, containing advanced and vocational courses
- independent research project under mentoring (doctoral project)
- international mobility, at least one-week of stay
- lectures and other type of communication activities
- publications in international scientific journals and active participation in international events in relation to the doctoral thesis, and
- preparation and public defense of the doctoral thesis resulting from the doctoral project.

The doctoral studies in the field of art consist of two parts – doctoral thesis and public presentation of the art work or exhibition.

Examples of study programmes for third cycle studies:

- Doctoral studies in Industrial Engineering and Management <http://www.mf.ukim.edu.mk/system/files/Elaborat%20Doktorski%20Studii%20-INDUSTRISKO%20INZENERSTVO%20I%20MENADZMENT.pdf>
- Doctoral studies in Mechanical Engineering: [http://www.mf.ukim.edu.mk/system/files/Elaborat%202012-%20MFS%20Doktorski%20Studii%20-%20MASINSTVO\\_0.pdf](http://www.mf.ukim.edu.mk/system/files/Elaborat%202012-%20MFS%20Doktorski%20Studii%20-%20MASINSTVO_0.pdf).

**Table 20: Qualifications in the higher education system**

Cycle	Type of studies	ECTS credits	Title of public document	Title	Level of the qualification in the NQF
First cycle studies	Short cycle studies	60-120	Certificate		VA
	Academic studies	180-240	Diploma in the specific area	baccalaureate	VIA
	Professional studies	180-240	Diploma in the specific area	baccalaureate	VIB
Second cycle studies	Academic studies	60-120	Master degree diploma	master	VIIA
	Professional studies	60-120	Specialist diploma	specialist	VIIIB
Third cycle studies	Doctoral studies	At least 180	Diploma	Doctor of science/ Doctor of Art	VIII

According to the Law on Higher Education, higher education institutions do not charge tuition fees to: students without parents; persons with a first and second degree of disability; persons with war-related disabilities and persons grown up in orphanages. Funds for the tuition fee of these students are ensured from the Budget of the Republic of Macedonia. Student’s quotas and diversity of the study programmes at public higher education institutions are

carefully planned to fulfill the projections for socio-economic and regional development, as well as the demographic projections.

Higher Education Institutions can be Universities and Higher Professional Schools. Higher Education Institutions within the university might be Faculty, Art Academy and Higher Professional School as units of the university. The Higher Education Institutions can be public, private-public non-profit institutions, and private (profit or non-profit) institutions. By number and categories, the Higher Education Institutions are as follows:

1. Universities
  - Public 5
  - Private 11
2. Higher professional schools
  - Public as part of university 1
  - Private 4
3. Research Institutes
  - Public as part of university 6
  - Public independent 7
  - Private as part of university 3
  - Private independent 12
4. Religious Higher Education institutions
  - Faculty of Orthodox Theology
  - Faculty of Islamic Theology
5. Military Academy

According to the Law on Higher Education, Public Higher Education Institution as a university and as a unit of the university or as an independent Higher Education Institution is established by the Parliament of the Republic of Macedonia by law. Private (profit or non-profit) Higher Education Institution is established by a domestic and foreign legal entity or a person, under the conditions defined in the Law on Higher Education, upon approval of the Government of the Republic of Macedonia.

Universities are entitled to provide academic studies of first, second and third cycle; first and second cycle of professional studies; short cycle of studies and courses and to conduct research and applicative activities. Higher professional schools are entitled to provide professional studies of first and second cycle, short cycle of studies and courses and applicative activities. Research Institutes, within universities or independent ones, are entitled to provide academic studies of second and third cycle within the respective scientific fields; courses and to conduct research and applicative activities.

The Faculty of Orthodox Theology and the Faculty of Islamic Theology are recognized as independent Higher Education Institutions established by the Macedonian Orthodox Church and by the Islamic Community in the Republic of Macedonia respectively and are entitled to provide studies in the field of theology.

The Military Academy, established by the Ministry of Defense, provides academic and professional studies, as well as professional courses in the field of defense.

The Republic of Macedonia pays special attention territorial distribution of the population and develops the network of public universities regionally (see Figure 2.). The public and some private universities implement dispersed study programmes in the larger towns.

The largest one, “Ss.Cyril and Methodius” University was established in Skopje in 1949. Study programmes are realized in Macedonian, as well as in the Albanian and English languages.

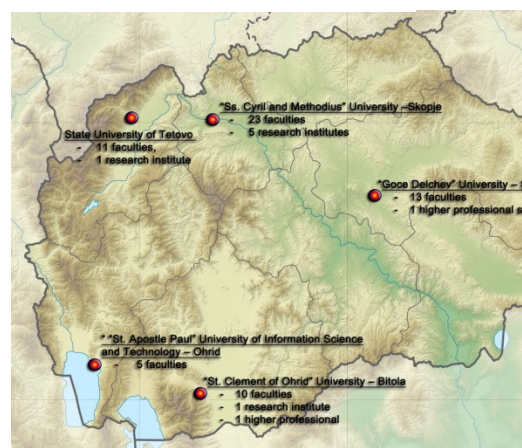
The “St. Clement of Ohrid” University was established in Bitola (South-Western region) in 1979. It offers study programmes in Macedonian and English.

The State University of Tetovo (North-Western region) was established in 2004. It offers study programmes mainly in Albanian, but also in the Macedonian and in the English languages.

The “Goce Delcev” University was established in Shtip (Eastern region) in 2008. It offers study programmes mainly in Macedonian, but also in English.

The youngest, “St. Apostle Paul” University of Information Science and Technology was established Ohrid (South-Western region) in 2009. It offers study programmes in English.

Figure 2.



Private Higher Education Institutions offer study programmes mainly in social sciences, few of them in informatics, robotics, and mining, mainly in Macedonian language but also in Albanian, Turkish and English language. The Franklin University from Ohio, USA and the Faculty of Economics, University of Ljubljana have their branches in the Republic of Macedonia.

**Table 21. Distribution of students enrolled in the first cycle**

Academic year	Number of students		Distribution by type of higher education institutions (in %)		
	Total	females (%)	Public	Private	Religious
2012/2013	56 906	54,5%	86,8%	12,7%	0,5%
2013/2014	57 746	54,5%	88,5%	11,1%	0,5%
2014/2015	59 359	54,2%	87,3%	12,2%	0,45%

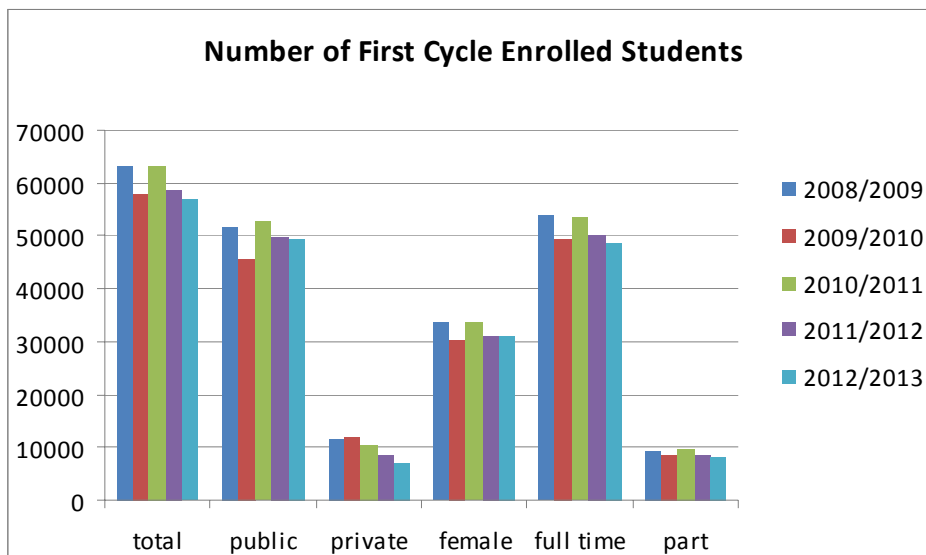
Source: State Statistical Office

**Table 22. Distribution of graduated students of the first cycle**

Year	Number of graduates		Distribution by type of higher education institutions (in %)		
	Total	females (%)	Public	Private	Religious
2012	10 392	55,7%	79,03%	20,9%	0,06%
2013	9 480	56,3%	77,1%	22,6%	0,3%
2014	9 863	55,9%	78,5%	21,2%	0,23%

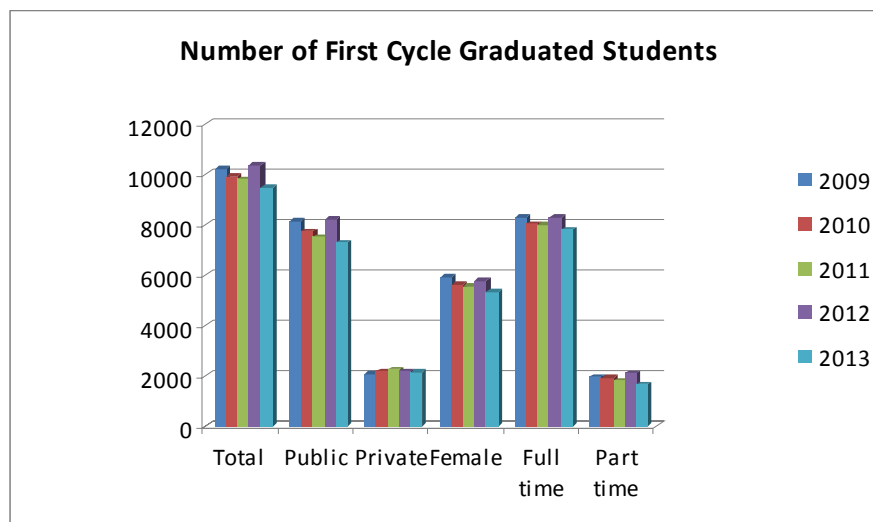
Source: State Statistical Office

**Figure 3. Distribution of students enrolled in the first cycle of studies in the period 2008-2013**



Source: State Statistical Office

**Figure 4. Distribution of the number of graduates of the first cycle**



Source: State Statistical Office

## ○ Legislation

- **Law on Higher Education** („Official Gazette of the Republic of Macedonia“ No.35/08, 103/08, 26/09, 83/09, 99/09, 115/10, 17/11, 51/11, 123/12, 15/13, 24/13, 41/14, 116/14, 130/14, 10/15, 20/15 and 98/15);
- Decree on the norms and the standards for establishing of Higher Education Institutions and for performing higher education activities ("Official Gazette" No 103/10, 168/10 & 10/11);
- Degree of National Framework for Higher Education Qualifications ("Official Gazette" No 154/10);
- Rulebook on the content and the form of the diploma, guidelines for preparing the Diploma Supplement and other public documents; ("Official Gazette" No 84/2009, 86/2009);
- Rulebook on the manner and conditions for the organization of practical training for students ("Official Gazette" No 120/10);
- Rulebook on conditions that a prominent expert in the practice of the relevant area shall fulfill to perform clinical teaching ("Official Gazette" No 120/10);
- Rulebook on the form, manner of keeping (in material and electronic form) and content of the register of enrolled students and the general ledger of graduates ("Official Gazette" No 71/2009);
- Rulebook for registration of Higher Education Institutions ("Official Gazette" No 71/2009);
- Rulebook on the form, content and manner of keeping of the Higher Education Qualifications Register (“Official Gazette of the Republic of Macedonia“ No.62/14);
- Rulebook on the manner of verifying the compatibility of the National Higher Education Qualifications Framework with European Higher Education Qualifications Framework (self-certification) (13-5986/1; 04.04.2014);
- Rulebook on procedure and method for keeping of the higher education activity database ("Official Gazette" No. 65/2013);
- Guidelines on criteria for the manner of providing and assessing the quality of the Higher Education Institutions and academic staff ("Official Gazette" No. 67/2013);
- Rulebook of the organization, work, method of deciding, methodology for accreditation and evaluation, standards for accreditation and evaluation, and other issues related to the work of the Board for Accreditation Evaluation of Higher Education ("Official Gazette" No. 151/2012);
- Rulebook for the compulsory components of the first, second and third cycle study programmes ("Official Gazette" No. 154/2011);
- Rulebook on the precise criteria and competences of the Boards for cooperation and trust with the public (Official Gazette of the Republic of Macedonia, No. 148/13);
- Rulebook on the content, form and manner of maintaining the Registry of Mentors of Master and Doctoral Papers (Official Gazette of the Republic of Macedonia, No. 148/13);
- **Law on Higher Education Institutions for education of teaching staff for pre-school, primary and secondary education** (Official Gazette of the Republic of Macedonia, No. 10/15, 20/15 and 98/15);
- **Law on Teachers' Academy** (Official Gazette of the Republic of Macedonia, No. 10/15).

## ○ Governance

*The Government of the Republic of Macedonia* (website: <http://vlada.mk>) – decides on quotas for enrolment in the first cycle studies and gives consent for the calls for enrolment of students on the second and the third cycle of studies on the public universities, upon proposals of the universities and the anticipated needs of the labour market. It initiates establishing public higher education institutions and provides consent for establishing private higher education institutions. The laws for establishing public higher education institutions are adopted by the Parliament of the Republic of Macedonia.

*Ministry of Education and Science* – responsible for higher education policies, providing funds from the National Budget, issuing institutional and study programme working permissions, recognition of higher education qualifications acquired abroad and providing technical support to the Higher Education Accreditation and Evaluation Board (HEAEB). The Ministry maintains a Register of Higher Education Institutions and a Register of Higher Education Qualifications.

*Higher Education Accreditation and Evaluation Board* – composed of 23 members out of which: nine representatives of the universities (elected by the Inter-University Conference), two members from the Macedonian Academy of Sciences and Arts, one representative of the most representative body of the employers, two members of the Interuniversity Students' Parliament, and nine members appointed by the Government of the Republic of Macedonia. The Board is responsible for institutional and study programmes accreditation and for external evaluation of higher education and research institutions (education activities, research activities and academic staff). The work of the Board is based upon the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

*Rectors' Conference of Public Universities and Rectors' Conference of Private Universities* – for the purpose of reviewing and coordinating the matters of mutual importance and interest for carrying out the higher education activity,

the public universities establish a Rectors' Conference of Public Universities consisted of the rectors of the public universities. For the purpose of reviewing and coordinating the issues of mutual importance and interest for carrying out the higher education activity, the private universities establish a Rectors' Conference of Private Universities consisted of the rectors of the private universities. The Rectors' Conferences submit proposals for members of the Higher Education Accreditation and Evaluation Board and in the Interuniversity Conference.

*Interuniversity Conference* – for the purpose of reviewing and coordinating the matters of mutual importance, universities set up an Interuniversity Conference as a public legal body. The Conference is composed of the rectors of the universities, the presidents of the student' parliaments of the universities, 20 members from the academic-scientific community elected by the senates of the universities, and one member from the directors of the higher professional schools.

*University senate* – governing and expert organ consisted of representatives of the units of the university, elected from among the professors, scientific counselors and students. The students account for at least 15% of the senate members. Each unit of the university has at least one representative in the senate. The rector is an *ex officio* member of the senate. The senate elects full professors and creates university policies.

*Rector* – managing organ and represents the university in the country and abroad. The rector coordinates the higher education, art, research and applied activities and the other activities of the university.

*Rector's Governing Board* – composed of the Rector, the vice-rectors, the deans of the faculties, the directors of the schools of higher professional education, the directors of the accredited scientific institutes, and student representatives.

*Board for Trust and Cooperation with the Public*– composed of representatives of academics, students, chambers, professional associations, local self-governance and the Ministry of Education and Science. Gives opinion and recommendations on study programmes, academic promotions, relevance of the research activities and other activities related to teaching, research and applied work of the university units. The Higher Accreditation and Evaluation Board shall initiate the process of accreditation of a study programme only after receiving opinion from the Board for Trust and Cooperation with the Public.

## ○ Learning outcomes

The first, second and third cycle study programmes are designed on the basis of learning outcomes in accordance with the Law on Higher Education. The programmes in all study years consist of up to 60% compulsory subjects, at least 30% elective subjects and 10% free subjects from a university pre-defined list. Subjects in entrepreneurship and innovations are obligatorily included in the 10% of free subjects. The list of free elective subjects is publicly announced.

Example of the learning outcomes for the first and second cycle academic studies in Power Systems of the University "St. Clement of Ohrid" – Bitola is provided in Annex 2. Examples of study programmes based on learning outcomes from the universities of the Republic of Macedonia are provided on the website [http://mrk.mk/wp-content/uploads/2015/07/LO-for\\_Bitola.pdf](http://mrk.mk/wp-content/uploads/2015/07/LO-for_Bitola.pdf).

## ○ Quality assurance

The quality assurance system covers:

- Initial accreditation of higher education institutions and study programmes;
- Assessment of the quality of higher education activities, management, financing, academic and other activities and priorities, measured by *evaluation*, and
- Other activities and mechanisms through which the quality of higher education is developed and maintained, determined by the law and the acts of the bodies that assess the quality of higher education.

All higher education institutions are obliged to have institutional accreditation and to offer accredited study programmes, as well as to have working permission provided by the Minister of Education and Science. The accreditation is performed by the Higher Education Accreditation and Evaluation Board. The Board was established in 2002 and accreditation started in the academic year 2003/04. In line with the amendments to the Law on Higher Education of 2010, which introduced learning outcome based study programmes, all study programmes were re-accredited during the academic year 2011/12. In 2011, the Board undertook also the responsibilities for external evaluation and became Higher Education Accreditation and Evaluation Board. Since October 2011 the Board has affiliated status within ENQA. Nomination of new members of the Board is in progress and will continue the activities in the academic year 2015/16.

Re-accreditation of first- and second-cycle study programmes takes place in a five-year period. Re-accreditation of the third cycle study programmes takes place every three years.

The institutional evaluation covers: self-evaluation, external evaluation and evaluation of the quality of the academic staff. Examples of evaluation reports:

- Self-evaluation and External evaluation reports of the University “Ss. Cyril and Methodius” – Skopje are available on the link: [http://ukim.edu.mk/mk\\_content.php?meni=155&glavno=1](http://ukim.edu.mk/mk_content.php?meni=155&glavno=1)
- Self-evaluation reports of the University “Goce Delcev” – Shtip (2007-2012 and 2012-2013) are available of the link: <http://ugd.edu.mk/index.php/mk/ugd/zaugd>
- The website of the South East European University - Tetovo contains a sub-page on quality assurance and management. Link to the website: <http://www.seeu.edu.mk/en/about/quality-assurance-management>.

Implementation of the Standards and Guidelines for Quality Assurance in the European Higher Education Area is compulsory. The legal basis is established with the bylaws on quality assurance. Depending on subject of the bylaws they are adopted by the Minister of Education and Science, HEAEB or the universities. Certain bylaws are adopted by the Inter-university Conference (e.g. Rulebook for election in academic titles, Rulebook for self-evaluation).

#### *Student examination*

The examination assesses whether and to what extent the student has acquired knowledge and understanding, skills and competence which correspond to the aims, competence and academic requirements prescribed by the generic and specific level descriptors that determine the learning outcomes of particular study programme. The form and content of the examination reflect the aims and the working methods of the subject and the study programme and enable individual assessment of the achieved learning outcomes by each student separately.

#### *Diploma Supplement*

The student, who has fulfilled all obligations according to the study programme for completing higher education of any cycle, receives a Diploma. Integral part of the Diploma is the Diploma Supplement. The content of the Diploma Supplement is prescribed by the Law on Higher Education and the bylaws. It is free of charge and should be automatically issued to graduate students of each cycle. It is issued in Macedonian and in English language. In case when the study programme has been carried out into the languages of the minorities, Diploma Supplement is issued in that language as well.

Example of Diploma Supplement issued by the University “Ss. Cyril and Methodius” - Skopje is provided on the website: [http://mrk.mk/wp-content/uploads/2015/07/UKIM\\_Diploma\\_Supplement.pdf](http://mrk.mk/wp-content/uploads/2015/07/UKIM_Diploma_Supplement.pdf).

In higher educational and scientific institutions, the State Inspectorate conducts the evaluation and monitoring over the application of the laws and the quality of the higher education. The teaching schools are subject of special supervision of the organization and realization of practical training of students in teaching profession.

**Table 23: Tabular presentation of level VA (short cycle) studies**

Entry requirements	Person that is awarded with IV level certificate and has passed the state leaving exam or the international leaving exam may enroll. The enrollment is on the basis of a public announcement published by the higher education institution. The procedure and criteria for selection of candidates ensure equal access for all candidates regardless of race, color, gender, language, religion, political or other belief, ethnic, national or social and financial status, birth, disability, sexual orientation and age.
Education and training	Lasts one or two years and 60 or 120 ECTS credits are acquired by its completion. The study programmes are developed according to the ESG. For all study years, they should consist of compulsory and elective subjects. The study programmes are adopted by the Senate of the university upon proposal of the academic-scientific Council. They have to be accredited by the HEAE and to possess work permission from the Minister of Education and Science.
Financing	For the study programmes performed by the public higher education institutions the financing is provided from the National Budget. The founder of the private Higher Education Institution provides financing of the study programmes.
Teachers qualifications	Holder of PhD degree in respected scientific area in which he/she is to be elected for, has respective research achievements, has competence in carrying out particular types of higher education activity, and has a positive assessment of the self-evaluation, and elected as higher education lecturer.
Expected learning outcomes	Study programmes are learning outcomes based.
Assessment and awards	The studies are completed by taking all activities in accordance with the study programme. Examination of the knowledge and understanding, skills and competence is made in order to assess whether and to what extent the acquired qualifications of the student correspond to the aims,



	<p>competence and academic requirements prescribed by the generic and specific qualification descriptors that determine the learning outcomes of particular study programme. The types of knowledge examination, projects, practical exams etc., should reflect the aims of the subject and of the study programme and enable individual assessment of student achievements. The form and content of the assessment should reflect the contents and the working methods of the subject and the study programme.</p> <p>After completing the study programme requirements the candidate is awarded a <i>credential (uverenie)</i>.</p>
Progression routes	Holders of VA level certificate can enter into the first cycle study programmes.
Labour Market	Yes. The studies provide knowledge and understanding, skills and competence that enable carrying out specialized professions and qualify for direct involvement into the working process.
Quality assurance	<ul style="list-style-type: none"> <li>• Institutional and Study Programme Accreditation and Re-accreditation</li> <li>• Self-evaluation process</li> <li>• External evaluation</li> <li>• University ranking</li> <li>• State plagiarism system</li> <li>• Board for trust and cooperation with the public.</li> </ul>

**Table 24: Tabular presentation of level VIB (first cycle) studies**

Entry requirements	<p>Person that is awarded IV level certificate and has passed the state leaving exam or the international leaving exam. The enrollment is on the basis of a public announcement published by the higher education institution. The procedure and criteria for selection of candidates ensure equal access for all candidates regardless of race, color, gender, language, religion, political or other belief, ethnic, national or social and financial status, birth, disability, sexual orientation and age.</p>
Education and training	<p>Lasts three years and 180 ECTS credits are acquired by its completion.</p> <p>The study programmes are developed according to the ESG. The programmes in all study years consist of 60% compulsory subjects, 30% elective subjects and 10% free subjects from a university pre-defined list. Subjects in entrepreneurship and innovations are obligatorily included in the 10% of free subjects. The list of free elective subjects is publicly announced.</p> <p>The study programmes are adopted by the Senate of the university upon proposal of the academic-scientific Council. They have to be accredited by the HEAE and to possess work permission from the Minister of Education and Science.</p>
Financing	<p>The study programmes performed by the public higher education institutions are financed from the National Budget.</p> <p>The founder of the private Higher Education Institution provides financing of the study programmes.</p>
Teachers qualifications	<p>Holder of PhD degree in respected scientific area in which he/she is to be elected for, has respective research achievements, has competence in carrying out particular types of higher education activity, and has a positive assessment of the self-evaluation, and elected as higher education lecturer.</p>
Expected learning outcomes	<p>Study programmes are learning outcomes based.</p>
Assessment and awards	<p>The studies are completed by taking all activities in accordance with the study programme. Examination of the knowledge and understanding, skills and competence is made in order to assess whether and to what extent the acquired qualifications of the student correspond to the aims, competence and academic requirements prescribed by the generic and specific qualification descriptors that determine the learning outcomes of particular study programme. The types of knowledge examination, projects, practical exams etc., should reflect the aims of the subject and of the study programme and enable individual assessment of student achievements. The form and content of the assessment should reflect the contents and the working methods of the subject and the study programme.</p> <p>After completing the study programme requirements the candidate is awarded with a <i>Bachelor Diploma (диплома)</i> and Diploma Supplement.</p>
Progression routes	Holders of VIB level bachelor diploma can enter into the second cycle study programme.
Labour Market	Yes. The studies qualify the graduates to carry out activities in the respected field of science and higher education, the business world, the public sector and the society at large through applying their scientific and professional competence.
Quality assurance	<ul style="list-style-type: none"> <li>• Institutional and Study Programme Accreditation and Re-accreditation</li> <li>• Self-evaluation process</li> <li>• External evaluation</li> <li>• University ranking</li> <li>• State plagiarism system</li> <li>• Board for Trust and Cooperation with the Public.</li> </ul>

**Table 25: Tabular presentation of level VIA (first cycle) studies**

Entry requirements	Person that has gained IV level certificate and passed the state leaving exam or international leaving exam. The enrollment is on the basis of a public announcement published by the higher education institution. The procedure and criteria for selection of candidates for admission in the manner that guarantees the quality of all candidates regardless of race, color, gender, language, religion, political or other belief, ethnic, national or social origin, wealth, birth, social status, disability, sexual orientation and age is determined by the higher education institution.
Education and training	The studies last four years and 240 ECTS credits are acquired. The study programmes are developed according to the ESG. The programmes in all study years contain of 60% compulsory subjects, 30% elective subjects and 10% free subjects from a university pre-defined list. Subjects in entrepreneurship and innovations are obligatorily included in the 10% of free subjects. The list of free elective subjects is publicly announced. The study programmes are adopted by the Senate of the university upon proposal of the academic-scientific Council. They have to be accredited by the HEAE and to possess work permission from the Minister of Education and Science.
Financing	For the study programmes performed by the public higher education institutions the financing is provided from the National Budget. The founder of the private Higher Education Institution provides financing of the study programmes.
Teachers qualifications	Holder of PhD degree in respected scientific area in which he/she is to be elected for, has respective research achievements, has competence in carrying out particular types of higher education activity, and has a positive assessment of the self-evaluation, and elected as higher education lecturer.
Expected learning outcomes	Study programmes are learning outcomes based.
Assessment and awards	The studies are completed by taking all activities in accordance with the study programme. Examination of the knowledge and understanding, skills and competence is made in order to assess whether and to what extent the acquired qualifications of the student correspond to the aims, competence and academic requirements prescribed by the generic and specific qualification descriptors that determine the learning outcomes of particular study programme. The types of knowledge examination, projects, practical exams etc. should reflect the aims of the subject and of the study programme and enable individual assessment of student achievements. The form and content of the assessment should reflect the contents and the working methods of the subject and the study programme. After completing the study programme requirements the candidate is awarded with a <i>Bachelor Diploma (диплома)</i> and Diploma Supplement.
Progression routes	Holders of VIA level bachelor diploma can enter into second cycle study programme.
Labour Market	Yes. The studies qualify the graduates to carry out activities in the respective field of science and higher education, the business world, the public sector and the society at large through applying their scientific and professional competence.
Quality assurance	<ul style="list-style-type: none"> <li>• Institutional and Study Programme Accreditation and Re-accreditation</li> <li>• Self-evaluation process</li> <li>• External evaluation</li> <li>• University ranking</li> <li>• State plagiarism system</li> <li>• Board for trust and cooperation with the public.</li> </ul>

**Table 26: Tabular presentation of level VIIB (second cycle professional) studies**

Entry requirements	Holders of VI level bachelor diploma and fulfilled university entry requirements. The enrollment is on the basis of a public announcement published by the higher education institution. Students with special needs can enroll at level VIIB studies.
Education and training	The studies last one year and 60 ECTS credits are acquired. The study programmes are developed according to the ESG. The programmes in all study years contain of 60% compulsory subjects, 30% elective subjects and 10% free subjects from a university pre-defined list. Subjects in entrepreneurship and innovations are obligatorily included in the 10% of free subjects. The list of free elective subjects is publicly announced. The study programmes are adopted by the Senate of the university upon proposal of the academic-scientific Council. They have to be accredited by the HEAE and to possess work permission from the Minister of Education and Science.
Financing	For the study programmes performed by the public higher education institutions the financing is provided from the National Budget. The founder of the private Higher Education Institution provides financing of the study programmes.
Teachers qualifications	Holder of PhD degree in respected scientific area in which he/she is to be elected for, has respective research achievements, has competence in carrying out particular types of higher education activity, and has a positive assessment of the self-evaluation, and elected as higher education lecturer.

Expected learning outcomes	Study programmes are learning outcomes based.
Assessment and awards	The studies are completed by taking all activities in accordance with the study programme. Examination of the knowledge and understanding, skills and competence is made in order to assess whether and to what extent the acquired qualifications of the student correspond to the aims, competence and academic requirements prescribed by the generic and specific qualification descriptors that determine the learning outcomes of particular study programme. The types of knowledge examination, projects, practical exams etc. should reflect the aims of the subject and of the study programme and enable individual assessment of student achievements. The form and content of the assessment should reflect the contents and the working methods of the subject and the study programme. After completing the study programme requirements the candidate is awarded with a <i>Specialist Diploma (диплома за специјалност)</i> and <i>Diploma Supplement</i> .
Progression routes	No direct vertical progression route. Possibility for progression exists upon passing specially tailored additional activities.
Labour Market	Yes. The professional (specialistic) studies provide the graduates with knowledge and understanding, skills and competence that enable them to carry out specialized professions and qualify them for direct involvement into the working process.
Quality assurance	<ul style="list-style-type: none"> <li>• Institutional and Study Programme Accreditation and Re-accreditation</li> <li>• Self-evaluation process</li> <li>• External evaluation</li> <li>• University ranking</li> <li>• State plagiarism system</li> <li>• Board for trust and cooperation with the public.</li> </ul>

**Table 27: Tabular presentation of level VIIA (second cycle academic) studies**

Entry requirements	Holders of VI level bachelor diploma and fulfilled university entry requirements. The enrolment is on the basis of a public announcement published by the higher education institution. Students with special needs can enroll at level VIIA studies.
Education and training	The studies last one or two years and 60 or 120 ECTS credits are acquired by completion of the requirements of the study programme. The study programmes are developed according to the ESG. The programmes in all study years contain of 60% compulsory subjects, 30% elective subjects and 10% free subjects from a university pre-defined list. Subjects in entrepreneurship and innovations are obligatorily included in the 10% of free subjects. The list of free elective subjects is publicly announced. The study programmes are adopted by the Senate of the university upon proposal of the academic-scientific Council. They have to be accredited by the HEAE and to possess work permission from the Minister of Education and Science.
Financing	For the study programmes performed by the public higher education institutions the financing is provided from the National Budget. The founder of the private Higher Education Institution provides financing of the study programmes.
Teachers qualifications	Holder of PhD degree in respected scientific area in which he/she is to be elected for, has respective research achievements, has competence in carrying out particular types of higher education activity, and has a positive assessment of the self-evaluation, and elected as higher education lecturer.
Expected learning outcomes	Study programmes are learning outcomes based.
Assessment and awards	The studies are completed by taking all activities in accordance with the study programme. Examination of the knowledge and understanding, skills and competence is made in order to assess whether and to what extent the acquired qualifications of the student correspond to the aims, competence and academic requirements prescribed by the generic and specific qualification descriptors that determine the learning outcomes of particular study programme. The types of knowledge examination, projects, practical exams etc., reflect the aims of the subject and of the study programme and enable individual assessment of student achievements. The form and content of the assessment reflect the contents and the working methods of the subject and the study programme. After completing the study programme requirements the candidate is awarded with a <i>Master Diploma (диплома за магистар)</i> and <i>Diploma Supplement</i> .
Progression routes	Holders of VIIA level master diploma can enter into third cycle (doctoral) study programmes.
Labour Market	Yes. The academic studies qualify the graduates for carrying out activities in the respected field of science and higher education, the business world, the public sector and the society at large by qualifying them to develop and apply scientific and professional competence.

Quality assurance	<ul style="list-style-type: none"> <li>• Institutional and Study Programme Accreditation and Re-accreditation</li> <li>• Self-evaluation process</li> <li>• External evaluation</li> <li>• University ranking</li> <li>• State plagiarism system</li> <li>• Board for trust and cooperation with the public.</li> </ul>
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**Table 28: Tabular presentation of doctoral studies (level VIII)**

Entry requirements	<p>Holders of VIIA level master diploma and completed university entry requirements. The enrollment is on the basis of a public announcement published by the higher education institution. Students with special needs can enroll at doctoral studies.</p>
Education and training	<p>The third cycle (doctoral) studies last at least three years and 180 ECTS credits are acquired. The study programmes are developed according to the ESG. The study programme mainly covers active research work under mentorship and includes:</p> <ul style="list-style-type: none"> <li>- organized academic training, containing advanced and vocational courses,</li> <li>- independent research project under mentoring (doctoral project),</li> <li>- international mobility, at least one-week stay,</li> <li>- lectures and other type of communication activities,</li> <li>- publications in international scientific journals and active participation in international events in the area of the doctoral thesis, and</li> <li>- preparation and public defense of the doctoral thesis on the basis of the doctoral project.</li> </ul> <p>The doctoral studies in the field of art consist of two parts – doctoral thesis and public presentation of the art work or exhibition.</p> <p>The study programmes are adopted by the Senate of the university upon proposal of the academic-scientific Council. They have to be accredited by the HEAE Board and to possess work permit from the Minister of Education and Science.</p>
Financing	<p>For the study programmes performed by the public higher education institutions the financing is provided from the National Budget.</p> <p>The founder of the private Higher Education Institution provides financing of the study programmes.</p>
Teachers qualifications	<p>Holder of PhD degree in respected scientific area in which he/she is to be elected in the academic title: part-time or full professor, has to have respective research achievements, competence in carrying out particular types of higher education activity, and has a positive assessment from the PhD students within the institutional self-evaluation.</p>
Expected learning outcomes	<p>Study programmes are learning outcomes and research based.</p>
Assessment and awards	<p>The studies of the third cycle are completed by taking all activities in accordance with the study programme, public defense of the doctoral thesis and published at least two scientific papers in scientific journals.</p> <p>After completing the study programme requirements the candidate is awarded with a <i>PhD diploma (диплома за доктор на науки) and Diploma Supplement.</i></p>
Progression routes	<p>VIII level is the highest one.</p>
Labour Market	<p>Yes.</p>
Quality assurance	<ul style="list-style-type: none"> <li>• Institutional and Study Programme Accreditation and Re-accreditation</li> <li>• Self-evaluation process</li> <li>• External evaluation</li> <li>• University ranking</li> <li>• State plagiarism system</li> <li>• Board for trust and cooperation with the public.</li> </ul>

## 2.3 Adult education

### o General description

Adult education provides acquiring relevant educational level for everyone and for all adult groups. Persons acquire knowledge, skills and competence in accordance with the needs of the society and the labour market by way of formal education, non-formal and informal learning.

*Formal education of adults* is realized according to the laws on primary, secondary and higher education. It is conducted in public and private institutions, according to relevant curricula and programmes adopted by the Minister of Education and Science.

*Non-formal education* provides acquiring skills for work and social activities, as well as for personal development. Since 2012, it has been realized according to special programmes, verified by the Adult Education Centre.

*Informal education* encompasses activities for acquiring knowledge, skills and competence through everyday experience. Informal education is not yet systemically regulated.

The programmes are implemented in institutions accredited by the Ministry of Education and Science. The institution enrolls participants, signs an agreement with them and maintains records according to the relevant rulebooks. Special institutions for adult education are open civil universities for life-long learning which realize programmes for formal and non-formal adult education.

**Table 29: Overview of the number of accredited special programmes for adult education and trainings (number and certificates)**

Year	Number of accredited programmes	Number of trainings	Number of adults who have completed the training
2012	23	4	31
2013	26	15	141
2014	40	16	151
2015	64	26	373

Source: Centre for Adult Education

The main State body involved in providing adult education programmes is the Employment Services Agency (ESA) of the Ministry of Labour and Social Policy (MoLSP), which organises job-related training programmes and vocational guidance for unemployed adults. The ESA's Employment Preparation Programme<sup>11</sup> provides training to meet labour market needs with the aim of increasing the employability of registered unemployed persons and the training courses are provided by verified providers. The measures take account of the findings of an Analysis of Skill Needs on the Labour Market<sup>12</sup> and include the following:

**Table 30 : Overview of job-related trainings organised by ESA**

Type of training	Purpose	Target 2014	Actual 2014
Training at known employer	To provide registered unemployed persons with 3 months training related to defined job positions and based on training plans prepared by participating employers who are obliged to retain at least 50% of the trained persons	1125	544
Subsidized training at known employer	To provide unemployed persons aged 50-59, young people up to 29 years with completed primary/secondary education and long-term registered unemployed persons with 3 months of employment preparation training coupled with a period of subsidised employment	170	145
Training for demanded occupations on the labour market	Training provided through programmes of the MoES or verified adult education programmes with duration of three months of training and one month of practical work experience	232	202
Training for demanded occupations of the traffic branch	One month of training in a licensed motoring school leading to a driving licence for "D" category with opportunity for employment after completion.	30	30
Training for advanced ICT skills	3-6 month courses to upgrade ICT skills in design, graphic design, 3D animation and post-production, Java web development, Cisco certified network associate routing & switching (CCNA) or Microsoft certified solution associate (MCSA)	100	100 (est.)

<sup>11</sup> MoLSP: 2014 Operational Plan for Active Employment Programmes and Measures

<sup>12</sup> ESA: Training needs analysis 2008-13

Practical work (internship)	To provide 3 month internships for practical work experience with private sector employers for persons up to 29 years old with secondary education or university degree	319	237
Education for starting a business	Basic business start-up training implemented through the ESA's Self-Employment Programme	1000	1050
Motivational training	Training and advice provided by the ESA to help unemployed people improve their job seeking skills and motivation for using the ESA's services	3000	4136

With support from the European Training Foundation, a Concept for Non-Formal Adult Education and Informal Learning was developed (2014 and 2015). The Concept was approved by decision of the Minister of Education and Science (dated 16/09/2015). Main objective of this document is the integration of the non-formal education in the education and training system and providing learning outcomes that are certified within the MQF, as well as to propose a systematic approach for development of the non-formal education. It also aims to promote an innovative approach and rethinking of the non-formal education. The Concept Paper sets the frame and establishes the roadmap for policy development based on objectives in six priority areas supported with number of activities (see Table 31).

**Table 31: Roadmap for policy development in adult education**

Objective	Activity
<b>1. Improve learners' motivation to participate in adult education</b>	1.1 Initiate a public information campaign to raise awareness among the general public, employers and stakeholders, with messages adjusted to attract specific targeted groups
	1.2 Provide information, guidance and support to individuals to incentivize them to participate in appropriate non-formal adult education programmes in line with their employment, career-related, social or personal needs, ambitions and aspirations
	1.3 Provide incentives to individuals to participate in non-formal adult education
	1.4 Provide continuing professional development opportunities for professionals with higher education qualifications to support their career development through the updating of knowledge and skills
<b>2. Incentivize employers to invest in education and training for their employees</b>	2.1 Introduce appropriate incentives (e.g. through the tax system) for employers to provide learning opportunities for their employees including use of NQF recognised qualifications
	2.2 Promote the recruitment and development of human resources by employers according to NQF recognised qualifications
	2.3 Promote partnerships between employers and adult education providers, including the provision of work placements regulated by contracts in compliance with labour law
<b>3. Ensure that there is open and equal access to non-formal adult education for all</b>	3.1 Develop and provide modular qualifications in which the constituent parts of the qualification can be separately certificated to provide increased accessibility for adults and support credit accumulation and transfer
	3.2 Develop flexible course delivery arrangements that facilitate access for different groups of adult learners including those with individual needs
	3.3 Develop and implement basic skills qualifications provision
	3.4 Develop and implement a system for VNFIL by the EU deadline of 2018
<b>4. Deliver learning that is relevant to employers and learners</b>	4.1 Develop occupational standards to extend the number of non-formal programmes leading to vocational qualifications at NQF levels 2-5
	4.2 Incentivise providers to develop tailor-made programmes to meet the full range of needs of local employers
	4.3 Ensure that municipalities identify local adult education needs in consultation with relevant stakeholders and collaborate with the CAE and providers to ensure the availability of courses to meet those needs
<b>5. Deliver quality and effective non-formal adult education</b>	5.1 Support quality improvement in non-formal adult education provision
	5.2 Increase the number of non-formal adult education providers and programmes that are verified
	5.3: Implement effective monitoring and external evaluation arrangements for programme delivery
	5.4 Implement effective external quality assurance of candidate assessments

Objective	Activity
	5.5 Increase the capacity of the Centre for Adult Education to be a centre of expertise and a catalyst for innovation in adult learning
<b>6. Improve evidence-based education policy development and coordinate with other government policies</b>	6.1 Strengthen and improve the information sources and supply of data on adult education provision and participation
	6.2 Further develop the legislative, funding, institutional and regulatory framework for adult education
	6.3 Develop an inclusive and comprehensive network of stakeholders as a focus for dialogue, information sharing and coordinating activities

With the support of UNDP, the Concept for Primary Education of Adults was developed and adopted by the Ministry of Education and Science (dated 16/09/2015).

#### o Legal framework

- **Law on Adult Education** (Official Gazette of the Republic of Macedonia, No. 7/08, 17/11, 51/11, 74/12, 41/14, 144/14 and 146/15);
- Rulebook on the manner of accreditation of special programmes (Decision No. / 2014);
- Rulebook on the manner of accreditation of the institutions for adult education (Official Gazette of RM, No. 115/13);
- Rulebook on the standards for the premises, equipment and staff of the institutions for adult education (Decision No.19-14134/2 as of 09.09.2014);
- Rulebook on the title, content and form of the certificate on knowledge, skills and competence acquired through the special programmes for adult education (Official Gazette of RM, No. 37/10 and 141/12);
- Rulebook on the form, content and manner of maintaining the Central Register and the Municipal register of the institutions which realize publicly recognized programmes for adult education (Official Gazette of the Republic of Macedonia, No. 37/10);
- Rulebook on the content, form and procedure for signing the agreement on monitoring the programme for adult education (Decision N<sup>o</sup> 01-331/1 of 24.09.2015).
- **Law on open civil universities for life-long learning (Official Gazette of the Republic of Macedonia, No. 36/11 and 41/14).**

Strategic documents:

- Strategy on Adult Education 2010-2015, with Action plan;
- Concept for Non-Formal and Informal Adult Education in the Republic of Macedonia, Skopje, 2015;
- Concept for Primary Adult Education in the Republic of Macedonia, Skopje, 2015.

#### o Governance

*The Ministry of education and science* adopts a Strategy on adult education; it verifies the institutions for adult education; maintains registry of accredited institutions and provides funds in the Budget of the Republic of Macedonia for accreditation of adult education.

*The Ministry of Labour and Social Policy:* Participates in the realization of the national policy in the field of adult education; it identifies the needs for retraining and additional qualification of the staff, through analysis of the labor market, and delivers an opinion to the Council for adult education; it participates in the preparation and harmonization of the vocational qualifications; in cooperation with the Centre for Adult Education it initiates preparation of new vocational qualifications and participates in the organization of professional orientation for the candidates.

*The Council for Adult Education* is an advisory body established by the Government of the Republic of Macedonia. It considers strategic issues; proposes a Strategy for development of adult education in the context of life-long learning and monitors its realization; proposes standards of occupations; proposes funding of adult education programmes and development of the network of adult education institutions. The Council is composed of 13 members from: the Ministry of Education and Science, the Bureau for Development of Education, VET Centre, the Ministry of Finance, the representative trade union, the Local self-government units, the Employment Service Agency of the Republic of Macedonia, the Agency for Development of Small and Medium Enterprises, the Chamber of Commerce of the Republic of Macedonia, the Association of Chambers of the Republic of Macedonia, the Craftsmen Chamber of the Republic of Macedonia and experts in adult education.

*The Centre for Adult Education* (website: [www.cov.gov.mk](http://www.cov.gov.mk)) is the body implementing the policy on adult education and training. Develops adult education in cooperation with the social partners; it prepares concepts for adult education and models for special programmes for adult education; it proposes preparation of vocational standards to the Council for

Adult Education; it conducts accreditation of special adult education programmes; it maintains an electronic catalogue of verified special adult education programmes and electronic catalogue of verified institutions and publishes them on the Centre's website; facilitates the carrier development and professional orientation of the candidates in the adult education and coordinates international cooperation. The Centre is managed by a Governing Board of 11 members from: the Ministry of Education and Science, the Ministry of Labour and Social Policy, the Local self-government units, the Chamber of Commerce of the Republic of Macedonia, the Association of Chambers of the Republic of Macedonia, the Craftsmen Chamber of the Republic of Macedonia and experts from the Centre.

*The Local self-government units* (website: <http://www.zels.org.mk/Default.aspx>): Analyze the labour market needs on a local level and submit the results of the analysis to the Centre and to the adult education institutions; establish adult education institutions and municipal centres for human resources development; submit proposals to the Ministry of Education and Science and to the Centre for Adult Education about the needs for development of programmes, prepare programmes funded by the municipalities and deliver them to be verified by the Centre for Adult Education, as well as maintain a municipal register of institutions which realize publicly recognized programmes.

*The Chambers* (website: [http://www.mchamber.org.mk/\(S\(zgdlny2rkuulazjrhauru55\)\)/default.aspx?lId=2&mId=0&smId=0&cId=0&pld=1](http://www.mchamber.org.mk/(S(zgdlny2rkuulazjrhauru55))/default.aspx?lId=2&mId=0&smId=0&cId=0&pld=1)) Submit proposals for adoption of new and updating of the existing programmes and for preparation of standards of occupations; establish institutions for adult education and prepare programmes funded by the Chambers, which they send to the Centre to be verified.

*The majority (representative) Trade Union* (website: <http://www.ssm.org.mk/index.php?lang=en>): Submits proposals for improvements of the conditions for practical training of the participants with the employers; it establishes institutions for adult education and prepares programmes funded by the trade union, which are verified by the Centre.

○ **Learning outcomes**

The adult education programmes are based on learning outcomes and most of them take reference to existing occupational standards. The programmes are prepared according to the Model for special programmes. Special item of the Model is dedicated to the learning outcomes. All new verified adult education programmes are described in learning outcomes.

Example of a special programme for education of adults for makeup is provided on the website <http://mrk.mk/wp-content/uploads/2015/07/%D0%9F%D0%BE%D1%81%D0%B5%D0%B1%D0%BD%D0%B0-%D0%BF%D1%80%D0%BE%D0%B3%D1%80%D0%B0%D0%BC%D0%B0-%D0%B7%D0%B0-%D0%BE%D0%B1%D1%80%D0%B0%D0%B7%D0%BE%D0%B2%D0%B0%D0%BD%D0%B8%D0%B5-%D0%BD%D0%B0-%D0%B2%D0%BE%D0%B7%D1%80%D0%B0%D1%81%D0%BD%D0%B8-%D0%A8%D0%BC%D0%B8%D0%BD%D0%BA%D0%B5%D1%80.pdf>

○ **Quality assurance**

*Accreditation of special programmes* – it is conducted by the Centre for Adult Education, in accordance with a Rulebook. Programmes are prepared by the institution which plans to realize the training, according to the Model for special adult education programme. The Decision is adopted by the Director of the Centre for Adult Education.

*Accreditation of adult education institutions* – it is conducted by the Ministry of Education and Science according to a Rulebook. The Decision is adopted by the Minister of Education and Science.

*Monitoring* - The Centre monitors the service provider and the quality of the training, using the tool for monitoring and evaluation of institutions. The service provider submits an annual report to the Centre at the end of the year. The *State Educational Inspectorate*, through integral evaluation, conducts supervision over the quality of the educational process in the open civil universities for life-long learning.

*Teaching staff* - Adult education programmes are realized by teachers, professors, practical training instructors and experts, who have been trained in work with adults. The preparation is organized by the Centre for Adult Education, or the relevant institutions. A Rulebook prescribes the conditions for the staff. The staff must be involved in permanent professional development.

*Exams at the end of adult education* – organized and administered by the institution which realizes the programme. Participants acquire a Certificate.

**Table 32: Tabular presentation of non-formal education for adults**

Entry requirements	Above 15 years of age and without student status. Specific conditions defined by the service provider.
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Education and training	The service provider determines the duration of the programme. Programmes are realized in a verified institution. Practical training may be realized with an employer.
Financing	From the Budget of RM, the budget of the local self-government units, chambers, the respective trade union, self-funding by the participant, donations.
Teachers qualifications	Completed higher education for the theoretical part of the programme, and completed training for work with adults. The practical part of the programme is realized by a person with at least relevant secondary education and 3 years of experience in the relevant area; secondary education, and at least 5 years of working experience in the relevant area; master exam, and completed training for work with adults. The staff must be involved in continuous professional development.
Expected learning outcomes	The special adult education programmes are based on learning outcomes. They are prepared according to the Model for special adult education programmes.
Assessment and awards	Continuous during the training and completed exam at the end of the training. Upon completion of the training, the participant acquires a Certificate.
Progression routes	In all types of vocational education.
Labour Market	YES, with Certificate.
Quality assurance	<ul style="list-style-type: none"> <li>• Special programme for education of adults verified by the Centre for Adult Education;</li> <li>• Institutions verified by the Ministry of Education and Science;</li> <li>• Desk monitoring by analyzing the yearly reports of the institutions and on-the spot monitoring of the implementation of special programmes. Performed by the Centre for Adult Education;</li> <li>• Supervision and integral evaluation of public open universities for lifelong learning (отворени граѓански универзитети) performed by the State Education Inspectorate;</li> <li>• Continuous professional development of teachers and trainers.</li> </ul>
Example	<p>Argon welder</p> <p><u>Profile of the participant for enrollment in the programme</u> – completed secondary education (general or secondary vocational education). Candidates should be older than 17 years.</p> <p><u>Duration of the programme</u> – 250 hours.</p> <p>Service provider a verified institution.</p> <p>Knowledge assessment: Continuous, with a written test and practical work after completion of each topic. Final test at the end of the programme. Participants acquire a Certificate.</p> <p>After completion of the training, they may apply for a job on the labour market.</p>

## 2.4 Recognition of foreign qualifications

### ○ General description

For citizens of the Republic of Macedonia and for foreigners the completed primary/secondary education or the completed years of primary/secondary education abroad are recognized by an independent commission established by the Ministry of Education and Science.

Recognition of higher education qualifications acquired abroad is carried out for the purpose of employment (professional recognition) or continuation of education (academic recognition). The Republic of Macedonia has signed the Convention on the Recognition of Qualifications concerning Higher Education in the European Region in year 2002 (Official Gazette of the Republic of Macedonia" No. 47/2002). Since 1995 the recognition is carried out by the national ENIC/NARIC Centre, which functions within the Ministry of Education and Science.

### ○ Legal framework

- Rulebook for keeping records of the recognized primary school leaving certificates (No11-204/1 from15.01.2014);
- Rulebook for keeping records of the recognized secondary school leaving certificates ("Official Gazette" No. 27/96)
- Rulebook on the procedure for equivalence and recognition of foreign qualifications and the necessary documentation ("Official Gazette" No 71/2009)
- Rulebook on keeping records of equivalence and recognition of foreign qualifications ("Official Gazette" No 71/2009).

### ○ Governance

Ministry of Education and Science supported by National ENIC/NARIC center is central governance authority for recognition of foreign qualifications. Recognition procedure lasts between 8 and 20 days. Decisions are made by the Minister and they are compulsory for the higher education institutions.

### ○ Quality assurance

Within the Quality Management System according ISO 9000 there are special procedures regarding recognition procedures. The Ministry's officials who work on recognition applications has proper training and collaborate with ENIC/NARIC network. Applicant has right for fair assessment of their qualification. Every candidate who is not satisfied by the Decision for recognition has right to appeal.

## 3 NQF DEVELOPMENT AND REFERENCING/SELF-CERTIFICATION PROCESS

### 3.1. Role of the Macedonian Qualifications Framework (MQF)

The MQF development and implementation have been strongly influenced by the process of European integration and the commitment of the Republic of Macedonia to the Lisbon Strategy, the Bologna process, Copenhagen process, ET2010, the Europe 2020 Strategy, ET2020, etc.

Nationally, the reporting on the achievement of the Bruges process short-term deliverables (2010, 2012, 2013, 2014) and the preparation of the Strategy for Vocational Education and Training in the Context of Lifelong Learning (2013-2020) have boosted the work on the NQF and its' implementation.

The NQF development resulted with the Baselines of the National Qualifications Framework (Macedonian Qualifications Framework) (July 2013). The main goals of MQF are to integrate and coordinate the education sub-systems and to improve the transparency, access, progression and quality of qualifications in relation to the labour market and the civil society. The MQF is the reference point for the reforms of the education and training system in the context of lifelong learning.

### 3.2. Preparatory phase

The initial idea for the development of a National Qualifications Framework started in 2002 under the Project Programme for Vocational Education and Training (Contract No.02-0003 Second Phase, CARDS). Expert group led by Mr.David Handley, UK expert in cooperation with members of the subgroup for national standards of qualifications and the subgroup for assessment developed the Concept System of Vocational Qualifications for the Republic of Macedonia. Staff members of the Ministry of Education and Science, VET experts from the Bureau for Development of Education, teachers and directors of VET schools, employers, chambers of commerce, representatives of the trade union etc. were involved in the development of the Concept. Within the Project were developed 5 standards and 5 qualifications in 4 priority sectors: Economy, Law and Trade, Electrotechnics, Mechanical Engineering and Health.

As of 2003, in parallel, the Republic of Macedonia was involved in the regional ETF project on awareness raising and capacity building of the countries of South Eastern Europe on the importance and relevance of development of national qualifications frameworks Developing Strategies for National Qualifications Frameworks for South Eastern Europe with Implementation plan 2004-2005. In September 2005 the working group (ETF expert, Irish expert and national experts) prepared the Proposal for Development of a National Qualifications Framework for the Republic of Macedonia.

With the CARDS project for lifelong learning Technical Assistance to the Ministry of Education and Science on Lifelong Learning (Contract No. 06MAC01/11/102) the document Baselines of the National Qualifications Framework for Lifelong Learning was developed. The Working group for the National Qualifications Framework consisted of representatives from the: Ministry of Education and Science (Department of Primary and Secondary Education, Department of Higher Education, EU Department, State Education Inspectorate), Bureau for Development of Education, VET Centre, Ministry of Labour and Social Policy, Ministry of Economy, Employment Service Agency, universities from Skopje, Bitola, Tetovo and Shtip, open universities for lifelong learning, Chamber of Commerce of the Republic of Macedonia, Chamber of Crafts, Trade Union, Centre for Adult Education and the State Statistical Office. Two technical sub-groups were established: Sub-group for design of NQF and of qualifications and Sub-group for Accreditation and Registration. The Baselines for the National Qualifications Framework for Lifelong Learning built upon the European Qualifications Framework for Lifelong Learning, the Copenhagen process, the Bologna process, and the Decree on the National Framework for Higher Education Qualifications [http://mrk.mk/wp-content/uploads/2015/05/Appendix\\_1\\_Decree\\_for\\_the\\_NQF\\_HE.pdf](http://mrk.mk/wp-content/uploads/2015/05/Appendix_1_Decree_for_the_NQF_HE.pdf).

### 3.3. Development phase

The National Framework for Higher Education Qualifications that closely defines the profile, objectives and initial creation of the curricula of the first, second and third cycle of studies and curricula for vocational education shorter than three years was developed in the framework of the Tempus Project N° 145165-TEMPUS-2008-SE-SMHES. The project was developed by an international consortium involving: the Linkoping University - Sweden, 'St Clement Ohridski' University – Bitola, Ministry of Education and Science, Ministry of Labour and Social Policy, 'Ss. Cyril and Methodius' University – Skopje, South East European University – Tetovo, 'Goce Delchev' University - Shtip, State

University of Tetovo, Ghent University - Belgium and University of Applied Sciences, Osnabruck - Germany. Main activities under the project: reviewing the existing higher education qualifications at national level; training visits; designing the NQF HE; evaluation survey on the designed NQF HE and aligning the NQF HE with the Qualifications Framework for the European Higher Education Area (QF-EHEA); setting up criteria for accreditation and registration of qualifications in the NQF HE; verifying the criteria by the Ministry of Education and Science; publishing a *Guide on the National Framework for Higher Education Qualifications of the Republic of Macedonia*; designing learning outcomes oriented study programmes and dissemination activities. In 2010 the Government of the Republic of Macedonia adopted the Decree for the National Framework for Higher Education Qualifications (Official Gazette of the Republic of Macedonia N°154/2010).

On 7 November 2012 the Minister of Education and Science established the Working Group for Development of the National Qualifications Framework for Lifelong Learning, coordinated by the Ministry of Education and Science with members from: the Ministry of Education and Science (Department of Primary and Secondary Education, Department of Higher Education, representatives of the Cabinet of the Minister, EU Department), Ministry of Labour and Social Policy, Centre for Adult Education, VET Centre, Bureau for Development of Education, Employment Service Agency, State Statistical Office, Ministry of Information Society and Public Administration; representatives of the Chamber of Commerce, the Organisation of Employers of the Republic of Macedonia and the Chamber of Crafts. The composition of the Working Group is presented on website <http://mrk.mk/wp-content/uploads/2015/05/resenie-1.pdf>.

The intensive work of the Working Group in the period November 2012 - April 2013 resulted in a draft Macedonian Qualifications Framework - Baselines. The development of levels and level descriptors of the NQF for LLL was supported by Ms. Anne - Marie Chéreau from the Commission Nationale de la Certification Professionnelle (CNCP) of France. The draft Macedonian Qualifications Framework - Baselines was submitted to the ETF for consultation. Mr. Arjen Deij, ETF expert on qualifications frameworks and Ms. Eduarda Castel - Branco, ETF country manager for the Republic of Macedonia provided written feedback. Following the improvement of the draft document in accordance with the ETF recommendations, the draft Macedonian Qualifications Framework – Baselines was put on the website of the Ministry of Education and Science (March 2013). This enabled all interested parties and individuals to provide comments and recommendations for improving the text.

On 9 April 2013 the public debate on the draft Macedonian Qualifications Framework – Baselines took place in the premises of the Chamber of Commerce of the Republic of Macedonia. Representatives of the: Ministry of Education and Science, Ministry of Labour and Social Policy, Ministry of Economy, Employment Service Agency, VET Centre, Bureau for Development of Education, Centre for Adult Education, State Statistical Office, local self-government (municipalities), higher education sector (private and state universities), pre-school education institutions (kindergartens), primary schools, secondary schools (general and VET schools), Association of Educational Workers of the Republic of Macedonia (Sojuz na prosvetni rabotnici na Republika Makedonija), Union of the Higher Education Students, Union of Secondary Education Students, open universities for lifelong learning, employers, Chamber of Commerce, Chamber of Crafts of the Republic of Macedonia, Trade Union, National Examination Centre, the Board for Accreditation and Evaluation of Higher Education, National Agency for European Educational Programmes and Mobility, representatives of the donor community active in the area of education (USAID, British Council, experts from the IPA Twinning project for VET, experts from the IPA Twinning project for adult education), non-governmental organizations, media representatives (in Macedonian and Albanian language), as well as the UNDP participated and contributed to the event. The Minister of Education and Science chaired the public debate. Copy of the flyer and the agenda of the public debate are on website <http://mrk.mk/?p=212&lang=mk>.

The recommendations of the stakeholders were incorporated into the draft document. The most important intervention that resulted from the public discussion was the development and introduction of three components of level descriptors for the higher education sector (knowledge and understanding, skills and competence), as adjustment of the five components of the descriptors of the NQF HE (knowledge and understanding, applying knowledge and understanding, making judgement, communication skills and learning skills). The final draft of the Macedonian Qualifications Framework - Baselines was presented at a Governmental session and adopted by the Government on 30 July 2013.

The Macedonian Qualifications Framework – Baselines was the basis for developing the Law for the National Qualifications Framework. The draft Law was uploaded on ENER (national electronic register of legislation). The Government of the Republic of Macedonia discussed the proposal and forwarded it to the Parliament of the Republic of Macedonia for adoption. The Law for the National Qualifications Framework was adopted in October 2013 (Official Gazette of the Republic of Macedonia N° 137/2013). The application of the Law effectively started from 30/09/2015.

### **Visibility of the work at international level**

The work on the development of MQF and the NQF HE was presented and discussed on different occasions, the most important ones being:

- Poster presentation on the implementation of NQF HE at the International Forum on Qualifications Conference organised by IBE (Warsaw, Poland, 8-9 November 2012)

- Launching meeting of the Western Balkans Platform for Education and Training, established by the Directorate General for Education and Culture (March 2012)
- 20-th meeting of the UNESCO Assembly (Paris, France, November 2013)
- ETF conference on the development of NQF, held in the European Parliament (April 2014)
- Meeting on the referencing of the National Qualifications Framework of Montenegro (May 2014)
- Meeting of the Subcommittee of Innovation, Information Society and Social Policy (European Commission, Brussels, May 2014)
- Western Balkans Platform on Education and Training, Regional Conference on Erasmus+ (Athens, Greece, 17-18 January 2014)
- Third ministerial meeting of the Western Balkans Platform on Education and Training (European Commission, Brussels, 19-20 June 2014)
- ETF regional knowledge-sharing workshop on EQF implementation for the enlargement countries, on 30/09-01/10/2015, in Podgorica (Montenegro)
- Council of Europe SEE Regional QF network (Istanbul, Turkey, 15-16 October 2015) – presentation on the development of the National Framework for Higher Education Qualifications.

The Republic of Macedonia is member of the ERI SEE cluster of knowledge on NQF, which enabled the Macedonian experts to participate in the peer learning and exchange of good practice of the SEE countries in the development of NQFs (quality assurance and NQF, validation of non-formal and informal learning etc.).

In June 2014, upon request of the national member of the EQF AG, Ms. Eduarda Castel-Branco – ETF member of the EQF AG and country manager for the Republic of Macedonia, briefed the participants on the progress made by the Republic of Macedonia.

### 3.4. Implementation phase

On 7 April 2014 the Minister of Education and Science established the Working Group for Further Development of the National Qualifications Framework for Lifelong Learning, coordinated by the Ministry of Education and Science. Structure of the Group: Ministry of Education and Science (Department for Primary and Secondary Education, Department for Higher Education, representatives of the Cabinet of the Minister, EU Department), Ministry of Labour and Social Policy, Bureau for Development of Education, VET Centre, Centre for Adult Education, Employment Service Agency, State Statistical Office, Ministry of Information Society and Public Administration, Chamber of Commerce, Organisation of Employers of the Republic of Macedonia and the Chamber of Crafts. Representatives of employers, Trade Union, schools and local self-governments are involved in the work of further development and implementation of NQF. The composition of the Working Group is presented on website <http://mrk.mk/wp-content/uploads/2015/05/resenie-2-1.pdf>.

The further development and implementation of NQF is supported by the ETF and the British Council. Preparations started in late 2013 and resulted with two projects with implementation period 2014-2015:

- *Support from the European Training Foundation to the process of referencing the NQF to EQF.* The fields and format of cooperation is defined by the legal basis of the ETF, by the work programme adopted by ETF Governing Board chaired by the Director General for Employment Social Affairs and Inclusion. Moreover the role of the ETF is mentioned in Article 91 of the Stabilisation and Association Agreement (2001) between the EU and the country. The preparations started in late 2013, leading to the ETF project in support to the referencing of the Macedonian Qualifications Framework to EQF (2014-2015). This process has been led by the ETF expert Ms. Eduarda Castel-Branco. Main objectives and outputs: development of a roadmap for referencing the MQF to EQF; guidance and hands-on support to the process of drafting and review of the national Referencing Report; capacity building of the relevant stakeholders; Inventory of all qualification and analysis of a sample; training and experimentation of revision of VET qualifications to describe them in learning outcomes; levelling of a small sample of VET qualifications, based on learning outcomes. The ETF team supporting the EQF referencing process is composed of Ms. Eduarda Castel-Branco and the external expert Prof. Dr Mile Dzelalija from Croatia. In addition, the team in charge of the Inventory and analysis of a sample of qualification was composed of: Ms. Eduarda Castel-Branco, Ms. Mirijam de Jong and the external expert - Mr. Jove Jankulovski. Upon invitation of ETF, Mr. Wojciech Stęchły from the Polish Education Research Institute (IBE) ran the training and experimentation on revision of VET qualifications to describe them in learning outcomes, as well as the levelling of a small sample of VET qualifications, based on learning outcomes.

The first expert mission during which the concept of the future joint work with the Macedonian stakeholders, promotional (buy-in) meetings with relevant institutions and a workshop for acquainting with the referencing process took place in Skopje (May 2014).

The second mission to Skopje was realized in the period 23-27 June. The concept and the content of the Referencing report were agreed, as well as the Roadmap for the development of the Report. In October 2014 the third workshop was held with participation of members of the EQF AG from Austria, Croatia and Hungary, as well as representative of Montenegro. Experiences were shared and recommendations for improving the referencing process took place. The Inventory and Analysis of Existing Qualifications and the Synthesis report were presented and discussed during the workshop.

The third expert mission on referencing (Skopje, 18 - 22 May 2015) was dedicated to improvement of the draft Referencing Report and to knowledge sharing and capacity building of stakeholders on the use of learning outcomes in the Republic of Macedonia and their links with EQF referencing criteria 2, 3, 4 and 5.

Experimentation (phase I) - The ETF invited the Polish expert Wojciech Stęchły to run the workshop "Key Learning Outcomes in VET qualifications: a practical approach" (Skopje, 3-4 September 2015). The workshop contributed to capacity building and testing a practical way to identify, formulate and describe key learning outcomes for a sample of VET - 4 qualifications in the sectors: Textile, Leather and Similar Products; Economics, Law and Trade, as well as Catering (Food Service Industry) and Tourism. The participants from the VET centre, VET schools, employers from the sectors and the Ministry of Education and Science: formulated key learning outcomes; used the approach and methodology developed and tested in Poland (IBE) for the identification and formulation of key learning outcomes; determined the levels of the qualifications and started documenting the process.

Experimentation (phase II – completion): The review and finalisation of the key learning outcomes, as well as levelling to MQF for the sample of VET-4 years qualifications continued in 17-18 December 2015. Led by Mr. Wojciech Stęchły and Ms. Eduarda Castel Branco, the same expert group which worked on 3-4 September completed the work on the selected 3 qualifications. The second part of the event was introductory for a wider group of experts (50 representatives from economic sectors, teachers, employers from all regions) who will work on reviewing additional 11 VET – 4 qualifications in the first part of 2016. General information and capacity building on the process and results of the experimentation were provided during the session.

Detailed information on the ETF support to the referencing process led by Ms. Eduarda Castel-Branco is provided in Annex 3.

- *Memorandum of Understanding between the Ministry of Education and Science and the British Council in the Republic of Macedonia* for implementation of the project Support to the Ministry of Education and Science in the preparation of the Action plan for Implementation of the NQF for LLL. The Memorandum of Understanding entered into force on 8 April 2014.

The main objective of the project was provision of expertise from the United Kingdom for planning of the implementation of the NQF from the point of its relevance and functionality linked to the needs of labour market in the Republic of Macedonia. In the period 13-18 July 2014 the first capacity building workshop with the UK expert with participation of representatives of all relevant stakeholders took place in Skopje. In November 2014 the second workshop took place. Besides other topics, the draft qualifications developed by the VET Centre were discussed, as well as the draft Procedure for Developing Vocational Qualifications and the draft Methodology for Positioning of the Qualifications in the Macedonian Qualifications Framework, developed by the Ministry of Education and Science. In the course of 2014 and early 2015 the final drafts of these documents were prepared and presented at the closing conference of project (Skopje, 18 March 2015). During the conference the progress in referencing the MQF to EQF and the role of employers were presented as well as the role of the sector skills councils in the UK. Three workshops addressed: the needs for capacity building of employers for active involvement in the NQF; the challenges in the cooperation with the employers as well as the governance of NQF.

- *Follow-up project between the Ministry of Education and Science and the British Council in the Republic of Macedonia*

In the period June-December 2015 the British Council supported the capacity building relevant for the future Sectoral Qualifications Councils (sektorski komisii za kvalifikacii). Special attention was paid to raising awareness and building the capacities of the employers.

In September 2015, representatives from the VET Centre, the Chamber of Tourism, the Economic Chamber of Macedonia, representatives from secondary vocational Tourism and Hospitality schools, the University of Tourism and Management from Skopje and the Ministry of Education and Science took part to the training session with the UK consultant who shared best practices from the UK focusing on employer engagement and engagement of all relevant parties involved in the training of cadre in formal and non-formal education. Emphasis was also placed on

the role and the importance of establishing Sectoral Qualifications Councils in the Republic of Macedonia as a next step.

In cooperation with Swisscontact on their programme Increasing Employability and PREDA Plus, the British Council supported the event on raising awareness and engaging employers from the IT sector in the process of implementation of MQF. The November 2015 event brought together stakeholders, employers, representatives from higher education institutions from the IT sector and from the Ministry of Education and Science. They had the opportunity to learn about the MQF, the processes for employer engagement and the creation of occupational standards and qualifications. The UK expert shared information about the UK system, the concept and the benefits of employer engagement, the models, the best practices and the development of the IT sector in the UK. As result of this meeting, a model of cooperation between the higher education institutions and the employers in the Republic of Macedonia will be developed.

### 3.5. Next steps

In July 2015 the consortium for implementation of the IPA Twinning project (2015-2017) Further Improvement of the System for Development and Implementation of the National Qualifications Framework was selected. Project activities will start in mid-January 2016. The overall objective of the project is to support the process of further improvement of the system for development and implementation of MQF in line with the EQF. The specific objective of the project is strengthening of the national capacities for effective and efficient functioning of the National Qualifications Framework. Main actions foreseen:

- Overview of the relevant legislation regarding the NQF
- Strengthening the institutional capacities of the NQF national system
- Further improvement of the qualifications as starting point for establishment of the NQF
- Improvement of qualifications standards based on further development of standards/curricula.

Important projects are the implementation phase, others will start in 2016. The results of the projects will contribute to meeting important challenges presented in Chapter 8:

- The on-going *Skills Development and Innovation Support* project is financed with the World Bank loan. One component of the project is the Modernization of Secondary Technical Vocational Education and Training with two sub-components: (i) Quality and labor market relevance of TVET through development of curricula and programmes based on occupational standards, assessment of the secondary TVET school network, development of a training programme for teachers and other staff, development of training materials and provision of equipment for school-based practical training and (ii) Improvement of the school-industry collaboration through school grants. The process of establishment of a Skills Observatory will contribute to strengthening and linking the labor market and education information systems. The Observatory will make available to the public, policy-makers and stakeholders information on the performance (e.g. students placed in practical training at firms, job placements after graduation) and resources available (e.g. courses, companies providing internship and practical training opportunities, infrastructure, training) in VET schools, higher education institutions, as well as general labor market information on employment opportunities and wages in different occupations and sectors.
- In 2016 the implementation of the IPA project Enhancing Lifelong Learning through Modernizing the Vocational Education and Training and Adult Education Systems will start. It aims at development of new standards of occupations and standards of qualifications, reforming curricula, improvement of adult education, practical work, cooperation between stakeholders and teachers in 2-year and 3-year VET, supply of teaching equipment for vocational training, supply of software to the schools and to support the modernization of the system for post-secondary education, including the analysis and updating the legislation on post-secondary education according to labor market needs.
- Support to the modernization of the system for post-secondary education
- Project in support to the introduction of ECVET
- In 2016 an IPA project Cooperation between Higher Education Institutions, Private Sector and Relevant Public Bodies will start. The main goal of the project is straightening the cooperation between the higher education institutions and the business community through practical work of the students in companies.

## 4 NATIONAL QUALIFICATIONS FRAMEWORK

The Republic of Macedonia develops the MQF as an instrument for communication between the stakeholders and for reforming the education and training system. A major objective of the MQF is transparency of qualifications and flexibility of paths to qualifications. The MQF makes lifelong learning visible and encourages people to engage in learning. As a consequence, eventually the MQF supports the development of a knowledge and skills based society, human resource development for growth and competitive economy, increased social inclusion, harmonised social development, promotion and facilitation of lifelong learning and mobility of citizens during the acquisition of qualifications and employment.

### 4.1. Principles

The MQF is based on the following principles:

- Learning outcomes are expressed through knowledge and understanding, skills and competence;
- Classification of qualifications at levels and sub-levels;
- Transferability of credits;
- Comparability with the European Qualifications Framework (EQF);
- Quality assurance in the process of development of qualifications and acquisition of qualifications;
- Providing conditions for equal access to education throughout the whole life for the acquisition and recognition of qualifications;
- Strengthening the competitiveness of the Macedonian economy that is based on human potentials and
- Building a system for validation of non-formal and informal learning.

### 4.2. Objectives and functions

The MQF has the following objectives:

- To clearly define learning outcomes,
- To establish a system for valuing different qualifications within the overall system of qualifications,
- To encourage and promote learning throughout the whole life (lifelong learning),
- To demonstrate the clear links between different parts of the education and training system,
- To indicate the transfer and progression (horizontally and vertically) throughout and within all types of education and training (formal, non-formal and informal),
- To enable international comparability of qualifications,
- To promote the importance of key competences for lifelong learning and professional competence,
- To ensure the mobility of participants in the process of education and training, and inclusion in the labour market, at the national and international level,
- To create a single system for quality assurance,
- To balance the quality of service providers,
- To ensure the cooperation of all stakeholders,
- To ensure harmonisation with economic, social and cultural needs of the country and
- To be part of the developments within the European Qualifications Framework.

The MQF coordinates and integrates all stakeholders by taking into consideration the needs of the labour market, the society and the individuals. It enables transparency and recognition of the qualifications acquired in the Republic of Macedonia and abroad.

### 4.3. Legislation

The Parliament of the Republic of Macedonia adopted the Law on the National Qualifications Framework in October 2013 (Official Gazette of the Republic of Macedonia No. 137/2013). In the general part, the Law defines the subject, provides definitions and gives the principles & goals of MQF. In the second part the Law describes the Macedonian Qualifications Framework: the standards of qualifications, the structure of the MQF, the volume of the qualifications, the levels and sub-levels of qualifications, the number of credits acquired, the types of qualifications, the acquiring of qualifications, the development of qualifications and the sectoral qualifications. The third part of the Law describes the governance of MQF: the National Board for MQF, the competent bodies and authorities for the coordination and development of MQF, the Sectoral Qualifications Councils, and defines their competences. The fourth part describes the Register of MQF and quality assurance in MQF: Register of MQF, input of the qualifications in the Register and maintenance of the Register, quality assurance in MQF and the procedures for quality assurance and improving the

quality of qualifications. The fifth part defines the equivalence of the existing qualifications with the MQF and the timetable for establishing the bodies defined with the Law, as well as the Law enforcement.

## 4.4. Governance

According to the NQF Law the development, adoption, approval and classification of the qualifications are under the responsibility of: the National Board for MQF, Ministry of Education and Science, Ministry of Labour and Social Policy, Bureau for Development of Education, VET Centre, Centre for Adult Education, and Sectoral Qualifications Councils.

The coordination of the development and implementation of MQF is under the responsibility of the Ministry of Education and Science and the Ministry of Labour and Social Policy.

Ministry of Education and Science:

- provides recommendations for the development of qualifications standards
- leads the referencing of the Macedonian Qualifications Framework to the EQF and the self-certification to the QF-EHEA
- follows the implementation and development of the NQFs in other countries and
- communicates to the stakeholders and to the wider public topics related to the Macedonian Qualifications Framework.

The Ministry of Education and Science is the National Contact Point for MQF.

The Ministry of Labour and Social Policy:

- establishes and develops an information system on the labour market needs and forecasting
- proposes development of standards of qualifications and standards of occupations according to the needs of the labour market
- adopts standards of occupations
- participates in the preparation of strategic documents and analyses relevant for the development of the Macedonian Qualifications Framework and
- monitors the employment of persons with acquired qualifications.

Competent institutions for development of qualifications are:

- The VET Centre<sup>13</sup>, Centre for Adult Education<sup>14</sup> and Bureau for Development Education for levels I to VB;
- Higher education institutions for levels VA to level VIII.

The National Board for the Macedonian Qualifications Framework with members from: the Ministry of Education and Science, Ministry of Labour and Social Policy, VET Centre, Centre for Adult Education, Bureau for Development of Education, National Agency for European Educational Programmes and Mobility, higher education institutions, one representative of the chambers in the Republic of Macedonia<sup>15</sup> and Independent Trade Union for Education, Science and Culture of the Republic of Macedonia:

- discusses evaluations of policies on education, sustainable employment, and regional development
- recommends actions for better linking the education system with the labour market needs
- decides on the allocation of existing and new qualifications in the Macedonian Qualifications Framework
- proposes development of new or improvement of existing qualifications to the competent institutions
- monitors the development of the Macedonian Qualifications Framework as a whole
- develops and adopts methodological documents for classifying qualifications
- establishes Sectoral Qualifications Councils
- determines criteria for operation of the Sectoral Qualifications Councils and provides recommendations for their work
- decides on sub-sectors, areas and sub-areas within the sectoral qualifications and
- adopts the reports of the Sectoral Qualifications Councils, including recommendations on their functioning.

The National Board was established in October 2015.

The Sectoral Qualifications Councils (president and eight members of: the Ministry of Education and Science, Association of Employers from the relevant sector, Trade Union in the respective sector, universities, VET Centre,

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<sup>13</sup>National institution, see Chapter 2.

<sup>14</sup>National institution, see Chapter 2.

<sup>15</sup>Macedonia Chamber of Commerce of the Republic of Macedonia, Association of Chambers of the Republic of Macedonia, Chamber of Crafts of the Republic of Macedonia, Chamber of Commerce of North-West Macedonia.



Centre for Adult Education, Bureau for Development of Education, and the relevant competent body for regulated professions in the country:

- analyse the current state and trends of the sectoral labour market
- identify the needs for all types of qualifications in line with the requirements of the labour market and the society as a whole
- analyse and evaluate existing qualifications
- review proposals for the introduction of new qualifications
- propose sectoral or sub-sectoral qualifications for all levels
- propose priorities for development of new qualifications and updating of existing qualifications
- provide opinions on the compliance of the assessment standards and instruments with the occupational standards and the standards of qualifications
- establish commissions for assessment and validation of the learning outcomes acquired in non-formal learning
- promote the sectoral qualifications and the employment possibilities, and
- submit annual reports on their work to the National Board.

All relevant stakeholders are involved in the governance of MQF through the National Board for MQF and the Sectoral Qualifications Councils.

## **4.5. Structure of the MQF**

The Macedonian Qualifications Framework comprises of:

- Levels/sub-levels of qualifications,
- Descriptions of the levels and the learning outcomes for each level of qualification,
- Types of qualifications and documents serving as evidence for the acquired qualification and
- Volume of the qualification.

The Framework consists of 8 levels and additional sub-levels at levels V, VI and VII, introducing learning outcomes as the core concept described by level descriptors within three domains (knowledge and understanding, skills and competence). They are presented in the Table 33.

**Table 33: MQF level descriptors and learning outcomes according to levels**

MQF Level	Sub-level	Knowledge and understanding	Skills	Competence	Credits	EQF level
VIII		<p>Demonstrates a systematic understanding of the field of research and perfect knowledge of research methods and skills within the respective field in accordance with the highest international standards;</p> <p>Possesses knowledge gained with own research or work, thus significantly contributing to the professional and scientific field of research, but also in the related fields.</p>	<p>Demonstrates ability to interpret, design, apply and adapt the essential subject of the research with scientific integrity;</p> <p>Uses the knowledge as a basis for original ideas and research that exceed the current boundaries of knowledge, developing new knowledge, valued on the level of national and international peer-reviewed publications;</p> <p>Ability for critical analysis, evaluation and synthesis of new and complex ideas, necessary for solving complex problems in the field of research;</p> <p>Ability for independent initiation and participation in national and international research networks and events with scientific integrity;</p> <p>Ability for independent initiation of research and development projects, through which new knowledge will be generated, as well as skills for development in the field of research;</p> <p>Expected to be capable of self-promotion in academic and professional context and in the technological, social or cultural development in a knowledge-based society;</p> <p>Capable for communication with the colleagues, the wider academic community and with the society as a whole within the field of expertise.</p>	<p>Takes maximum responsibility for the results of the own work, but also for the work of the others in the group;</p> <p>Takes responsibility for managing complex processes, while, in the same time, ensuring the professional development of the individuals and the group as a whole.</p>	at least 180 ECTS credits	8
VII	VII A	<p>Demonstrates knowledge and understanding of the scientific field of study that builds upon the first cycle, by applying methodologies appropriate for resolving complex problems, both in a systematic and in creative manner, which provides the basis or the possibility for originality in the development and/or application of autonomous ideas in the context of the research;</p>	<p>Capability for critical, independent and creative problem-solving with a certain degree of originality in new or unknown environments and in multi-disciplinary contexts, related to the field of study;</p> <p>Capability to synthesize and integrate the knowledge and to handle complex issues, in a systematic and creative manner;</p> <p>Capability to evaluate and select scientific theories, methodologies, tools and general skills from the subject areas, and to put forward new analyses and solutions on scientific</p>	<p>Demonstrates significant responsibility for the own and the joint results, for leading and initiating activities;</p> <p>Capability for solid evaluation, even in the case of incomplete and limited information, which includes the personal, social and ethical responsibilities in the application of the acquired knowledge and evaluation thereof;</p>	60 to 120 ECTS credits	7

		<p>Presents a high level of professional competence in one or in several specific scientific fields;</p> <p>Possesses knowledge from one or more subject areas, which in the given scientific fields are based on the most renowned international research in that scientific field, as well as capability to connect wider and deeper knowledge in related professions or fields of science.</p>	<p>basis;</p> <p>Capability to recognize the personal need for further knowledge and capability for independent and autonomous actions when acquiring new knowledge and skills in the social framework;</p> <p>Capability to exchange conclusions and proposals by clearly and unambiguously arguing and rationally underpinning the stance, both with experts and non-experts.</p>	<p>Capability for taking responsibility for further professional development and education, both for personal and for the group with which cooperates.</p>		
	<b>VII B</b>	<p>Demonstrates knowledge and understanding of the scientific field of study that builds upon the first cycle, by applying methodologies appropriate for resolving complex problems, both in a systematic and in creative manner, which provides the basis or the possibility for originality in the development and/or application of autonomous ideas in the context of the research;</p> <p>Presents a high level of professional competence in one or in several specific scientific fields;</p> <p>Possesses knowledge from one or more subject areas, which in the given scientific fields are based on the most renowned international research in that scientific field, as well as capability to connect wider and deeper knowledge in related professions or fields of science.</p>	<p>Capability for critical, independent and creative problem-solving with a certain degree of originality in new or unknown environments and in multi-disciplinary contexts, related to the field of study;</p> <p>Capability to synthesize and integrate the knowledge and to handle complex issues, in a systematic and creative manner;</p> <p>Capability to evaluate and select scientific theories, methodologies, tools and general skills from the subject areas, and to put forward new analyses and solutions on scientific basis;</p> <p>Capability to recognize the personal need for further knowledge and capability for independent and autonomous actions when acquiring new knowledge and skills in the social framework;</p> <p>Capability to exchange conclusions and proposals by clearly and unambiguously arguing and rationally underpinning the stance, both with experts and non-experts.</p>	<p>Demonstrates significant responsibility for the own and the joint results, for leading and initiating activities;</p> <p>Capability for solid evaluation, even in the case of incomplete and limited information, which includes the personal, social and ethical responsibilities in the application of the acquired knowledge and evaluation thereof;</p> <p>Capability for taking responsibility for further professional development and education, both for personal and for the group with which cooperates.</p>	60 ECTS credits	
<b>VI</b>	<b>VI A</b>	<p>Demonstrates knowledge and understanding in the scientific field of study that builds upon previous education and training, including knowledge in the domain of theoretical, practical, conceptual, comparative and critical perspectives in the scientific field according to the relevant methodology;</p> <p>Understanding of a certain area and knowledge of current issues in relation to</p>	<p>Is able to apply knowledge and understanding in a manner that shows a professional approach to the work or the profession;</p> <p>Demonstrates ability to identify, analyse and solve problems;</p> <p>Capability to find and support arguments within the profession or the field of study;</p> <p>Capability to collect, analyse, evaluate and present information, ideas and concepts from relevant data;</p> <p>Capability to assess theoretical and practical issues, provide</p>	<p>Takes responsibility for the own results and shared responsibility for the collective results;</p> <p>Capability for independent participation, with a professional approach, in specific scientific and interdisciplinary discussions.</p> <p>Makes relevant judgement by taking into consideration the personal, social,</p>	240 ECTS credits	6

		<p>scientific research and new sources of knowledge.</p> <p>Demonstrates knowledge and understanding of different theories and methodologies necessary for the wider area of research.</p>	<p>explanations for the reasons and to select an appropriate solution; Takes initiative to identify the requirements for acquiring further knowledge and study with a high degree of independence;</p> <p>Capability to communicate and discuss information, ideas, problems and solutions, when the decision criteria and the scope of the task have been clearly defined, both with (professional?) and the non-expert public.</p>	<p>scientific and ethical aspects.</p>		
	<b>VI B</b>	<p>Demonstrates knowledge and understanding in the scientific field of study that builds upon previous education and training, including knowledge in the domain of theoretical, practical, conceptual, comparative and critical perspectives in the scientific field according to the relevant methodology;</p> <p>Understanding of a certain area and knowledge of current issues in relation to scientific research and new sources of knowledge.</p> <p>Demonstrates knowledge and understanding of different theories and methodologies necessary for the wider area of research.</p>	<p>Is able to apply knowledge and understanding in a manner that shows a professional approach to the work or the profession;</p> <p>Demonstrates ability to identify, analyse and solve problems;</p> <p>Capability to find and support arguments within the profession or the field of study;</p> <p>Capability to collect, analyse, evaluate and present information, ideas and concepts from relevant data; Capability to assess theoretical and practical issues, provide explanations for the reasons and to select an appropriate solution; Takes initiative to identify the requirements for acquiring further knowledge and study with a high degree of independence; Capability to communicate and discuss information, ideas, problems and solutions, when the decision criteria and the scope of the task have been clearly defined, both with professionals and the non-expert public.</p>	<p>Takes responsibility for the own results and shared responsibility for the collective results;</p> <p>Capability for independent participation, with a professional approach, in specific scientific and interdisciplinary discussions.</p> <p>Makes relevant judgement by taking into consideration the personal, social, scientific and ethical aspects.</p>	180 ECTS credits	
<b>V</b>	<b>V A</b>	<p>Demonstrates knowledge and understanding in the field of study or work that is built upon general secondary school education supported with professional literature;</p> <p>Possesses specialist theoretical and professional knowledge and understanding of individual basic theories from the narrow scientific and expertise area;</p> <p>Possesses limited knowledge of contemporary developments in the area of work or study which provides support to the field of work or profession, potential for personal development and basis for further studies to complete the first cycle.</p>	<p>Applies skills that are based on understanding of theoretical principles and their application in solving problems and in the execution of complex and specific tasks in the field of work and study, with the selection and use of relevant data, methods, procedures, techniques, instruments, devices, tools and materials;</p> <p>Possesses the skills to study in order to become able to take over further researches with a certain degree of independence;</p> <p>Possesses the ability to communicate and discuss with target groups from the narrow profession or area of study, with colleagues, superiors and clients.</p>	<p>Has a high degree of personal and business responsibility, and ability to evaluate their own work and the work of the group based on criteria in the field of work;</p> <p>Capability to transfer knowledge to others, organize, communicate and control own work and the work of others;</p> <p>Takes responsibility for own results, but also shares responsibility for the activities, results and work of others in</p>	60 to 120 ECTS credits	5

				the group.		
	<b>V B</b>	<p>Demonstrates knowledge and understanding in the field of study or work that is built upon general secondary education supported with professional literature.</p> <p>Possesses specialist theoretical and professional knowledge and understanding of certain basic theories from the narrow scientific and professional area.</p> <p>Possesses limited knowledge of contemporary developments in the area of work or study which provides support to the field of work or profession, possibility for personal development and a basis for further studies for completion of the first cycle of higher education.</p>	<p>Applies skills that are based on understanding of theoretical principles and their application in solving problems and in the execution of complex and specific tasks in the field of work and study, with selection and use of relevant data, methods, procedures, techniques, instruments, devices, tools and materials.</p> <p>Possesses skills to study in order to be able to undertake further studies with a certain degree of independence.</p> <p>Possesses ability to communicate and discuss with target groups from the narrow profession or the area of study, with colleagues, superiors and clients.</p>	<p>Has a higher level of personal and professional responsibility, and ability to evaluate the own work and the work of the group based upon criteria in the field of work.</p> <p>Capability to transfer knowledge to others, to organize, communicate and to control the own work and the work of others.</p> <p>Takes responsibility for the own results, but also shares responsibility for the activities, results and the work of others in the group.</p>	60 to 120 ECVET credits	
	<b>IV</b>	<p>Knows concepts, principles and processes from the subjects and areas of study;</p> <p>Possesses systematic theoretical and professional knowledge within the determined area of work or study that includes analysing and connecting facts and theoretical principles when performing the work, while at the same time enabling further studying.</p>	<p>Possesses various cognitive, practical and creative skills, based on theoretical knowledge and principles, necessary for study and work and for solving problems in changeable conditions in a certain field of work or study;</p> <p>Qualified to collect, analyse, select and to use relevant information from various sources, tools, methodologies, techniques and materials in the area of study;</p> <p>Qualified to perform complex procedures and to use methods, instruments, tools, installations and materials in the working process;</p> <p>Communicates and cooperates with the group in changeable conditions.</p>	<p>Independently plans, organizes and runs the own work and conducts supervision of the joint work;</p> <p>Independently performs complex tasks and solves problems, adjusting the behavior in accordance with the provided instructions, in changeable conditions;</p> <p>Responsible for the own work and for the work of the group, for the purpose of evaluating the results of the work and improving the quality, in accordance with predefined standards and criteria.</p>	240 ECVET or MCSGE <sup>16c</sup> credits	4
	<b>III</b>	<p>Possesses theoretical and systematic acquired professional knowledge, facts, principles, processes and general concepts for a certain area of work or study, while at the same time enabling further studying.</p>	<p>Possesses practical and creative skills that enable the solving of known (predictable) and less known (unpredictable) situations;</p> <p>Performs work and tasks of medium complexity, less standardized and relatively transparent;</p>	<p>Plans, prepares, organizes and evaluates the own work, based upon predetermined authorization, within the scope of the own work;</p> <p>Performs tasks that are not always</p>	180 ECVET credits	3

<sup>16</sup>MCSGE (Macedonian Credit System for General Education) into Macedonian language: MKCOO (Makedonski kredit system za opshto obrazovanie).

		<p>Uses various devices, tools, equipment and materials in the process of production and in the services;</p> <p>Communicates and cooperates with the group.</p>	<p>defined in advance, with a certain degree of independence and responsibility.</p>		
<b>II</b>	<p>Possesses basic theoretical and professional knowledge, needed for knowing the area of work, which can be applied when performing simple working tasks, while at the same time enabling further studying.</p>	<p>Possesses practical and creative skills for executing simple or less complex and predefined work in known conditions and predictable situations.</p> <p>Uses simple methods, tools, instruments, devices and materials on the basis of detailed instructions;</p> <p>Communicates and cooperates with individuals.</p>	<p>Works independently under known conditions and under periodic supervision and with limited responsibility for performing working tasks;</p> <p>Performs simple communication and cooperation with some employees in known situations.</p>	60 to 120 ECVET credits	<b>2</b>
<b>I</b>	<p>Possesses basic knowledge of the function of certain objects and occurrences with the possibility to apply them in practice and other disciplines, while at the same time enabling further studying.</p>	<p>Possesses basic skills for performing simple operations;</p> <p>Uses simple methods, tools and instruments with instructions and under supervision;</p> <p>Possesses general rules of communication.</p>	<p>Performs simple tasks under direct supervision;</p> <p>Takes responsibility for performing simple tasks.</p>		<b>1</b>

## Levels and sub-levels of qualifications and their volume

The Macedonian Qualifications Framework has eight levels. Levels V, VI and VII have two sub-levels each. The sub-levels are related to the specificities of the education system, meet the requirements of the employers and differ in the number of credits. Sub-levels are justified in a phase of transition and implementation of a new structure of cycles.

- Level I applies to completed primary education. Upon completion, the participants receive a certificate (svidetelstvo).
- Level II applies to vocational training lasting up to two years. Upon completion the participants receive certificate of vocational training (uverenie za struchno osposobuvanje). The NQF Law envisages the participants to receive between 60 and 120 ECVET credits.
- Level III applies to vocational education for occupations lasting up to three years. Upon completion, the participants receive a diploma (diploma). The NQF Law envisages the participants to receive 180 ECVET credits.
- Level IV applies to general secondary education (gimnazija), technical education or art education with duration of four years. Upon completion, the participants receive a diploma (diploma). The NQF Law envisages the participants to receive 240 ECVET or MCSGE (Macedonian Credit System for General Education) credits.
- Level V
  - Level V, sub-level VB applies to post-secondary education (specialist education and craftsman exam) and the participants receive a diploma for specialist education (diploma za specijalistichko obrazovanie) and a diploma for craftsman exam (diploma za majstorski ispit). Total of 60 to 120 credits are to be acquired for this sub-level.
  - Level V, sub-level VA applies to short vocational study programmes in higher education and the participants receive a credential (uverenie). Total of 60 to 120 ECTS credits are to be acquired for this sub-level.
- Level VI
  - Sub-level VIB applies to short vocational study programmes in higher education and the participants receive a diploma (diploma). Total of 180 ECTS credits are acquired at this sub-level.
  - Sub-level VIA applies to 3-year and 4-year undergraduate studies and the participants receive a diploma (diploma). Total of 240 ECTS credits are acquired at this sub-level.
- Level VII
  - Sub-level VIIA applies to higher education Master of Science studies and the participants receive a diploma (diploma). Total of 60-120 ECTS credits are acquired at this sub-level.
  - Sub-level VIIB applies to higher education specialist studies and the participants receive a diploma (diploma). Total of 60 ECTS credits are acquired at this sub-level.
- Level VIII applies to doctorate studies and the participants receive a diploma (diploma).

Non-formal learning applies to training to acquire qualifications or part of qualifications with level that can be levelled from levels I to VB accordingly to the level of complexity in line with the occupational standards. Upon completion, the participants receive a certificate (sertifikat). ECVET credits do not apply yet to these qualifications according to the Law of NQF.

Integrated studies of first and second cycle of studies refer to qualifications leading to titles for performing regulated professions. Currently they are not part of the Macedonian Qualifications Framework. Discussions for their inclusion in MQF are on-going.

## Credit system in the Macedonian Qualifications Framework

The NQF Law defines three types of credit systems:

- ECTS<sup>17</sup> credits in higher education (one ECTS credit is defined as 30 working hours with duration of 60 minutes each)
- ECVET<sup>18</sup> credits in vocational education and training. One ECVET credit is defined as 25 working hours of duration of 45 minutes each. It includes all activities of learners e.g. contact hours, practical work, homework, project, assessment, etc. This definition may be revised – it currently undergoes discussion triggered by international experience and the country ECVET project.
- MCSGE<sup>19</sup> for credits in primary education and general secondary education (one MKSOO credit is defined as 25 working hours of the duration of 45 minutes each).

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<sup>17</sup> European Credit Transfer and Accumulation System

<sup>18</sup> European Credit System for Vocational Education and Training

<sup>19</sup> Macedonian Credit System for General Education

**Table 34: Number of credits acquired from levels and sub-levels in the Macedonian Qualifications Framework and comparability with the levels of the European Qualifications Framework**

MQF level	Sub-level	General education	Formal vocational education and training	Non-formal learning	Higher education	EQF level
VIII					Third cycle Doctorate studies (at least 180 ECTS credits)	8
VII	VII A				Second cycle Master of Science academic studies (from 60 to 120 ECTS credits)	7
	VII B				Second cycle Specialist studies (60 ECTS credits)	
VI	VI A				First cycle University studies (240 ECTS credits) Vocational studies (240 ECTS credits)	6
	VI B				First cycle University studies (180 ECTS credits) Vocational studies (180 ECTS credits)	
V	V A				Vocational studies (from 60 to 120 ECTS credits) Short vocational study programmes within the first cycle	5
	V B		Post-secondary education (from 60 to 120 ECVET credits)	Post-secondary education		
IV		Secondary school education	Technical education (240 ECVET credits or 240 MCSGE credits)	Qualification or part of qualification (level of complexity - IV, in accordance with the occupational standards)		4
III			Vocational education for occupations (180 ECVET credits)	Qualification or part of qualification (level of complexity - III, in accordance with the occupational standards)		3
II			Vocational training (60 to 120 ECVET credits)	Qualification or part of qualification (level of complexity – I and II, in accordance with the occupational standards)		2
I		Primary education		Functional literacy and numeric skills		1



## 4.6. Classification of qualifications

The qualifications are classified according to: levels, types and sectors. They are registered in the national database of qualifications (Register). Currently the national Register is in construction, and the Inventory of Qualifications (2014) represents its starting point.

### Types of qualifications

The Macedonian Qualifications Framework recognises the following types of qualifications:

1. Educational qualifications and
2. Vocational qualifications.

**Educational qualification** - is a qualification obtained within the formal education system with necessary qualification volume and documented with a diploma/certificate. Educational qualifications are acquired by completing education for publicly adopted educational programmes and by achieving the learning outcomes. These qualifications aim to enable continuation of education, employment and personal development. They provide access to vertical progression in the formal education system.

**Vocational qualification** – is a qualification acquired for part of a publicly adopted education programme (modules, courses, etc.), by completing a special programme for adult education, or through validation of non-formal learning. The achieved learning outcomes are documented with a certificate. They contain competences relevant for the labour market presented within one or more standards of occupations. These qualifications aim to enable employment and personal development. By their nature, these qualifications, in principle, do not provide access to vertical progression in the formal education system. Vocational qualifications can be acquired for all MQF levels and sublevels, except level VIII. This type of qualifications in some countries is known as “partial qualification”.

**Table 35: Classification of qualifications**

	Type of qualification	
	Educational qualification	Vocational qualification
<b>Purpose</b>	Continuation of education or labour market	Labour market and personal development
<b>Type of document</b>	Certificate or diploma	Certificate

The NQF Law has introduced a number of new concepts (e.g. type of qualifications) which require further reflection and debates among stakeholder experts. In the future adjustments would be made in the legal - regulatory framework.

### Sectors of qualifications

Qualifications are grouped according to sectors.

The sectors of qualifications in VET are:

01	Geology, Mining and Metallurgy
02	Civil Engineering and Geodesy
03	Graphic Industry
04	Economy, Law and Trade
05	Electrical Engineering
06	Healthcare and Social Protection
07	Agriculture, Fishing and Veterinary Medicine
08	Personal Services

09	Mechanical Engineering
10	Traffic, Transport and Storage
11	Textile, Leather and Similar Products
12	Food Service Industry and Tourism
13	Chemistry and Technology
14	Forestry and Wood Processing
15	Sport and Recreation
16	Arts.

For higher education qualifications, the international Frascati classification applies.

### Register of qualifications

According to the NQF Law, the qualifications are registered in a national database of qualifications (Register). The Register consists of four sub-registers:

- Sub-register of general education qualifications;
- Sub-register of qualifications acquired through VET;
- Sub-register of higher education qualifications;
- Sub-register of qualifications acquired through non-formal education.

The Sub-register of qualifications acquired through VET up to level VB is run by the VET Centre. The Sub-register of qualifications acquired through non-formal education is run by the Centre for Adult Education. The Sub-register of general education qualifications and the Sub-register of higher education qualifications are run by the Ministry of Education and Science.

## 4.7. Use of EU tools

Since 2013 the Republic of Macedonia participates in EUROPASS. The National Europass Centre (NEC) is within the National Agency for European Educational Programmes and Mobility. In November 2013 the NEC launched the national Europass portal, [europass.mk](http://europass.mk).

In 2013 the Republic of Macedonia became member of the Eurydice network with the National Eurydice Unit (NEU) within the National Agency for European Educational Programmes and Mobility. The NEU provided description of the structure of the educational system of the country for the Eurydice and periodical updates. The publications: Developing Key Competences at School in Europe: Challenges and Opportunities for Policy, EHEA: Bologna Process Implementation Report, Modernization of the Higher Education in Europe 2011: Funding and the Social Dimension, Key Data for Learning and Innovation through ICT in Schools in Europe) were translated into Macedonian language and are available on the Eurydice portal. In 2014, the NEU contributed to several Eurydice publications with input on the Macedonian situation: School Evaluation, School and Academic Calendar, Teachers and School Heads Salaries. In the course of 2015, the country participated in the following Eurydice reports: Entrepreneurship Education, Fees and Support in Higher Education, Teaching profession, Eurydice diagrams, Teachers and School Heads Salaries, and Instruction Time in ISCED levels 1, 2 and 3.

As of 2014 the National Agency for European Educational Programmes and Mobility is building capacities for implementation of the Euroguidance initiative with focus on: promotion of the European dimension in lifelong learning, provision of quality information on lifelong guidance and mobility for learning purposes, provision and maintaining input to the joint EQF/Ploteus Portal, defining the target groups for promotion and support at national level, and contribution with relevant content for the [www.euroguidance.eu](http://www.euroguidance.eu) portal. Separate section for the Euroguidance initiative is published on the portal of the Agency (<http://na.org.mk/index.php/mk/euroguidance.html>). Currently the Agency is collecting data for the part Study in Macedonia, to be published on the website <http://euroguidance.eu/study-in-europe/national-websites/> in the course of 2016.

## 4.8. Quality assurance

The quality of the Macedonian Qualifications Framework depends on: 1) the quality of the national system of education and training and 2) the quality of the MQF procedures and processes.

### 1) Dependence of the MQF on the quality of the system of education and training

The quality assurance system of education and training is regulated with national legislation. It covers three phases: input, process and output.

#### **Input phase**

Validation and accreditation procedures defined and regulated at national level

- *Accreditation of educational institutions* - the Ministry of Education and Science runs accreditation procedures for the schools for primary education, secondary education and for the providers of special programmes for adult education. The verified institutions and providers are entered in the respective registers run by the Ministry of Education and Science. More information is provided in Chapter 2.
- *Accreditation of educational programmes* – Curricula for primary and secondary education are developed by the Bureau for Development of Education and/or the VET Centre and approved by the Minister of Education and Science. They are based on standards, objectives and expected results. The (2013) reformed vocational programmes for occupations (3-year) are based on learning outcomes, and are linked with qualifications standards and occupational standards.
- The providers of *adult education* provide special programmes for adult education verified by the Centre for Adult Education.

*Accreditation in higher education* - Higher education institutions and study programmes are accredited by the Board for Accreditation and Evaluation of Higher Education in accordance with the Rulebook on Criteria for Accreditation and External Evaluation of Higher Education Institutions and Study Programmes developed in accordance with the European Standards and Guidelines for Quality Assurance in Higher Education (ESG). Curricula are based on learning outcomes.

#### **Process phase**

- The implementation of curricula for primary and secondary education is supported and monitored by advisors from the Bureau for Development of Education, the VET Centre and the State Educational Inspectorate. In higher education the quality of the implementation of the study programmes is assessed within the institutional self-evaluations.
- Teacher training/re-training is provided by advisors of the Bureau for Development of Education, the VET Centre and independent providers selected by the BDE or the VET Centre. Continuous professional development of academic staff is inherent to the institutional strategies of the universities.
- Educational institutions implement self-evaluation procedures in accordance with the legislation (More information is provided in Chapter 2, EQF Criterion 5).
- The State Educational Inspectorate performs integral evaluation of primary and secondary schools on the basis of school self-evaluation reports. The Board for Accreditation and Evaluation of Higher Education is responsible for external evaluation of higher education institutions.
- The Centre for Adult Education monitors the implementation of the special programmes for adult education.

#### **Output phase**

- On a yearly base external assessment of students' achievements in primary and secondary education is realized by the National Examination Centre and the schools.
- Secondary education is completed by passing State Matura Exam/School Matura Exam/Final Exam. The National Examination Centre is involved in the external part of the exams.
- The Republic of Macedonia participates in the international assessments: PISA, TIMSS and PIRLS.
- In higher education the form and the content of the examination reflect the aims and the working methods of the respective subject and the study programme and enable individual assessment of the achieved learning outcomes.

- The participants in adult education and training are assessed on a continuous basis and through final demonstration of learning outcomes.

The summary overview of the components of the quality assurance system in education and training is provided on the table below:

**Table 36: Components of the quality assurance system in education and training**

Input phase	Process phase	Output phase
Accreditation of institutions and programmes for primary and secondary education by the Ministry of Education and Science	<p>Self-evaluation of school performed by the school</p> <p>Integral evaluation (external evaluation) performed by the State Educational Inspectorate</p> <p>Continuous professional development of teachers/trainers</p> <p>Counseling of students and parents performed by the Pedagogical service in accordance with respective programmes</p> <p>Development of 'local curriculum': adjustment of the curricula to the needs and the specificity of the local communities</p> <p>Updating of programmes according to the new socio-economic developments</p>	<p>External assessment of students' achievements by the National Examination Centre and the schools.</p> <p>Matriculation exams: State Matura Exam/School Matura Exam/Final Exam. National Examination Centre involved in the external part of the exams.</p> <p>Participation in international assessments: PISA, TIMSS and PIRLS.</p>
Accreditation of higher education institutions and study programmes by the Board for Accreditation and Evaluation of Higher Education	<p>The quality of the implementation of the study programmes is assessed within the institutional self-evaluation.</p> <p>Continuous professional development of academic staff.</p> <p>External evaluation performed the Board for Accreditation and Evaluation of Higher Education.</p>	The form and the content of examination reflect the aims and the working methods of the respective subject and the study programme and enable individual assessment of the achieved learning outcomes.
<p>Accreditation of providers of non-formal education by the Ministry of Education and Science.</p> <p>Accreditation of special programmes for adult education by the Centre for Adult Education</p>	The Centre for Adult Education monitors the implementation of the special programmes for adult education.	The participants are assessed on a continuous basis.

2) Dependence of the MQF on the quality of the procedures and processes for development and implementation of the Framework

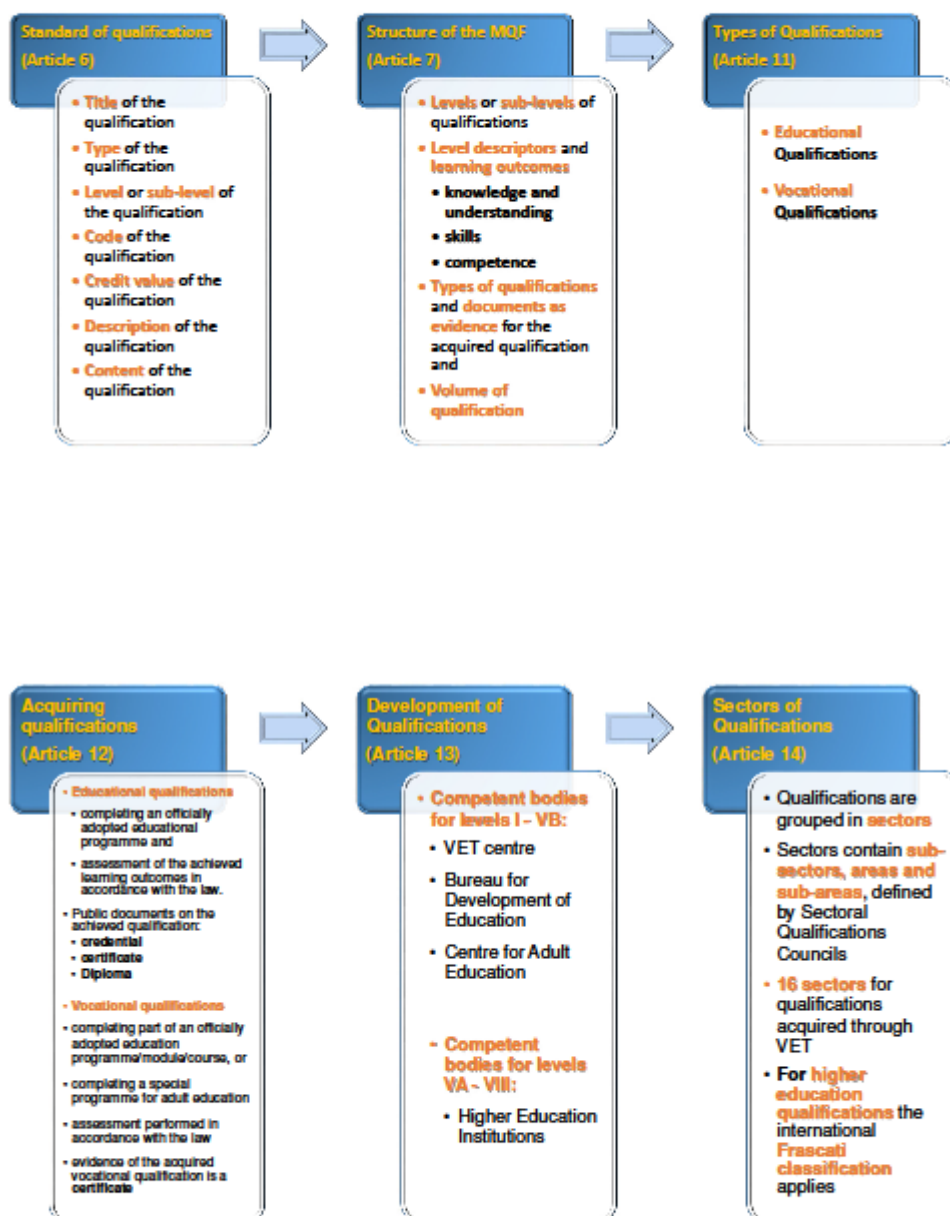
- *Stakeholders involvement* – in consultations and in the development of the Macedonian Qualifications *Framework* – Baselines, in public debates, in preparation of documents and procedures. More details are presented in the Sub-Chapter 3.3 and the Sub-Chapter 3.4.
- *National and international experts* - the national expertise and understanding of the national context of all stakeholders was combined with input from the international experts on the best practice and lessons learnt from the NQF development and referencing processes. More details are presented in the Sub-Chapters 3.1, 3.2, 3.3 and 3.4.
- *Legal basis* – The Law on the National Qualifications Framework was adopted in October 2013.
- *Standards* – development of occupational standards is in line with the labour market needs and involves the relevant stakeholders, in particular employers. In support to the standards of qualifications, the documents: Procedure for Development of Qualifications, Format of Qualifications, Protocol for Cooperation among the Stakeholders Involved in the Process of MQF and Methodology for Including

Qualifications in MQF were developed.

- *Curricula* – curricula development is based on learning outcomes and on standards (occupational, qualification, educational, educational profiles) and other documents. Coherence between programmes and qualification / occupational standards differs: newer VET programmes tend to be systematically better articulated with requirements from the market and their design involves players from the industry / sectors.
- *Assessment and awarding criteria and procedures* – the procedures are compliant with the principles of fairness, validity and reliability. Attention is paid to well-designed assessment criteria and procedures, profile and training of assessors and quality of assessment materials.
- *Register of qualifications* – only the qualifications that comply with the criteria are entered in the Register.
- *Institutions responsible for quality assurance* - National Board for the Macedonian Qualifications Framework and Sectoral Qualifications Councils have important role in the quality of MQF.

More information on quality assurance in the Macedonian education and training system is provided in Chapter 2.

Figure 5. Schematic presentation of the MQF structure and processes



## 5 RESPONSE TO THE EQF REFERENCING CRITERIA AND PROCEDURES

### Criterion 1 (EQF)

**The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process, including the National Coordination Point, are clearly determined and published by the competent public authorities.**

On 07 November 2012 the Minister of Education and Science established the Working Group for Development of the National Qualifications Framework for Lifelong Learning, coordinated by the Ministry of Education and Science<sup>20</sup>. Members of the Working Group are representatives from the:

- Ministry of Education and Science (Department of Primary and Secondary Education, Department of Higher Education, representatives of the Cabinet of the Minister, EU Department)
- Ministry of Labour and Social Policy
- Centre for Adult Education (national institution)
- VET Centre (national institution)
- Bureau for Development of Education
- Employment Service Agency
- State Statistical Office
- Ministry of Information Society and Public Administration
- Chamber of Commerce
- Organisation of Employers and
- Chamber of Crafts.

The Working Group focused on the development of the Macedonian Qualifications Framework for Lifelong Learning, communication and promotion of the Framework. On 09 April 2013 public debate on the draft document Macedonian Qualifications Framework – Baselines was held with participation of representatives of all key stakeholders and social partners: Ministry of Education and Science, Ministry of Labour and Social Policy, Ministry of Economy, Employment Service Agency, VET Centre, Bureau for Development of Education, Centre for Adult Education, State Statistical Office, local self-government (municipalities), higher education sector (private and public universities), pre-school education institutions (kindergartens), primary schools, secondary schools (general and VET), Association of Teachers of the Republic of Macedonia (Sojuz na prosvetni rabotnici na Republika Makedonija), Union of the Higher Education Students, Union of Secondary Education Students, open universities for lifelong learning, Employers Organisation of the Republic of Macedonia, companies, Chamber of Commerce, Chamber of Crafts of the Republic of Macedonia, Trade Unions, National Examination Centre, the Board for Accreditation and Evaluation of Higher Education, National Agency for European Educational Programmes and Mobility, representatives of the donor community active in the area of education (USAID, British Council, UNDP, experts from the IPA Twinning project on VET, experts from the IPA Twinning project for adult education), non-governmental organizations, as well as media representatives (in Macedonian and Albanian language). Based on the recommendations from the public debate, the draft document was updated and the final draft was submitted to the Government for adoption.

On 30 July 2013 the Government of the Republic of Macedonia adopted the Macedonian Qualifications Framework – Baselines with the aim to reference it to the EQF.

In October 2013 the Parliament of the Republic of Macedonia adopted the Law for the National Qualifications Framework (Official Gazette of the Republic of Macedonia N<sup>o</sup> 137/2013).

On 07 April 2014 the Minister of Education and Science established the Working Group for Further Development of the National Qualifications Framework for Lifelong Learning, coordinated by the Ministry of Education and Science<sup>21</sup>. Members of the Working Group are representatives from the:

<sup>20</sup> Decision N<sup>o</sup> 19-8483/1 of 07.11.2012 see the website <http://mrk.mk/wp-content/uploads/2015/05/resenie-1.pdf>.

<sup>21</sup> Decision N<sup>o</sup> 07-6230/1 of 07.04.2014, see the website <http://mrk.mk/wp-content/uploads/2015/05/resenie-2-1.pdf>.

- Ministry of Education and Science (Department of Primary and Secondary Education, Department of Higher Education, representatives of the Cabinet of the Minister, EU Department)
- Ministry of Labour and Social Policy
- Centre for Adult Education
- VET Centre
- Bureau for Development of Education
- Employment Service Agency
- State Statistical Office
- Ministry of Information Society and Public Administration
- Chamber of Commerce of the Republic of Macedonia
- Organisation of Employers and the
- Chamber of Crafts.

In addition, representatives of employers, trade unions, schools and local self-governments have been involved in the activities of the Working Group.

The Working group follows the developments and implementation of qualifications frameworks in Europe, analyses the existing relevant legislation and prepares recommendations for adjustment, prepares relevant documents (methodologies, procedures, protocols etc.), works on awareness raising and capacity building of all stakeholders, as well as on communication and promotion of NQF.

For the preparation of the EQF Referencing Report, the Minister of Education and Science established a Working Group for Preparation of a National Report for Referencing the NQF to the EQF<sup>22</sup>. The Group is chaired by representative of the Ministry and Education and Science, with members from the: Ministry and Education and Science (Cabinet of the Minister, Department of Primary and Secondary Education, Department of Higher Education, EU Department), academia (University “St. Clement of Ohrid”-Bitola, University “Goce Delchev” – Shtip, South-East European University-Tetovo), Board for Accreditation and Evaluation of Higher Education, VET Centre, Centre for Adult Education, Bureau for Development of Education, National Examination Centre, State Educational Inspectorate, National Agency for European Educational Programmes and Mobility, VET school, Student Union, Organisation of Employers and the Chamber of Crafts of the Republic of Macedonia. The Decision mentions all activities needed for preparation of the EQF Referencing Report.

By the Law on the National Qualifications Framework, the responsibilities / legal competence of the national bodies is as follows:

Ministry of Education and Science:

- provides recommendations for the development of qualification standards
- leads the referencing of the Macedonian Qualifications Framework to the EQF and the self-certification to the QF-EHEA
- follows the implementation and development of the NQFs in other countries and
- communicates to the stakeholders and to the wider public topics related to the Macedonian Qualifications Framework.

The Ministry of Labour and Social Policy:

- establishes and develops an information system on the labour market needs and forecasting
- proposes development of standards of qualifications and standards of occupations according to the needs of the labour market
- adopts standards of occupations
- participates in the preparation of strategic documents and analyses relevant for the development of the Macedonian Qualifications Framework and
- monitors the employment of persons with acquired qualifications.

Competent institutions for development of qualifications are:

- The VET Centre<sup>23</sup>, Centre for Adult Education<sup>24</sup> and Bureau for Development Education for levels I to VB;
- Higher education institutions for levels VA to level VIII.

<sup>22</sup>Decision N° 19-9913/1 of 03.06.2014 see website: <http://mrk.mk/wp-content/uploads/2015/05/Resenie-Referenciranje-na-NRK-2.pdf>.

<sup>23</sup>National institution, see Chapter 2.

<sup>24</sup>National institution, see Chapter 2.



The National Board for the Macedonian Qualifications Framework with members from: the Ministry of Education and Science, Ministry of Labour and Social Policy, VET Centre, Centre for Adult Education, Bureau for Development of Education, National Agency for European Education Programmes and Mobility, higher education institutions, one representative of the chambers<sup>25</sup> and Independent Trade Union for Education, Science and Culture of the Republic of Macedonia:

- discusses evaluations of policies on education, sustainable employment, and regional development
- recommends actions for better linking the education system with the labour market needs
- decides on the allocation of existing and new qualifications in MQF
- proposes development of new or improvement of existing qualifications to the competent institutions
- monitors the development of MQF as a whole
- develops and adopts methodological documents for classifying qualifications
- establishes Sectoral Qualifications Councils
- determines criteria for operation of the Sectoral Qualifications Councils and provides recommendations for their work
- decides on sub-sectors, areas and sub-areas within the sectors and
- adopts the reports of the Sectoral Qualifications Councils, including recommendations on their functioning.

The Sectoral Qualifications Councils (president and eight members of: the Ministry of Education and Science, Association of Employers from the relevant sector, Trade Union in the respective sector, universities, VET Centre, Centre for Adult Education, Bureau for Development of Education, and the relevant competent body for regulated professions in the country:

- analyse the current state and trends of the sector labour market
- identify the needs for all types of qualifications in line with the requirements of the labour market and the society as a whole
- analyse and evaluate existing qualifications
- review proposals for the introduction of new qualifications
- propose sectoral or sub-sectoral qualifications for all levels
- propose priorities for development of new qualifications and updating of existing qualifications
- provide opinions on the compliance of the assessment standards and instruments with the occupational standards and the standards of qualifications
- establish committees for assessment and validation of the learning outcomes acquired in non-formal learning
- promote the sectoral qualifications and the employment possibilities, and
- submit annual reports on their work to the National Board.

The NQF Law applies as of 30 September 2015. On 20 October 2015 the Government established the National Board for the Macedonian Qualifications Framework<sup>26</sup>. Representatives of the quality assurance bodies and labour market actors are involved as members of the MQF Board and the Sectoral Qualifications Councils. Establishment of Sectoral Qualifications Councils is in progress.

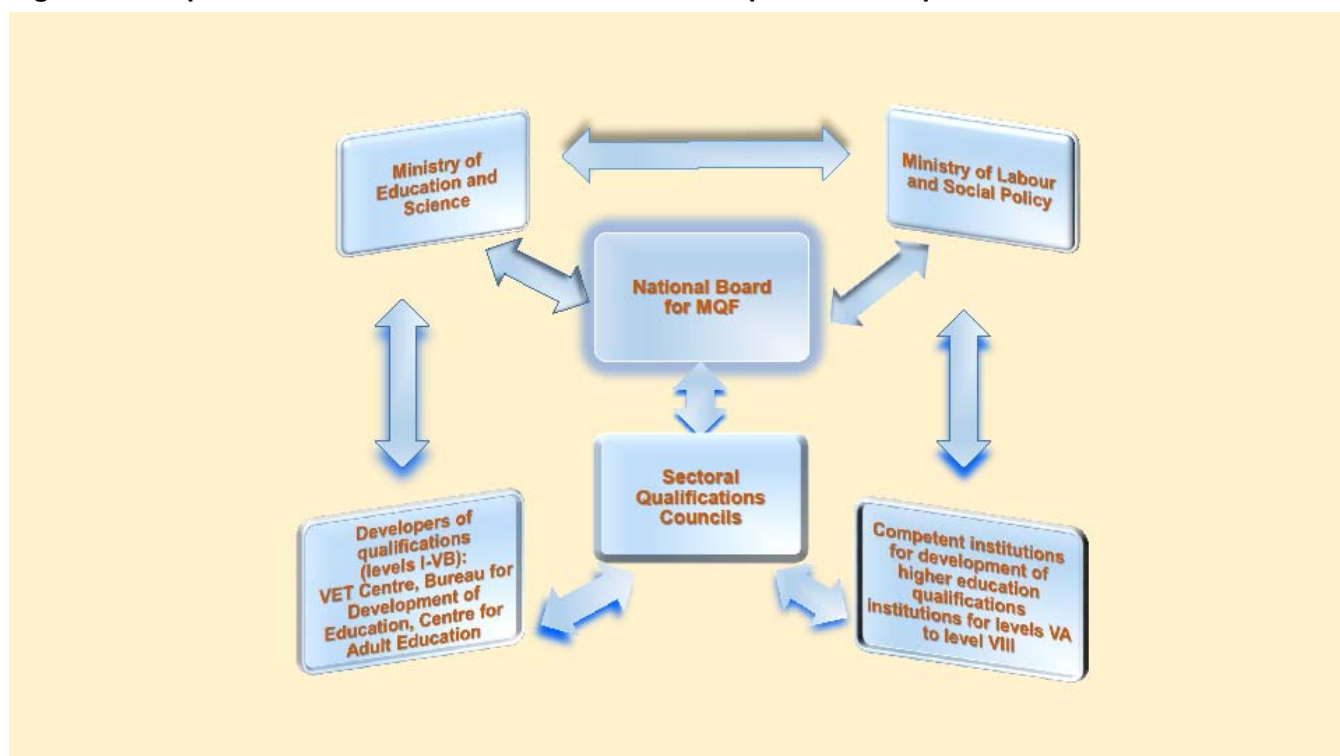
The institutions and bodies involved in developing and implementation of the Macedonian Qualifications Framework are presented on Figure 6.

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<sup>25</sup> Chamber of Commerce of the Republic of Macedonia, Association of Chambers of the Republic of Macedonia, Chamber of Crafts of the Republic of Macedonia, Chamber of Commerce of Northwest Macedonia

<sup>26</sup> Official Gazette of the Republic of Macedonia No. 183/2015.

Figure 6. Competent institutions and bodies for the development and implementation of the MQF



**Criterion 2 (EQF)**

**There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.**

There is a clear link between qualification levels of Macedonian Qualifications Framework and EQF which is demonstrated in this part by comparing the structure, the key concepts and level descriptors.

Both MQF and EQF have eight levels described by level descriptors. Contrary to the EQF, the MQF level V, level VI and level VII have two sub-levels each. The sub-level VB is related only to the labour market. The sub-level VA is related to the labour market as well as could be part of first cycle study programmes. The sub-levels are related to the specificities of the Macedonian qualifications system and reflect the recommendations of the stakeholders during the public debates. Therefore, as result of the national consensus they were approved by the relevant national authority.

**Table 37: Comparison of the Macedonian Qualifications Framework and the EQF levels**

MQF		I	II	III	IV	V		VI		VII		VIII
						VB	VA	VIB	VIA	VIIIB	VIIIA	
EQF		1	2	3	4	5		6		7		8

Both frameworks are based on the concept of learning outcomes. Similar to the EQF, in the Macedonian Qualifications Framework the level descriptors are described by: knowledge and understanding (theoretical and factual), skills (cognitive and practical) and competence (responsibility and autonomy). The MQF level descriptors include notions such as: creativity, innovation, entrepreneurship, responsibility and autonomy (refer to Table 39 for an example – descriptors of MQF level IV). This emphasises the objective to develop qualifications that prepare individuals for changing demands and society, including the labour market.

The initial comparison of the Macedonian Qualifications Framework and the EQF level descriptors took place at the joint ETF/MoES workshop (Skopje, October 2014), followed by additional meetings to fine-tune the comparison. The result of the work is presented in Table 38.

Table 38: Comparison of the MQF and EQF level descriptors

European Qualifications Framework				Macedonian Qualifications Framework			
Level	Knowledge	Skills	Competence	Level	Knowledge and understanding	Skills	Competence
1	<u>Basic general knowledge</u>	<u>Basic skills</u> required to <u>carry out simple tasks</u>	Work or study <u>under direct supervision</u> in a structured context	I	Possesses <u>basic knowledge</u> of the function of certain objects and occurrences with the possibility to apply them in practice and other disciplines, while at the same time enabling further studying.	Possesses <u>basic skills</u> for <u>performing simple operations</u> ;  Uses simple methods, tools and instruments with instructions and under supervision;  Possesses general rules of communication.	Performs simple tasks <u>under direct supervision</u> ;  Takes responsibility for performing simple tasks.
2	<u>Basic factual knowledge</u> of a <u>field of work or study</u>	<u>Basic cognitive and practical skills</u> required to use relevant information in order to <u>carry out tasks</u> and to <u>solve routine problems using simple rules and tools</u>	Work or study <u>under Supervision with some autonomy</u>	II	Possesses <u>basic theoretical and professional knowledge</u> , needed for knowing the <u>area of work</u> , which can be applied when performing simple working tasks, while at the same time enabling further studying.	Possesses <u>practical</u> and creative <u>skills for executing simple or less complex and predefined work in known conditions</u> and <u>predictable situations</u> .  <u>Uses simple methods, tools, instruments, devices and materials</u> on the basis of detailed instructions;  Communicates and cooperates with individuals.	<u>Works independently under known conditions and under periodic supervision</u> and with <u>limited responsibility</u> for performing working tasks;  Performs simple communication and cooperation with some employees in known situations.
3	<u>Knowledge of facts, principles, processes and general concepts, in a field of work or study</u>	A range of cognitive and <u>practical skills</u> required to accomplish tasks and <u>solve problems</u> by selecting and <u>applying basic methods, tools, materials and information</u>	Takes <u>responsibility for completion of tasks in work or study</u> ; Adapt own behavior to circumstances in solving problems	III	Possesses <u>theoretical</u> and <u>systematic acquired professional knowledge, facts, principles, processes and general concepts for a certain area of work or study</u> , while at the same time enabling further studying.	Possesses <u>practical</u> and creative <u>skills</u> that enable the <u>solving</u> of known (predictable) and less known (unpredictable) <u>situations</u> ;  Performs work and tasks of medium complexity, less standardized and relatively transparent;  <u>Uses various devices, tools, equipment and materials</u> in the process of production and in the services;  Communicates and cooperates with the group.	<u>Plans, prepares, organizes and evaluates the own work</u> , based upon predetermined authorisation, within the scope of the own work;  Performs tasks that are not always defined in advance, with a certain degree of independence and responsibility.
4	<u>Factual and theoretical knowledge</u> in broad contexts within a <u>field of work or study</u>	A range of <u>cognitive and practical skills</u> required to generate <u>solutions to specific problems</u> in a <u>field of work or study</u>	Exercise <u>self-management</u> within the guidelines of work or study contexts that are usually predictable, but are <u>subject to change</u> ; <u>Supervise the routine work of others, taking some responsibility for the evaluation and improvement of work</u> or study activities	IV	<u>Knows concepts, principles and processes from the subjects and areas of study</u> ;  Possesses systematic <u>theoretical and professional knowledge</u> within the determined <u>area of work or study</u> that includes analysing and connecting facts and theoretical principles when performing the work, while at the same time enabling further studying.	Possesses various <u>cognitive, practical</u> and creative <u>skills</u> , based on theoretical knowledge and principles, necessary for <u>study and work</u> and for <u>solving problems</u> in changeable conditions in a certain field of work or study;  Qualified to collect, analyse, select and to use relevant information from various sources, tools, methodologies, techniques and materials in the area of study;  Qualified to perform complex procedures and to use methods, instruments, tools, installations	<u>Independently plans, organizes and runs the own work</u> and conducts supervision of the joint work;  Independently performs complex tasks and solves problems, adjusting the behavior in accordance with the provided instructions, <u>unchangeable conditions</u> ;  <u>Responsible for the own work and for the work of the group, for the purpose of evaluating the results of the work and improving the quality</u> , in accordance with predefined

						and materials in the working process;  Communicates and cooperates with the group in changeable conditions.	standards and criteria.
5	<u>Comprehensive, specialized, factual and theoretical knowledge</u> within a <u>field of work or study</u> and an awareness of the boundaries of that knowledge	A comprehensive range of <u>cognitive and practical skills</u> required to develop <u>creative solutions to abstract problems</u>	Exercise <u>management and supervision in contexts of work</u> or study activities where there is unpredictable change; <u>Review and develop performance of self and others</u>	VB VA	Demonstrates <u>knowledge and understanding</u> in the <u>field of study or work</u> that is built upon general secondary education supported with professional literature.  Possesses <u>specialist theoretical and professional knowledge and understanding of certain basic theories from the narrow scientific and professional area.</u>  Possesses limited knowledge of contemporary developments in the area of work or study which provides support to the field of work or profession, possibility for personal development and a basis for further studies for completion of the first cycle of higher education.	Applies <u>skills that are based on understanding of theoretical principles</u> and their application in <u>volving problems</u> and in the <u>execution of complex and specific tasks</u> in the field of work and study, with selection and use of relevant data, methods, procedures, techniques, instruments, devices, tools and materials.  Possesses skills to study in order to be able to undertake further studies with a certain degree of independence.  Possesses ability to communicate and discuss with target groups from the narrow profession or the area of study, with colleagues, superiors and clients.	Has a higher level of personal and professional responsibility, and ability <u>to evaluate the own work and the work of the group</u> based upon criteria in the field of work.  Capability to transfer knowledge to others, <u>to organize, communicate and to control the own work and the work of others.</u>  <u>Takes responsibility for the own results, but also shares responsibility for the activities, results and the work of others in the group.</u>
6	<u>Advanced knowledge</u> of a <u>field of work or study</u> , involving a critical understanding of theories and principles	<u>Advanced skills, demonstrating mastery</u> and innovation, required to <u>solve complex and unpredictable problems</u> in a specialized <u>field of work or study</u>	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; <u>Take responsibility for managing professional development of individuals and groups</u>	VIB VIA	Demonstrates <u>knowledge and understanding in the scientific field of study</u> that builds upon previous education and training, including <u>knowledge in the domain of theoretical, practical, conceptual, comparative and critical perspectives in the scientific field</u> according to the relevant methodology;  Understanding of a certain area and knowledge of current issues in relation to scientific research and new sources of knowledge.  <u>Demonstrates knowledge and understanding of different theories and methodologies necessary for the wider area of research.</u>	Is able to apply knowledge and understanding in a manner that shows a professional approach to the <u>work or the profession</u> ;  Demonstrates <u>ability to identify, analyse and solve problems</u> ;  Capability to <u>find and support arguments within the profession or the field of study</u> ;  <u>Capability to collect, analyse, evaluate and present information, ideas and concepts from relevant data</u> ; Capability <u>to assess theoretical and practical issues, provide explanations for the reasons and to select an appropriate solution</u> ; Takes initiative to identify the requirements for acquiring further knowledge and study with a high degree of independence; Capability to communicate and discuss information, ideas, problems and solutions, when the decision criteria and the scope of the task have been clearly defined, both with <u>professional and the non-expert public.</u>	<u>Takes responsibility for the own results and shared responsibility for the collective results</u> ;  Capability for independent participation, with a professional approach, in specific scientific and interdisciplinary discussions.  Makes relevant judgement by taking into consideration the personal, social, scientific and ethical aspects.
7	Highly specialized knowledge, some of which is at the forefront of knowledge in a field	<u>Specialised problem-solving skills</u> required in	<u>Manage and transform work or study contexts</u> that are complex, unpredictable and require		Demonstrates knowledge and understanding of the scientific field of study that builds upon the first cycle, by applying methodologies	Capability for <u>critical, independent and creative problem-solving</u> with a certain degree of originality in new or unknown environments and in <u>multi-disciplinary contexts</u> , related to	Demonstrates <u>significant responsibility for the own and the joint results, for leading and</u>

	of work or study, as the basis for <u>original thinking and/or research</u> ; critical <u>awareness of knowledge issues in a field and at the interface between different fields.</u>	<u>research and/or innovation</u> in order to <u>develop new knowledge and procedures</u> and to <u>integrate knowledge from different fields.</u>	new strategic approaches; <u>Take responsibility for contributing to professional knowledge and practice</u> and/or for <u>reviewing the strategic performance of teams.</u>	<p>VIIB</p> <p>appropriate for resolving complex problems, both in a systematic and in creative manner, which provides the basis or the possibility for <u>originality in the development and/or application of autonomous ideas in the context of the research</u>;</p> <p>VIIA</p> <p>Presents a high level of <u>professional competence in one or in several specific scientific fields</u>;</p> <p>Possesses <u>knowledge from one or more subject areas</u>, which in the given scientific fields are based on the <u>most renowned international research</u> in that <u>scientific field</u>, as well as capability to connect wider and deeper knowledge in related <u>professional fields of science</u>.</p>	<p>the field of study;</p> <p>Capability to <u>synthesize and integrate the knowledge and to handle complex issues, in a systematic and creative manner</u>;</p> <p>Capability to evaluate and select scientific theories, methodologies, tools and general skills from the subject areas, and to <u>put forward new analyses and solutions</u> on scientific basis;</p> <p>Capability to recognize the personal need for further knowledge and capability for independent and autonomous actions when acquiring new knowledge and skills in the social framework;</p> <p>Capability to exchange conclusions and proposals by clearly and unambiguously arguing and rationally underpinning the stance, both with experts and non-experts.</p>	<p><u>initiating activities</u>:</p> <p>Capability for solid evaluation, even in the case of incomplete and limited information, which includes the personal, social and ethical responsibilities in the application of the acquired knowledge and evaluation thereof;</p> <p>Capability for <u>taking responsibility for further professional development and education, both for personal and for the group with which cooperates.</u></p>
8	<u>Knowledge at the most advanced frontier of a field of work or study</u> and at the <u>interface between fields</u>	The <u>most advanced and specialised skills and techniques</u> , including <u>synthesis and evaluation</u> , required to <u>solve critical problems in research and/or innovation</u> and to extend and <u>redefine existing knowledge</u> or professional practice.	Demonstrate <u>substantial authority</u> , innovation, autonomy, scholarly and professional integrity and sustained commitment to the <u>development of new ideas or processes</u> at the forefront of work or study contexts including research	<p>VIII</p> <p>Demonstrates <u>systematic understanding of the field of research and perfect knowledge of research methods and skills within the respective field</u> in accordance with the highest international standards;</p> <p>Possesses <u>knowledge</u> gained with own research or work, thus significantly contributing to the professional and scientific field of research, but also in the <u>related fields</u>.</p>	<p>Demonstrates <u>ability to interpret, design, apply and adapt the essential subject of the research with scientific integrity</u>;</p> <p>Uses the knowledge as a basis for <u>original ideas and research</u> that exceed the current boundaries of knowledge, <u>developing new knowledge</u>, valued on the level of national and international peer-reviewed publications;</p> <p>Ability for critical analysis, <u>evaluation and synthesis</u> of new and complex ideas, necessary for <u>solving complex problems in the field of research</u>;</p> <p>Ability for independent initiation and participation in national and international research networks and events with scientific integrity;</p> <p>Ability for independent initiation of research and development projects, through which new knowledge will be generated, as well as skills for development in the field of research;</p> <p>Expected to be capable of self-promotion in academic and professional context and in the technological, social or cultural development in a knowledge-based society;</p> <p>Capable for communication with the colleagues, the wider academic community and with the society as a whole within the field of expertise.</p>	<p>Takes maximum responsibility for the results of the own work, but also for the work of the others in the group;</p> <p>Takes responsibility for managing <u>complex processes</u>, while, in the same time, ensuring the professional development of the individuals and the group as a whole.</p>

Example of the level descriptors for level IV of the MQF is provided in Table 39.

**Table 39: Level descriptors for level IV of the Macedonian Qualifications Framework**

MQF	Knowledge and understanding	Skills	Competence
IV	<p>Knows concepts, principles and processes from the subjects and areas of study;</p> <p>Possesses systematic theoretical and professional knowledge within the determined area of work or study that includes <b>analysing</b> and <b>connecting facts</b> and theoretical principles when performing the work, while at the same time enabling <b>further studying</b>.</p>	<p>Possesses various cognitive, practical and <b>creative skills</b>, based on theoretical knowledge and principles, necessary for study and work and for <b>solving problems</b> in <b>changeable conditions</b> in a certain field of work or study;</p> <p>Qualified to collect, analyse, select and to use relevant information from various sources, tools, methodologies, techniques and materials in the area of study;</p> <p>Qualified to perform <b>complex</b> procedures and to use methods, instruments, tools, installations and materials in the working process;</p> <p><b>Communicates</b> and <b>cooperates</b> with the <b>group</b> in <b>changeable conditions</b>.</p>	<p><b>Independently</b> plans, organizes and runs the <b>own work</b> and conducts supervision of the <b>joint work</b>;</p> <p>Independently performs <b>complex tasks</b> and <b>solves problems</b>, <b>adjusting the behavior</b> in accordance with the provided instructions, in <b>changeable conditions</b>;</p> <p><b>Responsible for the own work</b> and for <b>the work of the group</b>, for the purpose of evaluating the results of the work and improving the quality, in accordance with predefined standards and criteria.</p>

The key elements of each level and their correspondence to the EQF are the following:

- MQF level descriptors are elaborated into more details.
- For the level descriptors of the MQF level I there are no substantial differences to the level descriptors of the EQF level 1. We conclude that the MQF level I fully corresponds to the EQF level 1.
- We find that all three domains of the level descriptors of the MQF level II, level III and level IV are slightly more demanding compared to the respective level descriptors of the EQF level 2, level 3 and level 4. The MQF level descriptors include creativity as an additional characteristic. The level of autonomy and responsibility is slightly higher.
- The level descriptors of the level V of the MQF correspond very well to the level descriptors of the level 5 of the EQF. The EQF level descriptors use the terms management and supervision, while the MQF level descriptors use the terms organise, communicate and control.
- The level descriptors of the MQF level VI, level VII and level VIII correspond to the respective level descriptors of the EQF level 6, level 7 and level 8. The Dublin descriptors were the basis for developing these level descriptors.

Table 42 presents the comparison between the NQF HE level descriptors and the Dublin Descriptors. Five domains of the level descriptors for higher education (knowledge and understanding, applying knowledge and understanding, making judgements, communication and learning skills) have been restructured into three domains of the NQF LLL (knowledge and understanding, skills and competence):

- The *knowledge and understanding* domain from the NQF HE fully corresponds to the *knowledge and understanding* domain of the NQF LLL.
- *Applying knowledge and understanding* from the NQF HE is integrated into the *skills* domain of the NQF LLL.
- *Making judgements* domain from the NQF HE is incorporated into all three domains of the NQF LLL.
- *Communication* domain from the NQF HE is incorporated into the *skills* and the *competence* domain of the NQF LLL.
- *Learning skills* of the NQF HE is incorporated into the *skills* and the *competence* domains of the NQF LLL.

### Criterion 3 (EQF)

**The national qualifications framework or system and its qualifications are based on the principle and objective of learning outcomes and linked to arrangements for validation of non-formal and informal learning and, where these exist, to credit systems.**

According to the NQF legislation (Law on NQF, Law on Higher Education, Decree for the National Framework for Higher Education Qualifications), learning outcomes are key concept for the MQF and its qualifications. In 2014 analysis of relevant legislation was carried-out. According to the findings, there is a need for updating the laws on primary education, secondary education, VET and education of adults with introduction of learning outcomes. Information on the current situation with recommendations was presented to the Government, which concluded that the work in this area should continue. The interventions in the legislation will also address adjustment of assessment to the learning outcomes approach. The current input and process oriented quality assurance will be further improved with focusing on learning outcomes. Actions will follow for strengthening the quality assurance bodies and processes focusing to learning outcomes.

The analysis<sup>27</sup> of the current state of learning outcomes implementation in primary, secondary (general and VET) and higher education and education of adults (carried out in 2014) shows that there are differences in the sub-systems.

In primary education learning outcomes have been implemented gradually. As of 2008 the nine year primary education is organized in three periods (I-III grade), (IV-VI grade) and (VII-IX grade). Curricula are designed per period and per grade according to educational goals and expected learning outcomes for each subject. Subject curricula are developed according to specific aims. An example of subject curriculum (in English) is presented on the web site [http://mrk.mk/wp-content/uploads/2015/07/Programa\\_za\\_III\\_odd..pdf](http://mrk.mk/wp-content/uploads/2015/07/Programa_za_III_odd..pdf)

In general secondary education curricula are designed according to educational goals and expected learning outcomes for each subject.

In VET, curricula are designed according to educational goals and expected learning objectives for each subject. In the part of VET programmes that was reformed in 2012 (12 programmes of VET-3 years of education), the learning outcomes approach was introduced in a coherent manner: programmes and the qualification standards are described in learning outcomes and linked with occupational standards. Examples of occupational standards and reformed curricula are provided on the website <http://mrk.mk/wp-content/uploads/2015/07/Standardi-na-zanimanja-2012.pdf>.

In higher education, the learning outcomes approach is generalised at level of programme design and accreditation. All accredited study programmes are learning outcomes based in accordance with the Decree for the National Framework for Higher Education Qualifications. However full implementation of the learning outcomes approach will require further efforts, as learning outcomes are a new paradigm. All higher education institutions are adjusting to the learning outcomes approach and in this process there is still room for improvement as regards the involvement of other stakeholders. Examples of study programmes are provided on the website of the South East European University of Tetovo: <http://www.seeu.edu.mk/en/future-students/academics>.

In adult education occupational standards are the foundation of the vocational qualifications derived from verified special adult education programmes. A number of different special adult education programmes are clustered around certain occupational standard. The programmes are designed on the basis of learning outcomes.

Credit systems to measure the volume of achieved learning outcomes have been partially implemented in the qualifications system. In higher education the ECTS has been used for all cycles since 2005. One ECTS credit is equivalent to 30 working hours of duration of 60 minutes. Preparations for introduction of ECVET are in progress. In the NQF Law one ECVET credit is defined as workload of 25 working hours of duration of 45 minutes. Development and implementation of MCSGE will follow. One MCSGE is equivalent to 25 working hours of duration of 45 minutes.

According to Article 8 of the Law on the National Qualifications Framework, for each educational programme, module, subject or other unit of studying a certain number of credits is allocated.

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<sup>27</sup> Inventory and Analysis of Existing Qualifications, Study Supporting the EQF Referencing Process in the Republic of Macedonia, European Training Foundation, May 2014

The validation of non-formal and informal learning (VNFIL) is supported with the MQF and described in the document Macedonian Qualifications Framework – Baselines.

Currently understanding of validation of non-formal and informal learning is different in different institutions. Good practice example is the Methodology on the Process of Recognition of Prior Knowledge and Skills developed in the framework of the Horizon 2020 regional project “BUILD UP Skills BEET - Builders' Energy Efficiency Training”(Croatia, Greece and the Republic of Macedonia). The system of VNFIL, including certification of qualifications, will be designed within the next phase according to the Roadmap for VNFIL. This and other examples of good practice will be relevant for the designing process. The work package 4 of the Roadmap for Further Development and Implementation of the MQF is focused on the development and implementation of VNFIL.

With support of the European Training Foundation the Concept for Non-formal Learning of Adults was developed and adopted by the Minister of Education and Science in 2015. The Concept for Primary Education of Adults was developed with relevant stakeholders and adopted in 2015. There is need for further communication, awareness raising and regulation of VNFIL. More information on the efforts of the Republic of Macedonia to develop a system for VNFIL is provided in Chapter 7.

Currently Criterion 3 is not fulfilled for the entire qualifications system in the country, but intensive activities are in progress in the areas of learning outcomes, credit systems and validation of non-formal and informal learning. The next steps in regard to learning outcomes are focused on: updating and enforcement of the legislation aiming at full implementation of learning outcomes. The non-reformed curricula will be revised and modernised and new curricula will be developed according to the learning outcomes approach with effective involvement of stakeholders in their design and implementation. Assessment leading to certification of qualifications will be more coherently linked to learning outcomes. The learning outcomes will also become part of quality assurance processes. The on-going reforms of VET will encompass the implementation of ECVET. The Republic of Macedonia will continue the work on development and implementation of the system for validation of non-formal and informal learning according to the roadmap prepared in accordance with the EU Recommendation (2012) and the new VNFIL Guidelines (2015).

#### **Criterion 4 (EQF)**

**The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.**

The national legislation foresees establishment of transparent procedures for inclusion of qualifications in the Macedonian Qualifications Framework. Standards of qualifications, as fundamental elements in the Macedonian Qualifications Framework are described in Article 6 of the Law on NQF and include: title, code, type, level or sub-level, credit value, description and contents of the qualification, which includes learning outcomes and assessment criteria. According to the Methodology for Allocation of Qualifications into the Macedonian Qualifications Framework, the respective Sectoral Qualifications Council analyses the content of the proposed standards of qualifications, including the allocation of levels according to level descriptors. The National Board for MQF adopts the standards of qualifications. Specific elements of the Methodology have been tested. For full implementation of the Methodology, adoption by the MQF Board is needed as well as capacity building of stakeholders.

Qualification standards and other relevant documents are further used for development, validation of programmes and allocation of the qualifications in MQF. The bodies that validate programmes are described in Criterion 5. The development of qualifications is prescribed in the document Procedures for Development of Qualifications.

The inclusion of qualifications in MQF is partially described in Chapter 4 of the Macedonian Qualifications Framework – Baselines. Sectoral Qualifications Councils: analyse the situation and the needs of the labour market and identify the needs for all types of qualifications in line with the requirements of the labour market and society as a whole, and prepare basic profiles of qualifications. The National Board for MQF adopts decisions for the inclusion of the qualifications in the MQF.

Current implementation of learning outcomes in programmes has been deeply analysed and published in 2015 within the project supported by the ETF<sup>28</sup>, and with the active participation of national stakeholders, Ministry of Education of Science, VET Centre, Centre for Adult Education, Bureau for Development of Education, schools, universities, and professional associations.

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<sup>28</sup>Inventory and Analysis of Existing Qualifications and the Synthesis Report, European Training Foundation, May 2014



The findings of the Analysis are based on a technical analysis of documentation following agreed criteria. The document was finalised following an inclusive stakeholders' consultation. Other aspects, beyond compliance with Article 6 of the NQF Law, analysis of content (learning outcomes) and of inherent quality, can be taken into consideration in levelling and insertion processes, such as: volume, role and place in the education and training structures and traditions, perception of employers on the value of certain qualifications.

The analysis covered the main features related to the *content of qualifications* and to the *quality of qualifications*.

The analysis of the *content of qualifications* consisted of comparison between the expressions of learning outcomes of the selected qualifications and the expressions of MQF level descriptors of the relevant levels. The process followed the steps:

- a) Identification of the relevant documents in which expressions of learning outcomes can be found.
- b) Assessment whether the identified documents provide expressions of learning outcomes and whether the learning outcomes have direct or indirect relation with the MQF level descriptors.
- c) Comparison of the learning outcomes with the MQF level descriptors.

The analysis of the *quality of qualifications* includes: relevance of the qualification for the labour market; standards on which the qualification is based; structure of the qualification; involvement of labour market actors in the different stages of the qualification process (development, learning process, assessment); institutional setting of the qualification. Aspects related with institutional quality assurance (accreditation and approval of the qualification) are regulated with legislation. Steps of the analysis:

- a) Identification of relevant documentation.
- b) Analysis of the collected documentation.
- c) Analysis of the data from the Employment Service Agency on the number of unemployed people and vacancies announced for the qualification analysed.
- d) Visit to companies employing persons holding the specific qualification and interviews with responsible persons.

Findings of the analysis:

#### Primary education, general secondary and art education

The documentation for these qualifications is based on learning objectives that partly cover MQF level descriptors in all domains – knowledge and understanding, skills and competence. *According to the Law on NQF, primary education, general secondary and art education are allocated to the MQF at the level I and the IV level respectively.*

#### Vocational education for occupations (3-year VET) and Vocational training (2-year VET)

Analysis was performed for the reformed 3-year VET qualifications (and one 2-year VET qualification)<sup>29</sup>. It showed that these qualifications are clear and complete: they are based on occupational standards, qualification standards, have consolidated information in the full curriculum collection (programme overview of teaching hours across years of education, subject curricula, examination programme for the final exam). *These qualifications are closely matching the MQF descriptors on level III (and level II, respectively) and meet the respective occupational standards.*

The process of reforming the remaining 3-year and 2-year VET qualifications is to follow.

#### Technical vocational education (4-year VET)

The 4-year VET qualifications are based on learning objectives. They are based on educational standards, standards of profiles of occupations according to the Nomenclature of occupations, sectoral standards (standard na struka) and standards of educational profiles. *First analysis of learning objectives within these qualifications shows that some of the statements can be categorised as knowledge and understanding, skills and competence.*

One component of the on-going Skills Development and Innovation Support Project addresses the modernisation of 4-year VET, including implementation of learning outcomes.

#### Adult education qualifications

Adult education programmes are based on occupational standards, and the qualification is described through learning outcomes. Occupational standards used for the development of these qualifications are the

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<sup>29</sup>Developed in the frame of the Twinning Project MK 07 IB SO 03

ones used for the development of 3-years or 2-years VET qualifications. Developers of the programmes apply different approach in using the occupational standards, and diverse coverage of the occupational standard. *The learning outcomes described in the occupational standards are relatively direct and close to the respective MQF level descriptors.*

#### Craftsman master professional qualification

The qualification is based on learning objectives that partly cover NQF level descriptors. *According to the Law on NQF, the craftsman master professional qualifications are allocated to the NQF level VB.*

#### Higher education qualifications

*Since 2010 and in accordance with the Decree for the National Framework for Higher Education Qualifications, the curricula are developed based on learning outcomes.* The allocation of higher education qualifications in the MQF is described in Chapter 2.2.5 and in Chapter 4.

#### Next steps related to levelling of qualifications in the MQF

Following the establishment of the complete MQF governance structure the transparent allocation of qualifications in MQF will continue depending on the relevance of the qualifications for the socio-economic development of the society. The on-going cooperation and support from renowned European institutions/organisations and bodies (European Commission, ETF, British Council, etc.) will be strengthened.

Table 40 shows which qualifications are currently ready to be included in the MQF, which are conditionally included and which are not yet ready to be included. Moreover, the table articulates information from Criteria 3, 4 and 5, level by level – and links this to the MQF inclusion decisions.

#### **Criterion 5 (EQF)**

**The national quality assurance system(s) for education and training refer(s) to the national qualifications framework or system and are consistent with the relevant European principles and guidelines (as indicated in annex 3 of the Recommendation).**

All levels of the Macedonian Qualifications Framework are underpinned by quality assurance systems: quality assurance system for primary and secondary education (general/VET/art) and quality assurance for higher education. The quality assurance system is regulated with national legislation.

#### *Quality assurance system for primary and secondary education*

In primary and secondary education (general/VET/art) quality assurance covers: validation of curricula, accreditation of schools, governance of primary and secondary schools, teaching and learning processes, and assessment of students' achievements. Directors of schools are licenced and continuous professional development of teachers takes place.

Schools perform self-assessment organised by the school management, as the basis for self-improvement and integral (external) evaluation. Both evaluations are performed on a regular basis.

Integral (external) evaluation is performed by the State Educational Inspectorate on a three year basis. The State Educational Inspectorate is independent from the Ministry of Education and Science. The Inspection Council of the Republic of Macedonia reviews the work of the State Educational Inspectorate.

Periodically, the Bureau for Development of Education and the VET Centre perform monitoring and advisory visits to primary and secondary schools focusing on the teaching and learning processes.

As described above, quality assurance within primary and secondary education covers context, input, process and output dimensions, including learning outcomes. The achieved learning outcomes are assessed by means of internal and external assessment. The final exam for general secondary education and for arts education is State matura exam, or School matura exam. For 4-year VET the students pass State matura exams or Final exams. For 3-year VET students pass Final exam. For 2-year VET students exam for vocational training (ispit za struchno osposobuvanje). The National Examination Centre organizes and coordinates the external part of the State matura exam, which is based on learning outcomes.

School self-evaluation is performed according to the Rulebook with indicators on the quality of the work of the school. The State Educational Inspectorate performs the external evaluations of schools in accordance with the Guidelines. Legal documents relevant for quality assurance in primary education are quoted in the

Sub-chapter 2.2.2. Legal documents relevant for quality assurance in secondary education are quoted in the Sub-chapter and 2.2.3.

Appropriate resources needed for the functioning of the quality assurance system (National Examination Centre, State Educational Inspectorate, Bureau for Development of Education and the VET Centre) are allocated from the National Budget.

Various stakeholders are involved in the quality assurance system. Students and parents are involved in self-evaluation and in integral evaluation of schools. Employers are involved in the development of standards of occupations, standards of qualifications, curricula design, implementation of curricula and in student assessment.

Schools have the opportunity to comment the draft reports in the external evaluation performed by the State Educational Inspectorate. Evaluation results contain observations and recommendations for improvement. The State Educational Inspectorate performs control field visits on the follow-up to the recommendations. On a yearly basis, the final evaluation reports on the Matura exams are published on the website of the National Examination Centre.

#### *Quality assurance system in higher education*

As member of the Bologna Process, the Republic of Macedonia has been working on the implementation of the European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG EHEA) which complies with the EQF common principles for quality assurance.

The quality assurance system in higher education consists of accreditation, self-evaluation and external evaluation. Departments/commissions for quality assurance are part of the university management systems. The larger universities have units at the faculty level coordinated by the central quality assurance unit of the university. The internal quality assurance system covers: the design and validation of proposals of study programmes, monitoring and review of existing study programmes, the quality of teaching and assessment, student admission, progression, recognition and certification, quality of teaching staff, learning resources (libraries, ICT environment), student life support (student standard); quality of information relevant for students and information for the public, periodic self-assessment as well as preparations for external evaluation. Self-evaluation should be performed within a three year period. Different stakeholders are involved in these processes: academic staff, administrative staff, students and employers. The self-evaluation reports are published on the websites of the universities. Examples: the Self-Evaluation Report of the "Ss. Cyril and Methodius" University in the period 2010/2011-2012/2013 and the Self-Evaluation Report of the "Ss. Cyril and Methodius" University in the period 2006/2007-2009/2010 are presented on the link [http://www.ukim.edu.mk/en\\_content.php?meni=157&glavno=10](http://www.ukim.edu.mk/en_content.php?meni=157&glavno=10). The yearly self-evaluation reports of the South-East European University in the period 2011-2015 are presented on the link <http://www.seeu.edu.mk/en/about/important-documents>. The findings of the evaluations are guiding the follow-up activities and contribute to building institutional quality culture.

The Higher Education Accreditation and Evaluation Board is the key body for external quality assurance. The Board is responsible for development of policy documents, legislation related to quality, defines the methodology of work, ensures resources from the National Budget and from its' own activities, organizes selection and training of experts for peer reviews who carry-out external evaluations and prepare reports. Representatives of the following stakeholders are members of the Board: academic staff, the Macedonian Academy of Sciences and Arts, students and employers.

As of 2010 the design and validation of higher education study programmes is learning outcomes based. In 2011 the Manual with Practical Advices for Writing Learning Outcomes became available to the developers of study programmes. The Manual is published on the following website: [http://mon.gov.mk/images/documents/nacionalna\\_ramka/Practical%20advices%20for%20writing%20Learning%20outcomes%20-%20Manual.pdf](http://mon.gov.mk/images/documents/nacionalna_ramka/Practical%20advices%20for%20writing%20Learning%20outcomes%20-%20Manual.pdf). To ensure learning outcomes implementation, the Board establishes peer review commissions for accreditation/re-accreditation of the study programmes.

Legal documents relevant for quality assurance in higher education are quoted in the Sub-chapter 2.2.5.

In 2012 the Higher Education Accreditation and Evaluation Board became associate member of ENQA. The Board works independently. In 2015 the Ministry of Education and Science became governmental member of the General Assembly of EQAR. Road map was prepared for full membership of the Board in ENQA and in EQAR.

Summary of the current status of MQF compliance and fulfilment of the Criteria 3, 4 and 5 is provided in Table 40.

**Table 40: Summary of the EQF referencing to Criteria 3, 4 and 5**  
 (“LO” stands for “Learning Outcomes”; “QA” stands for “Quality Assurance”)

MQF levels & sub-levels	EQF level	Types of qualifications, cycles and awards	Criterion 3	Criterion 4	Criterion 5	Inclusion in MQF (NQF for LLL)
VIII	8	<b>3<sup>rd</sup> cycle</b> Type: educational Diploma and Diploma Supplement	Principle of Learning Outcomes (LO); linked to arrangements VNFIL; credit systems  ≥ 180 ECTS  100 % of programmes are LO-based.  <i>Qualification not accessible via VNFIL</i>	Procedures for inclusion of qualifications in NQF or for describing the place of qualifications in NQS are transparent  Inclusion in the Register of HE qualifications: following the legal procedure of accreditation of the programme for doctoral studies (and titles)  108 third cycle programmes in the Register	National quality assurance systems for education and training refer to the NQF and are consistent with relevant European principles and guidelines (Annex III)  QA: see chapter 2 and 4.8	Accredited qualifications: included in MQF
VIIA	7	<b>2<sup>nd</sup> cycle</b> Type: educational (academic) and vocational Diploma and Diploma Supplement for educational qualifications. Certificate for vocational qualifications.	ECTS: 60-120  LO based  100% of the second cycle study programmes are LO-based.  (Re)Accreditation pledged to adoption of LO.  <i>Qualification not accessible via VNFIL</i>	Inclusion in the Register of HE qualifications: following the legal procedure of accreditation of the second cycle study programme (and titles)	QA: see chapters 2 and 4.8	Accredited qualifications: included in MQF
VIIB		<b>2<sup>nd</sup> cycle</b> Type: educational (professional) and vocational Diploma and Diploma Supplement for educational qualifications. Certificate for vocational qualifications.	ECTS: 60  100% of the programmes are LO-based.  (Re)-Accreditation pegged to adoption of LO.  <i>Qualification not accessible via VNFIL</i>	Inclusion in the Register accredited HE Qualifications (titles) following legal procedure of accreditation	QA: see chapters 2 and 4.8	Accredited qualifications: included in MQF

VIA	6	<p><b>1<sup>st</sup> cycle:</b> Type: educational (academic and professional) and vocational Diploma and Diploma Supplement for educational qualifications. Certificate for vocational qualifications.</p>	<p>ECTS: 240 Exception for the regulated professions: Medicine - 360 ECTS; Veterinary Medicine - 330 ECTS; Dentistry, Pharmacy and Architecture - 300 ECTS. 100 % of programmes are LO-based. (Re)-Accreditation pegged to adoption of LO. <i>Qualification not accessible via VNFIL.</i></p>	<p>In Register accredited HE  Qualifications (titles) following legal procedure of Accreditation</p>	<p>QA: see chapters 2 and 4.8</p>	<p>Accredited qualifications: included in MQF</p>
VIB		<p><b>1<sup>st</sup> cycle:</b> Type: educational (academic and professional) and vocational Diploma and Diploma Supplement for educational qualifications. Certificate for vocational qualifications.</p>	<p>ECTS: 180 100 % of programmes are LO-based. (Re)-Accreditation pegged to adoption of LO.  <i>Qualification: not accessible via VNFIL.</i></p>	<p>In Register of accredited HE qualifications  Qualifications (titles) following legal procedure of accreditation</p>	<p>QA: see chapters 2 and 4.8</p>	<p>Accredited qualifications: included in MQF</p>
VA	5	<p>Short-cycle: 60-120 ECTS Type: educational (professional) and vocational Certificate and supplement for educational qualifications. Certificate for vocational qualifications.</p>	<p>ECTS: 60-120 Currently, in development phase.  <i>Qualification: not accessible via VNFIL.</i></p>	<p>Development of Short-cycle programmes in progress</p>	<p>QA – see chapters 2 and 4.8</p>	<p>Accredited qualifications: upon completed accreditation, will be included in MQF</p>
VB		<p>a) Post-secondary: specialist education; Type: educational and vocational. b) Craftsman.</p>	<p>a) Described in education objectives (not LO)  b) Described in education</p>	<p>b) In Inventory</p>	<p>a) QA – see chapters 2 and 4.8  b) QA – see chapters 2</p>	<p>According to Article 24 of the Law on NQF, the craftsman master professional qualifications are allocated to the NQF level VB. Reforming post-secondary</p>

		Type: educational and vocational. Certificate.	objectives (not LO)		and 4.8	education will follow.
IV	4	Type: educational a) Secondary general  b) Secondary arts (4 years)  c) Technical (4 years) <i>A), b), c): students with special education needs - 5 years.</i> Diploma  Type: vocational Certificate.	a), b) and c) based on educational objectives (not LO)    d) Based on LO (occupational standards)  <i>No credit system in application (but planned)</i>	a), b) and c) - In Inventory    d) - In Inventory	a), b) and c) QA – see chapter 2 and 4    d) Verified programmes, authorized providers – see chapter	a) and b): According to the Law on NQF, general secondary and art education are allocated to the MQF at the level IV  c) Conditional inclusion: revision of technical qualifications and their description on LO-basis. Ongoing process of revision: first sample of 3 VET-4 qualifications completed in Dec 2015. Levelled to level 4 – type educational qualification
III	3	Type: educational 3 years VET Diploma  Type: vocational Certificate	a) 12 qualifications out of 48 are based on LO (25% of the active VET-3 qualifications) 75% based on educational objectives (36 out of 48 active VET-3 qualifications)  b) Based on LO (occupational standards)  <i>No credit system in application (but planned)</i>	a) - In Inventory    b) - In Inventory	a) QA – see chapters 2 and 4.8    b) Verified programmes, authorized providers – see chapters 2 and 4.8	a) i) 12 new (from 2012-2013) qualifications LO-based: can be included. ii) According to the Law on NQF, VET-3 qualifications (non-reformed) are allocated to the MQF at the level III. <i>b) Can be included upon formal leveling procedure (Type: vocational)</i>
II	2	Type: educational 2 years VT Certificate  Type: vocational Certificate	a) Based on LO    b) Based on LO (occupational standards)	a) - In Inventory    b) - In Inventory	a) QA – see chapters 2 and 4.8    b) Verified programmes, authorized providers – see chapters 2 and 4.8	One new (from 2013): qualification LO-based can be included.

I	1	<p>Type: educational Certificate</p> <p>Type: vocational (functional literacy and numeracy) Certificate</p>	<p>a) Education objectives – legal base:</p> <p>b) Education objectives – legal base:</p>		<p>a) Quality assured – chapters 2 and 4.8</p> <p>b) Quality assured – accredited programmes and authorised providers</p>	<p>According to Article 24 of the Law on NQF, qualifications from primary education are allocated to the MQF at level I.</p>
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**Criterion 6 (EQF)****The referencing process shall include the stated agreement of the relevant quality assurance bodies**

Representatives of the external quality assurance bodies: the National Examination Centre, the State Educational Inspectorate and the Board for Accreditation and Evaluation of Higher Education have been actively involved in the process of referencing the National Qualifications Framework to the European Qualifications Framework for Lifelong Learning.

In June – July 2015 special sessions were held with officials of the Board for Accreditation and Evaluation of Higher Education, the State Education Inspectorate and the National Examination Centre. Their comments and suggestions were incorporated in the Referencing Report.

The written agreements of these bodies on the Report are presented in Annex 4.

**Criterion 7 (EQF)****The referencing process shall involve international experts.**

The country decided for a mixed expertise, governed by the following principles: familiarity of the experts with the qualifications system, origin from a country with a similar/different qualifications system, expertise in higher education/VET, work in international organisations as well membership in the EQF Advisory Group (thus acquainted with the contemporary trends in the area of qualifications).

The pool of international experts consists of:

- Eduarda Castel Branco - European Training Foundation, Senior Specialist in VET Policies and Systems - Country Desk Morocco. Member of the EQF AG.
- Prof. Mile Dzelalija, PhD – University of Split, Faculty of Science, Croatia and member of the EQF AG.
- John O'Connor – Head of Qualifications and Skills Policy at Quality and Qualifications Ireland (QQI) and member of the EQF AG. Responsible for leading policy development and review of the Irish NFQ. Co-ordinates activities as Irelands designated EQF-NCP with responsibility for national development and implementation of the European Qualifications Framework.

It is important to stress that Ms. Eduarda Castel Branco and Prof. Mile Dzelalija have been involved in the EQF referencing since the beginning, therefore their written statements contain comments concerning both the inputs, the process and the output of the EQF referencing process. The opinion of Mr. O'Connor will address the output of the EQF referencing process.

The role of international experts has been to make the Report transparent and understandable for other readers. Ms. Eduarda Castel Branco and Prof. Dzelalija have been substantially involved in the preparation of the Report (knowledge sharing, capacity building workshops and meetings with nationals and international experts, guiding the development of the draft Report, providing comments and recommendations. By participation to meetings of the EQF AG and international conferences they have contributed to raising awareness and transparency of this process).

Mr. O'Connor was invited to read the draft Referencing Report and to provide comments and recommendations.

The short CVs and opinions of the international experts Ms. Eduarda Castel Branco, Prof. Mile Dzelalija and Mr. John O'Connor are provided in Annex 6 of this Report.

Upon initiative of the MS Project Leader of the IPA Twinning project *Further Improvement of the System for Development and Implementation of the National Qualifications Framework (MK 13 IB SO 02)* Ms. Agnieszka Chłoń-Domińczak from the Educational Research Institute from Poland, the draft EQF Referencing Report of the Macedonian Qualifications Framework and Self-Certification to the QF-EHEA was submitted for opinion of the project team. The members of the project team Ms. Aileen Ponton – member of the EQF AG, Ms. Brigitte Bouquet – member of the EQF AG and Ms. Agnieszka Chłoń-Domińczak – member of the EQF AG have read the draft Referencing Report and have prepared a joint Note which is provided in Annex 6 of this document. The joint Note has also been endorsed by Ms. Erzsebet Szlamka, member of the EQF AG. The national team for referencing expresses appreciation and gratitude for the initiative and for the opinion of the EQF AG members presented in the Note.



The national team uses this opportunity to thank Ms. Zora Bogicevic from the Ministry of Education of Montenegro and EQF AG member, for having shared the Montenegrin experience, having provided advices during the referencing process, has read the draft Report and has provided comments and recommendations for its' improvement.

**Criterion 8 (EQF)**

**The competent national body or bodies shall certify the referencing of the national qualifications framework or system with the EQF. One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies, including the National Coordination Point, and shall address separately each of the criteria.**

The referencing of the Macedonian Qualifications Framework with the EQF was presented and agreed with the National Board for the Macedonian Qualifications Framework. The Referencing Report is undergoing a Governmental procedure for adoption.

The Report is published on the official site of the Macedonian Qualifications Framework <http://www.mrk.mk>.

**Criterion 9 (EQF)**

**The official EQF platform shall maintain a public listing of member states that have confirmed that they have completed the referencing process, including links to completed referencing reports.**

Following the approval of the Referencing Report by the EQF AG, the Ministry of Education and Science will request the European Commission to include it on the official EQF platform.

**Criterion 10 (EQF)**

**Following the referencing process, and in line with the timelines set in the Recommendation, all new qualification certificates, diplomas and Europass documents issued by the competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate European Qualifications Framework level.**

Following the referencing process, all new qualification certificates, diplomas and Europass documents issued by competent bodies will contain a clear reference to the NQF and the EQF level. In order to implement the requirements of Criterion 10 for all levels of education, legislative amendments, including the rulebooks and the formats of the respective documents will take place. For the higher education sector this requirement has been covered with the format of the Diploma Supplement which in use.

Example of Diploma Supplement issued by the University "Goce Delcev" - Shtip is provided on the website: [http://mrk.mk/wp-content/uploads/2015/07/Diploma\\_supplement\\_UGD.pdf](http://mrk.mk/wp-content/uploads/2015/07/Diploma_supplement_UGD.pdf).

## 6 RESPONSE TO THE QF-EHEA SELF-CERTIFICATION CRITERIA AND PROCEDURES

In 2008 the Ministry of Education and Science endorsed two international projects in the field of qualifications frameworks:

- TEMPUS Structural measure on NQF – Designing and Implementing of the NQF<sup>30</sup>;
- EU CARDS Project – Technical assistance to the Ministry of Education and Science on Lifelong Learning.

The working group of the TEMPUS Structural measure on NQF – Designing and Implementing of NQF (TEMPUS ETF-SM-00050-2008 Project, 2009-2012 <http://www.dinaquf.uklo.edu.mk/>), was composed of representatives of:

- Ministry of Education of Science
- Ministry of Labour and Social Policy
- “Saint Clement of Ohrid” University in Bitola
- “Ss. Cyril and Methodius” University in Skopje
- South East European University in Tetovo
- “Goce Delchev” University in Shtip
- State University of Tetovo
- Linköping University, Sweden (Mr. Janerik Lundquist)
- Ghent University, Belgium (Mr. Luc François)
- Fachhochschule Osnabrück, University of Applied Sciences (Mr. Volker Gehmlich).

The main responsibilities of the working group were:

- Development of a model of NQF and making the Macedonian higher education harmonized with the QF-EHEA
- Design and development of a model of National Qualifications Framework for the HE, verified by regulation at ministerial level
- Practical implementation of the NQF through accepted set of levels, in which all learning achievements may be measured and related to each other in a coherent way and which defines the relationship between all education and training awards in the HE in the Republic of Macedonia.

During the preparatory phase and later in the implementation phase, the working group had wide consultations and collaboration with representatives of:

- Higher education institutions
- Student organizations
- Higher Education Accreditation and Evaluation Boards
- Local communities authorities
- Employers
- Chambers
- Trade Union
- Employment Service Agency.

As result of the public debates, comments received from the letters of the stakeholders, the comments from the participants invited at the workshops and the questionnaires, the Manual - Practical Advices for Writing Learning Outcomes and the National Framework for Higher Education Qualifications of the Republic of Macedonia – Guide were prepared. In May 2010 both documents were adopted by the Ministry of Education and Science. NQF HE was also presented to the Socio-Economic Council - the highest policy consulting body of the Government, consisted of highest representatives of the Government, employers and the Trade Union, for reviewing and comments.

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<sup>30</sup> [www.dinaquf.uklo.edu.mk](http://www.dinaquf.uklo.edu.mk/)

In November 2010, the Decree on the National Framework for Higher Education Qualifications was adopted by the Government, and published ("Official Gazette" No.154, 30/11/2010).

After entering into force of the Decree, respective amendments to the Higher Education Law were made and all study programmes were restructured and re-accredited as learning outcomes based study programmes.

**Criterion 1 (QF-EHEA)**  
**The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education.**

Fulfilment of this Criterion has been addressed within the explanation of the EQF Criterion 1.

**Criterion 2 (QF-EHEA)**  
**There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the European framework.**

Besides the explanation provided for the Criterion 2 (EQF) we have decided to also present the specificities of the level descriptors of the qualifications in the NQF HE and the Dublin descriptors under this chapter. The development of this Framework started in 2008 and entered into force in 2010. With Macedonian Qualifications Framework – Baselines and the Law for NQF the descriptors for the respective levels were adjusted without changing the text by restructuring them from five into the three domains of the Macedonian Qualifications Framework. Therefore they are fully identical.

The correspondence between the NQF HE and the Dublin Descriptors was examined and confirmed by nationals and experts from Sweden, Germany and Belgium included as partners within the Tempus project<sup>31</sup>. In the Report on the implementation of the EHEA in 2015<sup>32</sup>, under the indicator 3 "Implementation of national qualifications frameworks, 2013/14" the Republic of Macedonia is ranked in steps 7-9 (defined as qualifications have been included in the NQF, study programmes have been re-designed on the basis of learning outcomes and the implementation of NQF has started with agreement on the roles and responsibilities of HEI, QA and other bodies).

Comparison between the NQF HE and QF-EHEA cycles is provided in Table 41.

**Table 41: NQF HE and QF-EHEA cycles comparison**

NQF HE	V		VI		VII		VIII
	VA	VIB	VIA	VIIB	VIIA		
QF-EHEA cycles	Short cycle		First cycle		Second cycle		Third cycle

The coherence between the NQF HE descriptors and the Dublin descriptors is presented in Table 42.

<sup>31</sup>TEMPUS ETF-SM-00050-2008, (2009-2012)

<sup>32</sup>European Commission/EACEA/Eurydice, 2015. The European Higher Education Area in 2015: Bologna Process Implementation Report, Page 67.

**Table 42: Schematic Comparison between the NQF HE and the Dublin Descriptors**

NQF HE descriptors		Dublin Descriptors	
5	<p>Demonstrates <b>knowledge and understanding</b> in the <b>field of study or work</b> that is built upon general secondary education supported with professional literature.</p> <p>Possesses specialist theoretical and <b>professional knowledge and understanding of certain basic theories from the narrow scientific and professional area.</b></p> <p>Possesses limited knowledge of contemporary developments in the area of work or study which provides support to the field of work or profession, possibility <b>for personal development and a basis for further studies for completion of the first cycle of higher education.</b></p> <p>Applies skills that are based on <b>understanding of theoretical principles and their application in solving problems</b> and in the <b>execution of complex and specific tasks in the field of work and study,</b> with selection and use of relevant data, methods, procedures, techniques, instruments, devices, tools and materials.</p> <p>Possesses skills to study in order <b>to be able to undertake further studies with a certain degree of independence.</b></p> <p>Possesses ability <b>to communicate and discuss with target groups</b> from the narrow profession or the area of study, <b>with colleagues, superiors and clients.</b></p> <p>Has a higher level of personal and professional responsibility, and ability to evaluate the own work and the work of the group based upon criteria in the field of work.</p> <p>Capability to transfer knowledge to others, to organize, communicate and to control the own work and the work of others.</p> <p>Takes responsibility for the own results, but also shares responsibility for the activities, results and the work of others in the group.</p>	Short cycle (within the first cycle)	<p>Have <b>demonstrated knowledge and understanding in a field of study</b> that builds upon general secondary education and is typically at a level supported by advanced textbooks; <b>such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle;</b></p> <p>Can apply their knowledge and <b>understanding in occupational contexts;</b></p> <p>Have the ability <b>to identify and use data to formulate responses to well-defined concrete and abstract problems;</b></p> <p><b>Can communicate about their understanding, skills and activities, with peers, supervisors and clients;</b></p> <p><b>- have the learning skills to undertake further studies with some autonomy.</b></p>
6	<p>Demonstrates <b>knowledge and understanding in the scientific field of study</b> that builds upon previous education and training, including knowledge in the domain of theoretical, practical, conceptual, comparative and critical perspectives in the scientific field according to the relevant methodology;</p> <p>Understanding of a certain area and knowledge of current issues in relation to <b>scientific research and new sources of knowledge.</b></p> <p>Demonstrates knowledge and understanding of different theories and methodologies necessary for the wider area of research.</p> <p>Is able to apply knowledge and understanding in a manner that shows a <b>professional approach to the work or the profession;</b></p>	First cycle	<p>- have <b>demonstrated knowledge and understanding in a field of study</b> that builds upon and their general secondary education, and is typically at a level that, whilst supported by <b>advanced textbooks,</b> includes some aspects that will be informed by <b>knowledge of the forefront of their field of study;</b></p> <p>- can apply their knowledge and understanding in a manner that indicates a <b>professional approach to their work or vocation,</b> and have competences typically demonstrated through <b>devising and sustaining arguments and solving problems</b> within their field of study;</p> <p>- have the ability to <b>gather and interpret relevant data</b> (usually within their field of study) to inform judgements that <b>include reflection on relevant social, scientific or ethical issues;</b></p> <p>- can <b>communicate information, ideas, problems and solutions to both</b></p>

	<p>Demonstrates <u>ability to identify, analyse and solve problems</u>;</p> <p>Capability to find and support arguments within the profession or the field of study;</p> <p>Capability to <u>collect, analyse, evaluate and present information</u>, ideas and concepts from relevant data;</p> <p>Capability to assess theoretical and practical issues, provide explanations for the reasons and to select an appropriate solution;</p> <p>Takes initiative to identify the requirements for acquiring <u>further knowledge and study with a high degree of independence</u>;</p> <p>Capability to <u>communicate and discuss information, ideas, problems and solutions, when the decision criteria and the scope of the task have been clearly defined, both with (professional?) and the non-expert public</u>.</p> <p>Takes responsibility for the own results and shared responsibility for the collective results;</p> <p>Capability for independent participation, with a professional approach, in specific scientific and interdisciplinary discussions.</p> <p>Makes relevant judgement by <u>taking into consideration the personal, social, scientific and ethical aspects</u>.</p>		<p><u>specialist and non-specialist audiences</u>;</p> <p>- have developed those learning skills that are necessary for them to continue to undertake <u>further study with a high degree of autonomy</u>.</p>
7	<p>Demonstrates <u>knowledge and understanding of the scientific field of study that builds upon the first cycle</u>, by applying methodologies appropriate for resolving complex problems, both in a systematic and in creative manner, which provides the basis or the <u>possibility for originality in the development and/or application of autonomous ideas</u> in the context of the research;</p> <p>Presents a high level of professional competence in one or in several specific scientific fields;</p> <p>Possesses knowledge from one or more subject areas, which in the given scientific fields are based on the most renowned international research in that scientific field, as well as <u>capability to connect wider and deeper knowledge in related professions or fields of science</u>.</p> <p>Capability for critical, independent and creative problem-solving with a certain degree of originality <u>in new or unknown environments and in multi-disciplinary contexts</u>, related to the field of study;</p> <p>Capability to <u>synthesize and integrate the knowledge and to handle complex issues</u>, in a systematic and creative manner;</p> <p>Capability to evaluate and select scientific theories, methodologies, tools and general skills from the subject areas, and to <u>put forward new analyses and solutions on scientific</u></p>	Second cycle	<p>- have <u>demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with Bachelor's level</u>, and that provides a basis or <u>opportunity for originality in developing and/or applying ideas</u>, often within a research3 context;</p> <p>-can apply their knowledge and understanding, and <u>problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts</u> related to their field of study;</p> <p>- have the ability to <u>integrate knowledge and handle complexity</u>, and <u>formulate judgements</u> with incomplete or limited information, but that include <u>reflecting on social and ethical responsibilities</u> linked to the application of their knowledge and judgements;</p> <p>- can communicate their conclusions, and the knowledge and <u>rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously</u>;</p> <p>- have the learning skills to allow them to <u>continue to study in a manner that maybe largely self-directed or autonomous</u>.</p>

	<p><u>basis;</u></p> <p><b><u>Capability to recognize the personal need for further knowledge and capability for independent and autonomous actions</u></b> when acquiring new <u>knowledge and skills in the social framework;</u></p> <p>Capability to exchange conclusions and proposals by clearly and unambiguously arguing and <u>rationally underpinning the stance, both with experts and non-experts.</u></p> <p>Demonstrates significant responsibility for the own and the joint results, for leading and initiating activities;</p> <p>Capability for solid evaluation, even in the case of incomplete and limited information, which includes the personal, social and ethical responsibilities in the application of the acquired knowledge and evaluation thereof;</p> <p>Capability for taking responsibility for further professional development and education, both for personal and for the group with which cooperates.</p>		
8	<p>Demonstrates <u>a systematic understanding of the field of research and perfect knowledge of research methods and skills</u> within the respective field in accordance with the <u>highest international standards;</u></p> <p>Possesses knowledge gained with <u>own research</u> or work, thus significantly contributing to the professional and scientific field of research, but also in the related fields.</p> <p>Demonstrates ability to <u>interpret, design, apply and adapt the essential subject of the research with scientific integrity;</u></p> <p>Uses the knowledge as a basis for <u>original ideas</u> and research that exceed the current boundaries of knowledge, developing new knowledge, valued on the level of national and international peer-reviewed publications;</p> <p>Ability for <u>critical analysis, evaluation and synthesis of new and complex ideas, necessary for solving complex problems</u> in the field of research;</p> <p>Ability for independent initiation and participation in national and international research networks and events with scientific integrity;</p> <p>Ability for independent initiation of research and development projects, through which new knowledge will be generated, as well as skills for development in the field of research;</p> <p>Expected to be capable of <u>self-promotion in academic and professional context and in the technological, social or cultural development in a knowledge-based society;</u></p> <p>Capable for <u>communication with the colleagues, the wider academic community and with the society as a whole</u> within the field of expertise.</p> <p>Takes maximum responsibility for the results of the own work, but also for the work of the others in the group;</p> <p>Takes responsibility for managing complex processes, while, in the same time, ensuring the professional development of the individuals and the group as a whole.</p>	Third cycle	<ul style="list-style-type: none"> <li>- have demonstrated a <u>systematic understanding of a field of study and mastery of the skills and methods</u> of research associated with that field;</li> <li>- have demonstrated the ability <u>to conceive, design, implement and adapt a substantial process of research with scholarly integrity;</u></li> <li>- have made a contribution through <u>original research</u> that <u>extends the frontier of knowledge</u> by developing a substantial body of work, some of which merits <u>national or international refereed publication;</u></li> <li>- are capable of <u>critical analysis, evaluation and synthesis of new and complex ideas;</u></li> <li>- can <u>communicate with their peers, the larger scholarly community and with society in general</u> about their areas of expertise;</li> <li>- can be expected to be <u>able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society;</u></li> </ul>

In summary, for Criterion 2 it can be concluded that there is a clear and verifiable compatibility between the descriptors of the NQF HE and the QF-EHEA.

### Criterion 3 (QF-EHEA)

**The national framework and its qualifications are demonstrably based on learning outcomes, and the qualifications are linked to ECTS or ECTS compatible credits.**

The fulfilment of this Criterion is also explained under the Criterion 3 (EQF). Normally, in one academic year students can gain 60 ECTS credits. The number of ECTS credits allocated for different cycles is presented in the following table:

**Table 43: Allocation of ECTS credits for different cycles**

NQF HE	V		VI		VII		VIII
	VA	VIB	VIA	VIIB	VIIA		
QF-EHEA cycles	Short cycle		First cycle		Second cycle		Third cycle
ECTS credits	60-120		180	240	60	120	≥180

On evidence on the stage of implementation of ECTS system 2013/14 (indicator No. 4) in the Bologna Process Implementation Report “European Higher Education Area in 2015”, the Republic of Macedonia is under light green (ECTS credits are allocated to more than 75% of higher education programmes; enabling credit transfer system and accumulation and ECTS credits are demonstrably linked with learning outcomes, Page 69.)<sup>33</sup>.

Following the adoption of the Decree on NQF HE, as part of the implementation of NQF HE, all study programmes were re-accredited by the HEAEB as learning outcomes based in the course of 2011. For that purpose HEAEB adopted new rulebooks and templates.

### Criterion 4 (QF-EHEA)

**The procedures for inclusion of qualifications in the national framework are transparent.**

The fulfilment of this Criterion is also explained under the Criterion 4 (EQF). On page 67 of the Bologna Process Implementation Report “European Higher Education Area in 2015” under indicator No. 3, the Republic of Macedonia is ranked in the steps 7-9, whereby 9 is defined as “qualifications have been included in the NQF”<sup>34</sup>. Under the indicator 3 of the same Report, “Implementation of national qualifications frameworks, 2013/14”, the Republic of Macedonia is ranked in steps 7-9 (defined as: qualifications have been included in the NQF, study programmes have been re-designed on the basis of learning outcomes and the implementation of NQF has started with agreement on the roles and responsibilities of HEI, QA and other bodies).

According to Article 13 of the Decree for the National Framework for Higher Education Qualifications the qualifications awarded prior to the implementation of Bologna Process requirements have been acknowledged according the table presented below:

**Table 44: Comparison between degrees of higher education before and after the NQF HE**

Level in the National Framework for Higher Education Qualifications in RM	V		VI		VII		VIII
	VA	VIA	VIB	VIIA	VIIIB		
Former degrees	VI	VII/1		VII/2		VIII	

<sup>33</sup> Ibid.

<sup>34</sup> Ibid.

**Criterion 5 (QF-EHEA)**

**The national quality assurance system for higher education refers to the national framework of qualifications and is consistent with the Berlin Communiqué and any subsequent communiqués agreed by ministers in the Bologna Process**

The fulfilment of this criterion is described under the Criterion 5 (EQF). In the Bologna Process Implementation Report “European Higher Education Area in 2015”<sup>35</sup> a number of indicators on the stage of development of the quality assurance systems 2013/2014 are relevant. Under the indicator No. 7 of this Report, the Republic of Macedonia is ranked among the countries with a quality assurance system which is in operation nationwide. The QA system has not been evaluated against the ESG in the EHEA. The QA system applies to all institutions and/or programmes and covers teaching, learning, student support service and internal quality assurance/management<sup>36</sup>. The indicator No. 8 on the level of student participation in external QA system, has ranked the Republic of Macedonia in the highest category (student participate at all levels of QA reviews)<sup>37</sup>.

**Criterion 6 (QF-EHEA)**

**The national framework, and any alignment with the European framework, is referenced in all Diploma Supplements.**

In higher education, HE institutions are obliged to issue Diploma Supplement attached to each diploma. The Supplement fully complies with the relevant Council of Europe and UNESCO format. In the indicator No. 5 of the Bologna Process Implementation Report “European Higher Education Area in 2015”, the country is ranked among the countries in which the Diploma Supplement is issued to some graduates or in some programmes free of charge.

**Criterion 7 (QF-EHEA)**

**The responsibilities of the domestic parties to the national framework are clearly determined and published.**

The fulfilment of this Criterion is explained in the Criterion 1 (EQF). The body responsible for the NQF HE is within the Ministry of Education and Science.

**Procedure 1 (QF-EHEA)**

**The competent national body/bodies shall self-certify the compatibility of the national framework with the European framework.**

Procedure 1 has been explained under the Criterion 8 (EQF). Additionally, copies of the letters of endorsement for the TEMPUS project<sup>38</sup> issued by the Ministry of Education and Science and signed by the Minister of Education and Science is provided in Annex 5 of this Report.

**Procedure 2 (QF-EHEA)**

**The self-certification process shall include the stated agreement of the quality assurance bodies in the country in question, as recognised through the Bologna Process.**

Procedure 2 has been explained under the Criterion 6 (EQF).

**Procedure 3 (QF-EHEA)**

**The self-certification process shall involve international experts.**

The involvement of international experts has been described under Criterion 7 (EQF).

<sup>35</sup> Page 69.

<sup>36</sup> Page 98.

<sup>37</sup> Page 101.

<sup>38</sup> TEMPUS ETF-SM-00050-2008, (2009-2012)



**Procedure 4 (QF-EHEA)**

**The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out.**

The response to this Procedure has been described under Criterion 9 (EQF). In addition, the Self-Certification Report will be published on the EHEA website.

**Procedure 5 (QF-EHEA)**

**The ENIC and NARIC networks shall maintain a public listing of States that have confirmed that they have completed the self-certification process.**

The response to this Procedure been described under Criterion 9 (EQF). In addition, the Self-Certification Report will be published on the ENIC/NARIC website.

**Procedure 6 (QF-EHEA)**

**The completion of the self-certification process shall be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.**

The response to the Procedure has been described in Criterion 10 (EQF). Example of Diploma Supplement is provided on the website <http://mrk.mk/wp-content/uploads/2015/07/Diploma-Supplement-IBU-SK.pdf>.

## 7 SYSTEM FOR VALIDATION OF NON-FORMAL AND INFORMAL LEARNING (VNFI)

### ○ General description

In 2012 the Centre for Adult Education started process of accreditation of programmes for non-formal adult education. It is regulated by the Law on Adult Education and bylaws deriving from the Law. Aim of the accreditation is establishing a non-formal adult education system that will enable rising the quality in non-formal education and will contribute to satisfying needs of the labour market through providing competences demanded in a short period.

To-date the Centre for Adult Education has completed verification of 159 non-formal training programmes, of which 144 lead to a qualification, and 15 are focused on development of skills.

In the Concept Paper on Non-formal Education and Informal Learning for Adults high priority is placed on the introduction of a system for VNFIL, providing adults with a means of proving their achievements to employers as well as enabling them to transfer and progress within education and training. Under priority objective 3, the Concept paper foresees the development and implementation of a system for VNFIL by 2018<sup>39</sup>. Targeted public information campaign during the process will be the key for successful development and implementation of a system for VNFIL.

The Centre for Adult Education continues the cooperation with ETF in 2015-2016, focusing on this priority area. On 5<sup>th</sup> and 6<sup>th</sup> November 2015 the workshop with representatives from relevant stakeholders and ETF experts took place in Skopje. Topics discussed: issues and problems that exist or are emerging, justifying the establishment of a VNFIL mechanism, defining possible target groups of VNFIL, roles of different stakeholders involved in VNFIL, approaches and governance connected with quality assurance of the process. Also focus of the workshop was to spot existing and needed resources and human, technical, methodological and financial capacities of the country and expected social, economic and individual benefits and outcomes. Visit of the external ETF expert followed with the objective to map the current situation in the country. Separate meetings with representatives of ministries and governmental institutions responsible for education, training and employment, universities, providers, employers and NGOs took place.

Different stakeholders report growing number of demand for assessment of professional-technical skills: workers, returning migrants, and other citizens searching possibilities to reintegrate into the labour market and to enhance their CVs for employment. Demand for skills assessment is higher for construction, services (hotels and restaurants), domestic services, as well as in agriculture.

### ○ Legal framework

The current policy and legal framework related with non-formal education and VET includes provisions on the development of VNFIL. They are formulated in different laws, strategies, and in the Concept Paper on Non-formal Adult Education and Informal Learning in the Republic of Macedonia. The main legal<sup>40</sup> and strategic documents containing references to VNFIL are presented in Table 45.

**Table 45: Overview of the legal and strategic documents containing references to VNFIL**

Document	Approval / adoption year	Description
Law on Adult Education	2008	The Law arranges the organization, structure, financing and management of the adult education system as a part of a unified educational system of the Republic of Macedonia.  Article 23 of the Law states that adults can demonstrate the knowledge, skills and abilities they have acquired, regardless of the way this acquisition

<sup>39</sup> The deadline given in the Council Recommendation of 2012 on VNFIL for all involved countries.

<sup>40</sup> Information on the numbers and the dates of publishing the Official Gazettes of the Republic of Macedonia with the laws and other relevant documents on adult education is provided in the sub-chapter 2.3 Adult education.

		<p>is done, by passing exams.</p> <p>The exams are organized and delivered by the adult education provider which delivers the programme for gaining knowledge, skills and abilities, except the State matura exam, School matura exam and the Final exam in the secondary education.</p>
<b>Law on NQF</b>	2013	Article 3 of the Law on NQF states that one of principles of the NQF is building a system for validation of non-formal and informal learning. Among the goals of the NQF, the Law stipulates: "To indicate the transfer and progression (horizontally and vertically) through and within all types of education and training (formal, non-formal and informal)".
<b>Adult Education Strategy</b>	2010	One of the activities for realization of the strategic goals of the Strategy is Development of system for recognition of knowledge, skills and competences.
<b>Strategy for Development of Vocational Education and Training in a Lifelong Learning Context 2013-2020</b>	2013	<p>The VET strategy is structured in 4 key priorities, in which development of VNFIL finds a visible place.</p> <ol style="list-style-type: none"> <li>1. Under the first priority (VET in the function of strengthening social cohesion and social inclusion): objective A7 focuses on "Establishing a system for VNFIL". Key milestones: by 2015 (feasibility and options of a VNFIL system); by 2018 (key mechanisms and procedures in place) and by 2020 (generalization of implementation).</li> <li>2. Under the second priority (Attractive VET), the Strategy emphasizes the importance of VNFIL, in particular in objective B2 – "Building diversified and flexible pathways for learning and professional guidance".</li> </ol>
<b>National Programme for Development of Education in the Republic of Macedonia 2005 – 2015</b>	2005	A special chapter of this Programme is titled "Strategy for Adult Education in the Republic of Macedonia in the Context of Lifelong Learning" with 6 recommendations. One of the recommendations is Development of a system for recognition of prior learning.
<b>Concept Paper on Primary Education for Adults</b>	2015	In the Guidelines on implementation of the Concept paper, one of the proposed actions is to Develop a system of mechanisms and tools for verification (assessment) of previously acquired knowledge.
<b>Concept Paper on Non-formal Education and Informal Learning for Adults</b>	2015	<p>VNFIL is mentioned throughout the Concept paper. The roadmap supporting implementation of the Concept paper includes an action aimed at developing and implementing a system for VNFIL by the deadline of 2018, under the priority objective: "Ensure that there is open and equal access to non-formal adult education for all".</p> <p>Acknowledging the importance of this objective, and the need to take effective measures in line with the VNFIL Recommendation (2012), the Centre for Adult Education continues cooperation with the European Training Foundation on developing a roadmap for implementing VNFIL, and on the procedural and methodological aspects of VNFIL. This VNFIL Roadmap is currently in elaboration.</p>

Further development and amendment of the legislation and bylaws will follow with the objective to support generalization of practices of VNFIL.

#### o Governance

The current governance structure for adult education (described in details in the sub-chapter 2.3 Adult education) will continue the work on introduction of VNFL. There is an enabling legal basiss, which paves the way to defining the procedural and methodological aspects, as well as the governance and roles of different stakeholders.

The Concept Paper on Non-formal Education and Informal Learning for Adults proposes a vision that stresses the need for a learner-centred approach, empowering individuals to help them realise their aspirations and ambitions. Realisation of the vision requires a partnership approach between the MoES, CAE, ESA and other State institutions and key stakeholders including social partners. Efforts should be put for introduction of incentives to stimulate investment in learning and development, coupled with a range of support measures to providers to help them respond to challenges and improve the quality of adult education provision.

## o Quality assurance

Since 2012 Adult Education Center conducts the process of verification of programmes for non-formal adult education. The process is regulated by the Law on Adult Education and bylaws deriving from the Law. It is quality assured by the application of a coherent model and criteria. Aim of the verification is establishing a non-formal adult education system that will enable rising the quality in non-formal education and will contribute to satisfying needs of the labour market by developing skills and competences on demand, in an agile and efficient manner. This includes building up on existing skills (from experience / life) and offering flexible training programmes matching needs and profiles

In the Concept Paper on Non-formal Education and Informal Learning for Adults high priority is placed on the introduction of a system for VNFIL, providing adults with a means of proving their achievements to prospective employers as well as enabling them to transfer and progress within education and training. Important part of the VNFL system should be an improved system for information and guidance. Strong emphasis on quality is a must for a trustworthy system for VNFL.

### Enablers and cases of good practices

The verified non-formal programmes can be considered as enablers for practical implementation of VNFIL in the country:

- They are all consistently described in learning outcomes, which makes them useful in assessing knowledge and understanding, skills and competence acquired in diverse learning contexts
- They are all linked with relevant occupational standards most of which have been co-developed with the industry / sectors – which ascertains a degree of relevance for the labour market
- The awarded qualification is officially recognized and has market currency.

The workshop and the visits to relevant stakeholders (both activities took place in November 2015) have helped to identify good practice examples which could be used in the process of development a national VNFIL system. Two examples of good practice are presented below:

- **Build-up skills** project - the Republic of Macedonia successfully participates in this EU-wide project, aimed at enhancing energy efficiency in construction. Development of relevant skills to generalize energy efficiency practices in the sector is a top priority, which is addressed through a combination of validation and additional training on specific elements. The project is financed from Horizon 2020, and the country is represented by the Faculty of Electrical Engineering of the University “Ss. Cyril and Methodius” in Skopje.
- **Training courses in farming** - a number of investment projects in farming require a professional certificate, and many applicants search possibilities to go through a validation process, allowing them to shorten periods of training and to focus strictly on individual skills gaps. Upon conclusion of the Government, amendments of the Law on Agriculture have been made, according to which this training is organized under proper programmes supervised by the Ministry of Agriculture, the Ministry of Education and Science and the Centre for Adult Education. The training providers (e.g. VET schools) apply practical and written tests and issue a certificate. The certificate makes explicit for the individual the skills that, prior to the successful passing the test, have been implicit.

## 8 CHALLENGES AND NEXT STEPS

Since the adoption of the “Macedonian Qualifications Framework – Baselines” and the Law on NQF (2013) the Republic of Macedonia has focused on identifying the challenges for the further development and the implementation of the Framework. During the period that followed, the intensive national efforts have been supported by international cooperation and expertise in the framework of projects funded by different donors and loans. This resulted in the Roadmap for the Further Development and Implementation of the Macedonian Qualifications Framework. It contains specially designed working packages for overcoming the key challenges:

### **WP-1: Conceptual framework**

- Group of activities 1.1: Review and updates of concepts
- Group of activities 1.2: Publication of the glossary and acronyms
- Group of activities 1.3: Dissemination.

### **WP-2: Governing the MQF and stakeholder involvement**

- Group of activities 2.1: Analysis of stakeholders' involvement
- Group of activities 2.2: Consideration of recommendations
- Group of activities 2.3: Institutional setup of the MQF
- Group of activities 2.4: Development of a publication on the MQF and dissemination
- Group of activities 2.5: Capacity building of various actors according to their role in the qualifications system
- Group of activities 2.6: Agreement for the use of a protocol setting out roles and responsibilities of various actors and how they interact.

### **WP 3: Learning outcomes implementation**

- Group of activities 3.1: Analysis of learning outcomes implementation
- Group of activities 3.2: Development of guidelines on learning outcomes and dissemination
- Group of activities 3.3: Capacity building of various actors according to their role
- Group of activities 3.4: Implementation of learning outcomes (OS, QS, curricula, etc.), including credit systems.

### **WP 4: Development and implementation of validation of NF and IF learning**

- Group of activities 4.1: Design of the validation of the NF and IF learning (VNFIL) system and procedures
- Group of activities 4.2: Development of guidelines on VNFIL and dissemination
- Group of activities 4.3: Capacity building of various actors according to their role
- Group of activities 4.4: Implementation of VNFIL.

### **WP 5: Inclusion of qualifications into the MQF**

- Group of activities 5.1: Description of the system for inclusion of qualifications in the MQF
- Group of activities 5.2: Development of the MQF register (standards, IT infrastructure)
- Group of activities 5.3: Development of guidelines on inclusion of qualifications and dissemination
- Group of activities 5.4: Capacity building of various actors according to their role
- Group of activities 5.5: Development of new qualifications
- Group of activities 5.6: Revision of existing qualifications
- Group of activities 5.7: Inclusion of qualifications into the MQF on the basis of standards.

### **WP 6: Quality assurance**

- Group of activities 6.1: Analysis of the QA system(s) in MK and plans for improvements
- Group of activities 6.2: Alignment of QA with EQAVET and ESG

- Group of activities 6.3: Development of guidelines on QA and dissemination
- Group of activities 6.4: Capacity building of various actors according to their role
- Group of activities 6.5: Implementation of the Quality assurance system(s), including validation of qualifications.

#### **WP 7: Legislation**

- Group of activities 7.1: Analysis of the current legislation, needs for improvement and plans for harmonisation
- Group of activities 7.2: Consideration of recommendations
- Group of activities 7.3: Updating the legislation
- Group of activities 7.4: Preparation of an attractive publication and dissemination.

#### **WP 8: Quality assurance of the Roadmap implementation**

- Group of activities 8.1: Coordination of the MQF implementation
- Group of activities 8.2: Communication to relevant actors, dissemination and promotion of the MQF
- Group of activities 8.3: Monitoring of the implementation of the Roadmap
- Group of activities 8.4: Analysis of the implementation of the Roadmap and updates when justified
- Group of activities 8.5: Transfer of all relevant results to the legislation (WP-6).

The complete Roadmap is presented on the web page [\[REDACTED\]](#).

## 9 GLOSSARY

**Assessment** - a process of evaluation of knowledge, skills and competence according to predefined criteria and learning outcomes, which includes written, oral and practical tests, exams, projects and a portfolio.

**Accumulation** – the process of collecting credits awarded for achieving the learning outcomes of educational components or other learning activities.

**Allocation of Credit** - the process of assigning a number of credits to qualifications/programmes or to other educational components.

**Assessment** - the total range of methods (written, oral and practical tests/examinations, projects and portfolios) used to evaluate learners' achievement of expected learning outcomes.

**Assessment Criteria** - descriptions of what the learner is expected to do, in order to demonstrate that a learning outcome has been achieved.

**Benchmark** – a standard used for comparison.

**Competence** - a set of acquired knowledge and skills, that is, proven capability to use the knowledge and skills in situations of learning or work. Competence applies to responsibility and autonomy.

**Credit** - a quantitative measure for expressing the volume of learning, based on the volume of work that is required for the participants, so that they can achieve the expected results of the learning process at a given level.

**Credit transfer** - process by which the value of the results of learning achieved in a system or institution can be determined in another system or institution. In Europe there are two main credit systems in use: the European Credit Transfer System (ECTS) and the European Credit Transfer System for Vocational Education and Training (ECVET).

**Credit system** - a system of accumulation and transfer of credits based on the transparency of learning results and learning processes.

**Curriculum** - a broader concept than the terms national curriculum, subject curriculum and study programme. This concept includes: educational outputs/learning outputs as a result of implementation of subject curricula (or groups) of related modules/subjects/one subject, as well as description of methods of ensuring that the student will acquire envisaged competence.

**Descriptions of qualifications** - measurable indicators of learning outcomes relating to the acquired knowledge and understanding, skills and competence.

**Dublin descriptors** - general statements on the typical expectations from the achievements and capabilities related to the degrees awarded at the end of a single Bologna cycle.

**Educational qualification** – qualification obtained by completing publicly adopted educational programme within the formal education system, with necessary qualification volume, and documented with a diploma/certificate. It enables continuation of education, employment and personal development.

**European Qualifications Framework** - a common reference framework which links the qualifications systems in different countries and is an instrument for the recognition and understanding of qualifications.

**Formal learning** - an activity provided by an educational institution or a training provider, which is conducted in accordance with certain approved programmes, in order to improve knowledge, skills and competence, wherefore a public document shall be issued.

**Institution** – a facility, organization or another body that is accredited to educate, train and assess participants who acquire the qualifications. The institutions offer formal and non-formal programmes that lead to qualifications and issue public documents for them.

**Informal learning** - learning resulting from everyday life activities related to work, family or leisure time. It is not structured in terms of learning objectives, learning time or learning support.

**Key competences** - a set of competences on a certain level, required to satisfy the personal, social and professional needs of the person in the process of lifelong learning. There are eight key competences: communication in one's mother tongue, communication in a foreign language, mathematical, technical and scientific competence, civic awareness, information technology, entrepreneurship, learning how to learn and cultural expression.

**Knowledge and understanding** – a set of acquired and systematised information, that is, a set of theoretical and factual information.

**Learning outcomes** - statements about what the participant knows, understands and is able to do, as a result of the formal, non-formal or the informal learning process. Learning outcomes are defined in terms of knowledge and understanding, skills and competence (independence and accountability).

**Levels within the framework** - present a series of successive steps of learning, expressed in terms of a series of general results, structured according to a set of descriptors.

**Lifelong learning** – includes activities of formal, non-formal and informal learning throughout the whole life, aimed at improving knowledge, skills and competence for personal, professional and social needs.

**Macedonian Qualifications Framework** – an obligatory national standard that regulates the acquisition and use of qualifications in the Republic of Macedonia and an instrument for establishing a system of qualifications acquired in the country that provides the basis for transparency, access, transfer, acquisition and quality of qualifications.

**Module** - an independent unit of learning that is a complete or part of an educational programme.

**National Qualifications Framework (NQF)** - an instrument for establishing a system of qualifications acquired in a particular country, which provides a basis for gaining qualifications, transfer and quality of qualifications.

**Non-formal learning** - organised learning activities in order to improve knowledge, skills and competence for personal, social or professional needs.

**Programmes** - public documents which define educational outputs (knowledge, skills and competence) for a particular subject or area that learners acquire and develop in the educational process and prove at examinations. Educational outputs (knowledge, skills and competence) in the programmes are based on the subject curriculum objectives for the corresponding subjects or areas.

**Skills** - constitute the ability to apply knowledge, perform tasks and solve problems. The skills are described as cognitive (involving the use of logical, creative and intuitive thinking) and practical (manual work and use of methods, instruments, tools and materials).

**Quality assurance** - a process or set of processes adopted at national and/or institutional level with the goal of ensuring the quality of the education process, education programmes and qualifications.

**Qualification** - a formal result of the evaluation and confirmation process that is acquired when the responsible institution certifies that an individual has achieved learning outcomes in accordance with the established standards

**Type of qualification** – main grouping of qualifications according to the purpose, type of documents issued, type of programmes and volume. In the MQF there are two types of qualifications: educational and vocational qualifications.

**Vocational qualification** – qualification obtained by completing part of publicly adopted educational programme (modules, courses, etc.), a special programme for adult education, or through validation of non-formal learning. It is documented with a certificate and enables employment and personal development.



## 10 ACRONYMS

<b>BDE</b>	Bureau for Development of Education
<b>CAE</b>	Centre for Adult Education
<b>ECTS</b>	European Credit Transfer System
<b>ECVET</b>	European Credit System for Vocational Education and Training
<b>EQAR</b>	European Quality Assurance Register for Higher Education
<b>EQAVET</b>	European Quality Assurance for VET
<b>EQF</b>	European Qualifications Framework for Lifelong Learning
<b>ENIC</b>	European Network of Information Centres
<b>ESA</b>	Employment Services Agency
<b>ETF</b>	European Training Foundation
<b>EU</b>	European Union
<b>HEAEB</b>	Higher Education Accreditation and Evaluation Board
<b>IPA</b>	Instrument for Pre-Accession Assistance
<b>ISCED</b>	International Standard Classification of Education
<b>ISCO</b>	International Standard Classification of Occupations
<b>IT</b>	information technology
<b>LO</b>	Learning outcomes
<b>MCSGE</b>	Macedonian Credit System for General Education
<b>MoES</b>	Ministry of Education and Science
<b>MLSP</b>	Ministry of Labour and Social Policy
<b>MQF</b>	Macedonian Qualifications Framework
<b>NARIC</b>	National Academic Recognition Information Centre
<b>NCP EQF</b>	National Coordination Point for the European Qualifications Framework for Lifelong Learning
<b>NEC</b>	National Examination Centre
<b>NGO</b>	non-governmental organisation
<b>NQF</b>	National Qualifications Framework
<b>NQF HE</b>	National Framework for Higher Education Qualifications
<b>OECD</b>	Organisation for Economic Cooperation and Development

<b>PIRLS</b>	Progress in International Reading Literacy Study
<b>PISA</b>	Programme for International Student Assessment
<b>QA</b>	Quality assurance
<b>SEI</b>	State Education Inspectorate
<b>SSO</b>	State Statistical Office
<b>TIMSS</b>	Trends in International Mathematics and Science Study
<b>TU</b>	Trade Union
<b>VET</b>	Vocational education and training
<b>VET Centre</b>	Vocational Education and Training Centre
<b>VNFI</b>	Validation of non-formal and informal learning

## 11 BIBLIOGRAPHY

Bologna Process (Bergen, 2005). *The European Higher Education Area – Achieving the Goals*. Communiqué of the Conference of European Ministers Responsible for Higher Education, Bergen, 19-20 May 2005. Text available at [http://www.ehea.info/Uploads/Declarations/Bergen\\_Communique1.pdf](http://www.ehea.info/Uploads/Declarations/Bergen_Communique1.pdf)

Bologna Process. *Dublin Descriptors*. Text available at [http://www.tcd.ie/teaching-learning/academic-development/assets/pdf/dublin\\_descriptors.pdf](http://www.tcd.ie/teaching-learning/academic-development/assets/pdf/dublin_descriptors.pdf)

Bureau for Development of Education (Skopje, 2007). *Concept for Nine-Year Primary Education*. Text available at [http://bro.gov.mk/docs/Koncepcija\\_po\\_javna\\_rasprava\\_so\\_izmeni\\_i\\_dopnuvanja.pdf](http://bro.gov.mk/docs/Koncepcija_po_javna_rasprava_so_izmeni_i_dopnuvanja.pdf)

Bureau for Development of Education (Skopje). *Assessment Standards*. Text available at <http://bro.gov.mk/?q=osnovno-obrazovanie-standardi>

Bureau for Development of Education (Skopje). *Criteria for Assessment of Student Achievements*. Text available at [http://bro.gov.mk/docs/kriteriumi/Kriteriumi\\_za\\_ocenuvanje.pdf](http://bro.gov.mk/docs/kriteriumi/Kriteriumi_za_ocenuvanje.pdf)

Cedefop (2015). *European guidelines for validating non-formal and informal learning*. Luxembourg: Publications Office. Cedefop reference series; No 104. <http://dx.doi.org/10.2801/669676>

Centre for Adult Education (Skopje, 2015). *Concept for Primary Education for Adults in the Republic of Macedonia*

Council (2012). *COUNCIL RECOMMENDATION of 20 December 2012 on the validation of non-formal and informal learning* (2012/C 398/01). Text available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2012:398:0001:0005:EN:PDF>

Council for Adult Education (Skopje, 2010). *Strategy on Adult Education 2010-2015, with Action plan*.

EHEA Ministerial Conference (Bucharest, 2012). *Making the Most of Our Potential – Consolidating the European Higher Education Area*. Bucharest Communiqué. Text available at <http://www.ehea.info/Uploads/%281%29/Bucharest%20Communique%202012%281%29.pdf>

EHEA Ministerial Conference (Yerevan, 14-15 May 2015). *Yerevan Communiqué*. Text available at [http://www.ehea.info/Uploads/SubmittedFiles/5\\_2015/112705.pdf](http://www.ehea.info/Uploads/SubmittedFiles/5_2015/112705.pdf)

EHEA Ministerial Conference (Yerevan, 14-15 May 2015). *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) - Revised ESG approved by the Ministerial Conference in Yerevan, on 14-15 May 2015*. Approved by the Ministerial Conference in May 2015, by European Association for Quality Assurance in Higher Education European Students' Union European University Association European Association of Institutions in Higher Education Education International BUSINESS EUROPE European Quality Assurance Register for Higher Education. Text available at [https://revisionsg.files.wordpress.com/2015/05/revised\\_esg\\_2015\\_adopted.pdf](https://revisionsg.files.wordpress.com/2015/05/revised_esg_2015_adopted.pdf)

European Commission; Cedefop; ICF International (2014). *European Inventory on validation of non-formal and informal learning 2014*. Final synthesis report. Text available at <http://libserver.cedefop.europa.eu/vetelib/2014/87244.pdf>

European Commission; EQF Advisory Group; Cedefop (2009). *Criteria and procedures for referencing national qualifications levels to the EQF*. Ares(2009)89092. Agreed by the EQF AG (18/07/2010). Text available at [https://ec.europa.eu/ploteus/sites/eac-efq/files/criteria\\_en.pdf](https://ec.europa.eu/ploteus/sites/eac-efq/files/criteria_en.pdf)

European Commission; EQF Advisory Group; Cedefop (2015) *The future of referencing*

European Commission/EACEA/Eurydice (2015). *The European Higher Education Area in 2015: Bologna Process Implementation Report*. Luxembourg: Publications Office of the European Union. Text available at [http://bologna-yerevan2015.ehea.info/files/2015%20Implementation%20report\\_20.05.2015.pdf](http://bologna-yerevan2015.ehea.info/files/2015%20Implementation%20report_20.05.2015.pdf)

European Commission (2008). *Explaining the European Qualifications Framework for Lifelong Learning*.

European Parliament and Council (2008). *Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications for Lifelong Learning*. Text available at [https://ec.europa.eu/ploteus/sites/eac-efq/files/broch\\_en.pdf](https://ec.europa.eu/ploteus/sites/eac-efq/files/broch_en.pdf)

European Training Foundation (May 2014). *Inventory and Analysis of Existing Qualifications, Study Supporting the EQF Referencing Process in the Republic of Macedonia*.

EQF project 'EQF Referencing Process – Examples and Proposals (EQF-Ref)' (May 2011). *EQF Referencing Process and Report*.

EQF Series: [https://ec.europa.eu/ploteus/documentation#documentation\\_76](https://ec.europa.eu/ploteus/documentation#documentation_76)

- EQF Note 1 Explaining the European Qualifications Framework for Lifelong Learning (brochure) – (2010)
- EQF Note 2 Added value of National Qualifications Frameworks in implementing the EQF (2010)
- EQF Note 3 Referencing National Qualifications Levels to the EQF (2011)
- EQF Note 4 Using Learning Outcomes (2011)
- EQF Note 5 Referencing National Qualifications Levels to the EQF - Update 2013 (2013)

EQF Referencing Reports *The official versions of the national referencing reports of the countries following their adoption by the EQF AG* Texts available at

[https://ec.europa.eu/ploteus/documentation#documentation\\_76](https://ec.europa.eu/ploteus/documentation#documentation_76)

ICF GHK (2013). *Evaluation of the Implementation of the European Qualifications Framework Recommendation-Final report*, Text available at

<http://www.nki-latvija.lv/content/files/DG%20EAC%20-%20Evaluation%20EQF%20-%20Final%20Report%20-%20Final%20Version.pdf>

Ministers of vocational education and training (VET), Riga 2015 Conclusions on a new set of medium – term deliverables in the field of VET for the period 2015-2020, as a result of the review of short –term deliverables defined in the 2010 Bruges Communiqué. Text available at [http://ec.europa.eu/education/policy/vocational-policy/doc/2015-riga-conclusions\\_en.pdf](http://ec.europa.eu/education/policy/vocational-policy/doc/2015-riga-conclusions_en.pdf)

Ministry of Education and Science (2004). *Documentation produced in the framework of the EU funded project “Vocational Education and Training Programme Phase 2”*. Contract number 02-0003, CARDS. Project managed by the European Agency for Reconstruction. Period of implementation 2002-2004.

Ministry of Education and Science (2009). *Documentation produced in the framework of the EU funded project “Technical assistance to the Ministry of Education and Science on Life Long Learning”*. (Contract number 06MAC01/11/102, CARDS) Period of implementation 2007-2009.

Ministry of Education and Science (2005). *National Programme for Development of Education 2005-2015, with accompanying programme documents*. Text available at

<http://e-demokratija.mk/documents/10157/29517/%D0%9D%D0%B0%D1%86%D0%B8%D0%BE%D0%BD%D0%B0%D0%BB%D0%BD%D0%B0+%D0%BF%D1%80%D0%BE%D0%B3%D1%80%D0%B0%D0%BC%D0%B0+%D0%B7%D0%B0+%D1%80%D0%B0%D0%B7%D0%B2%D0%BE%D0%B8+%D0%BD%D0%B0+%D0%BE%D0%B1%D1%80%D0%B0%D0%B7%D0%BE%D0%B2%D0%B0%D0%BD%D0%B8%D0%B5%D1%82%D0%BE+%D0%B2%D0%BE+%D0%A0.%D0%9C.+2005-2015.pdf>

Ministry of Education and Science (2013). *National Qualifications Framework – Baselines*. Text available at [http://mon.gov.mk/images/documents/nacionalna\\_ramka/Dokument\\_Makedonska\\_ramka\\_za\\_kvalifikacii\\_-\\_pojgovni\\_osnovi-eng.pdf](http://mon.gov.mk/images/documents/nacionalna_ramka/Dokument_Makedonska_ramka_za_kvalifikacii_-_pojgovni_osnovi-eng.pdf)

Ministry of Education and Science (2013). *Strategy for Vocational Education and Training in the Context of Lifelong Learning 2013-2020, With Action Plan “Better Skills for a Better Tomorrow”*. Text available at [http://www.csoo.edu.mk/images/vet%20strategy\\_mac%20-%20final.pdf](http://www.csoo.edu.mk/images/vet%20strategy_mac%20-%20final.pdf)

Ministry of Education and Science (Skopje, 2015). *Concept for graduation and final exam in secondary education lasting four years in the Republic of Macedonia*. Text available at [http://www.matura.gov.mk/data\\_files/state\\_graduate/mk/2035\\_%D0%9A%D0%9E%D0%9D%D0%A6%D0%95%D0%9F%D0%A6%D0%98%D0%88%D0%90.pdf](http://www.matura.gov.mk/data_files/state_graduate/mk/2035_%D0%9A%D0%9E%D0%9D%D0%A6%D0%95%D0%9F%D0%A6%D0%98%D0%88%D0%90.pdf)

Ministry of Education and Science and Centre for Adult Education (2015). *Concept Paper for Non-formal Adult Education and Informal Learning in the Republic of Macedonia*.

Ministry of Labour and Social Policy (Skopje, 2009). *Early Learning and Development Standards*. Text available at [www.mtsp.gov.mk/WBStorage/Files/ran\\_detski\\_razvoj.doc](http://www.mtsp.gov.mk/WBStorage/Files/ran_detski_razvoj.doc)

State Statistical office of the Republic of Macedonia (Skopje, 2014). *The System of Education in the Republic of Macedonia in Relation to the International Standard Classification of Education ISCED 2011*. Text available at <http://www.stat.gov.mk/KlasifikaciiNomenklaturi/2.8.14.01.pdf>

State Statistical office of the Republic of Macedonia (Skopje, 2008). *National Classification of Occupations (NCP 2011)*. Text available at <http://www.stat.gov.mk/KlasifikaciiNomenklaturi/NacionalnaKlasifikacijaNaZanimanjata.pdf>

Subsidiary text 2013 to the Lisbon Recognition Convention - SUBSIDIARY TEXT TO THE CONVENTION: "RECOMMENDATION ON THE USE OF QUALIFICATIONS FRAMEWORKS IN THE RECOGNITION OF FOREIGN QUALIFICATIONS":  
[http://www.skvc.lt/uploads/lawacts/docs/128\\_323d3fabbbf54af185073abb20f68457.pdf](http://www.skvc.lt/uploads/lawacts/docs/128_323d3fabbbf54af185073abb20f68457.pdf)

Vocational Education and Training Centre (Skopje, 2010). *Concept for Vocational Education for Occupations*. Text available at <http://www.csoo.edu.mk/images/stories/koncepcija%20na%20strucno%20obrazovanie%20na%20zanimanja.pdf>

Vocational Education and Training Centre (Skopje, 2010). *Concept for Vocational Training with Duration Up to Two Years*. Text available at <http://www.csoo.edu.mk/images/stories/koncepcija%20na%20strucnoto%20osposobuvanje.pdf>

Vocational Education and Training Centre (Skopje, 2010). *Concept for Post-Secondary Education*. Text available at <http://www.csoo.edu.mk/images/stories/koncepcija%20za%20postsredno%20obrazovanie.pdf>

Vocational Education and Training Centre (Skopje, 2012). *Standards for Delivery of Practical Training of Student at Employers*. Text available at [http://www.csoo.edu.mk/index.php?option=com\\_content&task=blogcategory&id=37&Itemid=138](http://www.csoo.edu.mk/index.php?option=com_content&task=blogcategory&id=37&Itemid=138)

Vocational Education and Training Centre (Skopje, 2014). *Standard for Professional and Other Staff for Practical Training Delivery at Employers*. Text available at [http://www.csoo.edu.mk/index.php?option=com\\_content&task=blogcategory&id=37&Itemid=138](http://www.csoo.edu.mk/index.php?option=com_content&task=blogcategory&id=37&Itemid=138)

Vocational Education and Training Centre (Skopje, 2014). *Standards of Occupations* Text available at [http://www.csoo.edu.mk/index.php?option=com\\_content&task=blogcategory&id=65&Itemid=190](http://www.csoo.edu.mk/index.php?option=com_content&task=blogcategory&id=65&Itemid=190)

Vocational Education and Training Centre (Skopje, 2009). *Methodology for Preparation of Standards for Occupations*. Text available at <http://www.csoo.edu.mk/images/stories/metodologija%20za%20izработка%20na%20standardi%20na%20zanimanja.pdf>

Vocational Education and Training Centre (Skopje, 1999). *General National Curriculum for Secondary Reformed Vocational Education and Training*. Text available at <http://www.csoo.edu.mk/images/DOCs/opstdrzv-kurikulum.pdf>

## 12 ANNEXES

### Annex 1: National teaching plan for 9 years primary education

Teaching subjects	I	II	III	IV	V	VI	VII	VIII	IX
Compulsory subjects									
Macedonian language (Albanian, Turkish, Serbian)	•	•	•	•	•	•	•	•	•
Macedonian language for other students other communities				•	•	•	•	•	•
Mathematics	•	•	•	•	•	•	•	•	•
English language	•	•	•	•	•	•	•	•	•
Second foreign language						•	•	•	•
Art education	•	•	•	•	•	•	•	•	•
Music education	•	•	•	•	•	•	•	•	•
Introduction with environment	•	•	•						
Technical education				•	•	•			
Informatics						•	•		
Society				•	•				
Geography							•	•	•
History						•	•	•	•
Ethics							•		
Civic education								•	•
Nature				•					
Natural science					•				
Natural science and technics						•			
Biology							•	•	•
Physics								•	•
Chemistry								•	•
Physical and health education	•	•	•	•	•	•	•	•	•

Elective Subjects									
Language and culture of Vlachs			•	•	•	•	•	•	•
Language and culture of Roma			•	•	•	•	•	•	•
Language and culture of Bosniacs			•	•	•	•	•	•	•
Creativity (tvorestvo)				•	•				
Work with computers				•	•				
Ethics of religions, introduction with religious, classical culture in the European civilisation						•			
Other elective subject							•	•	•
Albanian language						•	•	•	•
Additional classes <sup>41</sup>		•	•	•	•	•	•	•	•
Class community lessons (klasen cas)		•	•	•	•	•	•	•	•
School choir									
School orchestra									

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<sup>41</sup> For students with difficulties in learning some subjects and for students with extraordinary interest.

## Annex 2: Examples of Higher Education Curricula Based on Learning Outcomes

### Learning Outcomes for the Academic Studies in Power Systems (First and Second cycle)



#### University "St. Kliment Ohridski" - Bitola

#### PROGRAMME LEARNING OUTCOMES FOR ACADEMIC STUDIES IN POWER SYSTEMS

	First Cycle	Second cycle
<b>Title of diploma</b>	University Bachelor degree in Electrical Engineering	Master of Science in Electrical Engineering
<b>Duration of study (years)</b>	4	1
<b>Number of credits</b>	240	60

Type of descriptor	Qualification cycle	Qualification descriptors
<b>Knowledge and understanding</b>	<b>First cycle</b>	<p>Recognizes and remembers the well-established principles within the fundamental fields of physics, mathematics and engineering sciences related to electrical engineering;</p> <p>Describes and discusses key aspects and concepts particularly in the principal focus areas of the Power systems: power production, transmission and distribution;</p> <p>Keeps abreast with the current research and development work as well as the wider multidisciplinary context of electrical engineering.</p>



	<b>Second cycle</b>	<p>Identifies appropriate methodologies and techniques for acquiring knowledge and understanding in one of the areas of Power systems in which the student has chosen to develop special expertise: electric machines, electric transmission and distribution systems, computer application in power systems, power electronics, renewable energy sources, energy efficiency and environment protection;</p> <p>Systematically and creatively explains and discusses the current and emerging research, concepts, principles and theories relevant to the chosen area of specialization in Power systems;</p> <p>Keeps abreast of the most advanced disciplines in the field of Power systems, providing a basis for originality in developing and applying autonomous ideas in a research context.</p>
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Type of descriptor	Qualification cycle	Qualification descriptors
<b>Applying knowledge and understanding</b>	<b>First cycle</b>	<p>Determines and analyses the processes, methods and results in the area of power production, transmission and distribution;</p> <p>Locates, formulates and solves fundamental problems in a real power system related to designing, exploitation, maintenance and technical control, using established methods;</p> <p>Selects and uses appropriate equipment, tools and analytical methods relevant for power systems analysis;</p> <p>Applies regulations and techniques for environmental protection.</p>
	<b>Second cycle</b>	<p>Examines, analyses, develops, optimizes and manages Power systems;</p> <p>Independently and creatively advises on problems that arise in the process of designing and construction of power systems, technical control and expertise;</p> <p>Applies innovative methods in solving multidisciplinary, unfamiliar and incompletely defined problems, using advanced mathematical, scientific, IT and engineering knowledge;</p> <p>Applies regulations and techniques and take measures for environmental protection.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
<b>Making judgment</b>	<b>First cycle</b>	<p>Gathers, analyses and presents information from relevant data within the field of Power systems, usually from the perspective of: power production, transmission and distribution;</p> <p>Exercises appropriate judgment in implementing and evaluating knowledge crucial for regular operation of the power systems. taking into account relevant personal, social, scientific or ethical aspects;</p> <p>Combines theory and practice to solve power systems' problems, to explain the reasons and to choose adequate solution.</p>
	<b>Second cycle</b>	<p>Synthesizes and integrates knowledge across several areas in the field of power systems, related to the area in which the student has chosen to develop special expertise;</p> <p>Critically evaluates data, makes sound judgments and draws conclusions even on the basis of incomplete or restricted information, using current information and communication technology necessary for regular operation of the power systems in practice; Investigates the application of new and emerging technologies, innovations and best practices in the everyday real Power systems practice, researches and analyses national development situation.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Communication skills	First cycle	<p>Communicates effectively in written reports and oral presentations using appropriate terminology and technical language, common for Power systems;</p> <p>Shares and debates concepts and ideas in the field of Power systems with the engineering community and with society in large;</p> <p>Is capable of teamwork and cooperate actively within the group by sharing in the tasks and responsibilities.</p>
	Second cycle	<p>Clearly and unambiguously communicates conclusions, results and study outcomes to specialist audiences, along with the ability to appropriate the style and form of expression to non-specialist audience;</p> <p>Participates effectively in multidisciplinary designed teams where Power systems competences are necessary, either as a team leader or in a specialist role;</p> <p>Accepts significant responsibility and accountability for the quality of individual and collective results, leads and initiates activity in specialized areas of Power systems within electrical engineering.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Learning skills	First cycle	<p>Takes initiative to identify and address learning needs for further professional education in the field of power systems, with a high degree of autonomy;</p> <p>Keeps track of scientific issues in the field of Power systems such as scientific papers, journals, seminars, conferences etc.</p>
	Second cycle	<p>Identifies personal need for further knowledge and operates independently to acquire new knowledge and skills autonomously within the societal context;</p> <p>Ability to take responsibility for ongoing self-directed individual learning in the area of Power systems in which the student has chosen to develop special expertise.</p>

## Learning Outcomes for Professional Studies for Medical Nurse/ Technician (First Cycle)



**University “Ss Cyril and Methodius” - Skopje**

### PROGRAMME LEARNING OUTCOMES FOR PROFESSIONAL STUDIES FOR GRADUATE MEDICAL NURSE /TECHNICIAN

	First cycle
<b>Title of diploma</b>	graduated medical nurse/technician (baccalaureus/baccalaurea)
<b>Duration of study(years)</b>	3
<b>Number of credits</b>	180

Type of descriptor	Qualification cycle	Qualification descriptors
Knowledge and understanding	First cycle	<p>Demonstrate knowledge of medical terminology, physiological and pathological mechanisms, related to body systems and diseases, understanding of human behaviour and value systems, knowledge necessary for applying nursing care of patients;</p> <p>Demonstrate knowledge for very common medications and their therapeutic use, organization of the different diagnostic departments in the hospital, how to interpret information on diagnostic orders, and what their role is in processing these orders;</p> <p>Demonstrate knowledge how to solve problems and work with team of professionals with higher education as well as how to manage a team of nursing care.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Applying knowledge and understanding	First cycle	<p>Apply theoretical principles and practical skills in all kinds of general patient care, perform necessary preventive measures to promote health and prevent diseases;</p> <p>Interpret information on different laboratory and diagnostic orders, record orders and receive results back;</p> <p>Apply professional expertise to solve problems and work with medical doctors in the process of diagnosis and treatment of patients, manages a team of nursing care, determines and organizes daily work assignments and schedules of work and successfully run a full documentation.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Making judgment	First cycle	<p>Demonstrate ability of making the conclusion or opinion following a process of observation, reflexion and analysis of observable available information or data;</p> <p>Demonstrate ability to identify, associate and interpret the signs or symptoms of a given condition, to decide on data to be collected about a patient, makes an interpretation of the data, arrives at a nursing diagnosis and identifies appropriate nursing actions;</p> <p>Demonstrate understanding the mechanisms and the significance of the case, their elements and effects in order to come up with appropriate solutions.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Communication skills	First cycle	<p>Demonstrate ability to effectively communicate with co-workers, visitors, patients, nurses, doctors, and staff from other departments. Work successfully as a team member, own confidentiality, assertive behaviour, critical thinking, understand and respect cultural diversity;</p> <p>Demonstrate ability to adapt to persons with diverse backgrounds and communication styles, empathy and respect for others;</p> <p>Demonstrate understanding of human behaviour, value systems, the elements and components of communication, listening skills, successful telephone techniques, initiating communication, time and stress management.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Learning skills	First cycle	<p>Demonstrate overwhelmed learning skills - concentrating, reading and listening, remembering, using time;</p> <p>Demonstrate ability to wisely evaluate ideas with <a href="#">critical thinking</a>, explore strategies (and attitudes) for generating ideas with <a href="#">creative thinking</a> and is able to effectively use these <a href="#">thinking skills and strategies for solving everyday problems and</a> in scientific method;</p> <p>Demonstrate ability to identify his/her personal needs and interests for postgraduate studies in the different areas of medical care, and take the initiative to knowledge acquisition and learning with a high degree of independence.</p>

## Learning Outcomes for Academic Integrated Studies in Pharmacy (First and Second Cycle)



**University “Ss Cyril & Methodius” - Skopje**

### PROGRAMME LEARNING OUTCOMES FOR PHARMACY

	First and second cycle integrated	Third cycle
<b>Title of diploma</b>	Master of Pharmacy	Doctor of Pharmacy
<b>Duration of study(years)</b>	5	3
<b>Number of credits</b>	300	180

Type of descriptor	Qualification cycle	Qualification descriptors
<b>Knowledge and understanding</b>	<b>First and second cycle integrated</b>	<p>Demonstrate knowledge and understanding that builds upon general secondary education and higher education entrance qualification in core areas of pharmaceutical practice and science, implementing methodologies appropriate for solving problems, both systematically and creatively, that provides a basis or opportunity for originality in developing and/or applying autonomous ideas in a practice and research context;</p> <p>Demonstrate knowledge to practice pharmacy within the legislation and according to the professional standards and ethical principles, to design, formulate, produce and test medicines, medicinal products and medical devices as well as to provide adequate outcome of the pharmacotherapy;</p> <p>Demonstrate critical understanding of the key theories, principles and methods in pharmaceutical science and practice and are able to consolidate their knowledge vertically, horizontally and laterally.</p>
	<b>Third cycle</b>	<p>Demonstrate high level of generic and systematic understanding for qualified research and mastered skills and methods for research in the area of pharmaceutical, biomedical and health sciences, and relevant sub disciplines for performing independent, autonomous research in accordance with the highest international standards.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Applying knowledge and understanding	First and second cycle integrated	<p>Apply evidence based knowledge and understanding in the field of pharmaceutical science and in management of pharmacy practice, formulation, production and ensuring quality of the medicines, medicinal products and medical devices, and in planning, managing, monitoring, advising and reviewing general pharmaceutical care programmes for patients;</p> <p>Develop and advance solutions to problems and arguments in the concerned areas applying modern technology and both multidisciplinary and individual, creative and original approach in new or unfamiliar environments within multidisciplinary context.</p>
	Third cycle	<p>Demonstrate ability to conceive, design, implement and adapt a substantial process of research in the area of pharmaceutical, biomedical and health sciences, and relevant sub disciplines;</p> <p>Demonstrate ability for independent contribution to research that is capable of extending the borders of knowledge and stand up to national or international review and examination by experts and specialists in the field.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Making judgment	First and second cycle integrated	<p>Demonstrate ability to gather, analyze, evaluate and present information, ideas and concepts, from complete or limited relevant data, for the core areas of the pharmaceutical practice;</p> <p>Demonstrate ability to assess and make selection of scientific theories, methodologies, tools and general skills in the core areas of the pharmaceutical science;</p> <p>Demonstrate ability to use skills in a range of routine and complex situations requiring analysis or comparison of a range of options. Recognize priorities when problem-solving and identify deviations from the normal pattern;</p> <p>Demonstrate ability to follow legal, ethical, professional and organizational policies/procedures and codes of conduct and to take action based on own interpretation of broad professional policies/procedures where necessary.</p>
	Third cycle	<p>Demonstrate ability to identify scientific questions and issues independently;</p> <p>Demonstrate ability for critical analysis, development and synthesis of new and complex ideas in the area of pharmaceutical, biomedical and health sciences, having assessment competences and respecting ethical issues;</p> <p>Demonstrate ability to initiate and participate in national and international research networks and events, independently and with scientific integrity;</p> <p>Demonstrate ability to initiate research and development projects that will generate new knowledge and skills for development in the field of pharmaceutical, biomedical and health sciences.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Communication skills	First and second cycle integrated	<p>Demonstrate use of appropriate professional communication to gain the cooperation of individual patients, small groups of patients, colleagues, other senior health professionals and managers within the organization;</p> <p>Demonstrate ability to communicate where the context of discussion and criteria for decisions and the scope of the task are both explicitly defined and based on opinion;</p> <p>Demonstrate ability for independent participation into specific, scientific and interdisciplinary discussions, with a professional approach. Accept consultation for specialist advice and also take on responsibility in a team, lead and initiate activity.</p>
	Third cycle	<p>Demonstrate ability to present and discuss findings and results from their research field with their peers, colleagues and can communicate these to an academic or non-academic society;</p> <p>They can establish collaboration network with the colleagues, domestic and international academic community and the society within their area of expertise;</p> <p>They can lead a research team.</p>

Type of descriptor	Qualification cycle	Qualification descriptors
Learning skills	First and second cycle integrated	<p>They can independently identify their personal needs and interest for continuing education and professional development, design strategy and plans for promotion of personal intellectual growth, organize advanced learning activities and critically evaluate adequacy of the learning methods, their influence on knowledge, skills, competency and of practice;</p> <p>They are able to document the learning activities by creating an individual portfolio.</p>
	Third cycle	<p>Demonstrate ability to promote themselves within the academic and professional context, and technological, social and cultural development in a knowledge based society.</p>

### Annex 3. Overview of the ETF support to the referencing process

	Objective	Stakeholders involved	Method of implementation	Period	Activities
1	Briefing on the status of development of the MQF. Information about the activities planned for finalizing the MQF.	Working Group for the Development of MQF  ETF – Eduarda Castel Branco	Working session and consultation about the draft text of the Macedonian Qualifications Framework – Baselines.	January 2013	ETF comments and recommendations prepared by the ETF expert Mr. Arjen Deij were discussed into details.
2	Planning of future activities related to the MQF	Working Group for the Development of MQF  ETF – Eduarda Castel Branco	Working meeting and consultancies	2.12.2013	
3	Start of discussions about the process of referencing the MQF to the EQF and self-certification to the QF-EHEA	Working Group for the Development of MQF  ETF – Eduarda Castel Branco	Working meeting and consultancies	28.01.2014	First general Action plan for referencing was prepared
4	Cooperation with the stakeholders involved in the MQF process, agreement on the next steps for further development and implementation of the MQF and for preparation of an EQF referencing report and self-certification to the QF-EHEA.	Working Group for the Development of MQF  ETF – Eduarda Castel Branco  British Council - Daniela Bavchandzi	Joint meeting Ministry of Education and Science – ETF – British Council.	30.01.2014	Development of an action plan for further development and implementation of the MQF was agreed. It was agreed the ETF to support the EQF referencing process. The British Council will support the implementation of the MQF, with focus on capacity building and increased involvement of employers.
5	Preparations for developing an EQF referencing report and self-certification to the QF-EHEA.	Working group for development of MQF  ETF – Eduarda Castel Branco	Working session	02.04.2014	Information on the EQF referencing criteria and the criteria and procedures for self-certification to the QF-EHEA
6	Kick-off of the process of preparation of an EQF referencing report and self-certification to the QF-EHEA.	Working Group for Preparation of a National Report for Referencing the NQF to the EQF, advisors of the VET Centre and the Centre for Adult Education, representatives of employers, employers, chambers, schools and higher education institutions.	Explanatory meetings with officials and experts from the Ministry of Education and Science, the VET Centre, the Centre for Adult Education, the Employment Service Agency  Workshop run by the experts Eduarda Castel	22-23.05.2014	Increased knowledge and understanding of the members of the members of the Working Group for Preparation of a National Report for Referencing the NQF to the EQF on the EQF, on the EQF referencing and the self-certification to the



		ETF – Eduarda Castel Branco ETF expert Prof. Dr. Mile Dzelalija	Branco and Prof.Mile Dzelalija		QF-EHEA
7	Process of referencing the MQF to the EQF and self-certification to the QF-EHE	Working Group for Preparation of a National Report for Referencing the NQF to the EQF, advisors of the VET Centre and the Centre for Adult Education, representatives of employers, employers, chambers, schools and higher education institutions.  ETF - Eduarda Castel Branco and Mirijam de Jong  ETF experts - Prof. Mile Dzelalija and Jove Jankulovski	Workshop run by the experts Eduarda Castel Branco, Prof. Mile Dzelalija, Mirijam de Jong and Jove Jankulovski	23-27.06.2014	Agreement on the format and content of the Referencing Report  Agreement on the sub-groups in charge for writing different sub-chapters of the Referencing Report and the process of coordination  Information about the preparations for starting the ETF project for preparation of an inventory of the existing qualifications and their analysis for the purpose of the referencing.
8	Continuation of the process of referencing the MQF to the EQF and self-certification to the QF-EHEA	Working Group for Preparation of a National Report for Referencing the NQF to the EQF, advisors of the VET Centre and the Centre for Adult Education, representatives of employers, employers, chambers, schools and higher education institutions.  ETF – Eduarda Castel Branco  ETF experts Prof. Dr. Mile Dzelalija and Jove Jankulovski  Invitees: members of the EQF AG from Austria and Hungary. Representative of the Montenegrin Ministry of Education.	Workshop with contributions from Ms. Eduarda Castel Branco, the Core referencing group, the experts on qualifications frameworks from Austria, Croatia, Hungary and Montenegro and from Mr. Jove Jankulovski.	13-17.10.2014	Increased knowledge and understanding of the members of the Working group and the other participants to the workshop on the EQF referencing processes.  Analysis on the compliance of MQF with the EQF Criterion 2  The Inventory and Analysis of the Existing Qualifications in the Republic of Macedonia presented, discussed and suggestions provided by the participants to the workshop.
9	Preparation of the Referencing Report	Advisors from the VET Centre Core group ETF – Eduarda Castel Branco	Working session with focus on detailed presentation and discussion on the Inventory and Analysis of Existing Qualifications, Study Supporting the EQF Referencing Process in	23.02.2015	It was agreed the each advisor of the VET Centre to read carefully the part of the Study which addresses the qualifications which are under his/her

			the Republic of Macedonia (ETF project)		responsibility and, if needed, to review the respective text.
10	Cooperation, mutual learning by the MQF stakeholders and sharing experiences of other countries.	Working group for further development of MQF, representatives of associations, chambers, employers, the United Kingdom and other countries. ETF – Eduarda Castel Branco Organisers: the British Council and the ETF	Conference: <i>Macedonian Qualifications Framework – early phase of implementation</i> <i>Approaches for levelling qualifications. Role of the EQF referencing in supporting EQF implementation</i> <i>Joint organisation British Council-ETF</i>	18 March 2015	Presentations
11	Preparation of the Referencing Report	Core group ETF – Eduarda Castel Branco	Working session – discussion with the members of the Core group on specific topics to be addressed within the Report	19.03.2015	Continuation of the work on drafting the Referencing Report Coordination with the VET Centre was agreed on the process of updating the Inventory and Analysis of Existing Qualifications.
12	Capacity building of stakeholders with focus on learning outcomes approach, quality assurance and MQF. Preparation of the Referencing Report	Working Group for Preparation of a National Report for Referencing the NQF to the EQF, advisors of the VET Centre and the Centre for Adult Education, representatives of employers, employers, chambers, schools and higher education institutions, EU Delegation. ETF – Eduarda Castel Branco ETF expert Prof. Dr. Mile Dzelalija	Workshop	18-22.05.2015	Preparation of the Referencing Report with focus on Chapter 5 on the compliance of the MQF with the EQF referencing criteria
13	Experimentation (phase I): revision of existing qualification VET-4 years by describing them in (key) learning outcomes. Levelling to MQF. Sample of 3 qualifications: textile technician, tourism-hotel technician, economics technician	Working group for development of MQF, All VET centre advisors, representatives from VET schools / teachers and enterprises of the 3 sectors (textile, banking and insurance, hotel-tourism). Representative of ESA. ETF – Eduarda Castel Branco Expert Wojciech Stęchły, IBE, Poland	Working meeting with advisors of the VET Centre Workshop run and moderated by the ETF expert. <ul style="list-style-type: none"> <li>• Use of learning outcomes – good practice examples</li> <li>• Key learning outcomes in VET-4 qualifications</li> </ul>	1-4.09.2015	Documents for writing key learning outcomes.  Initial documentation for key learning outcomes for three selected VET-4 qualifications.

14	Re-defining the current VET-4 qualifications by applying the approach of defining key learning outcomes	Core group ETF - Eduarda Castel Branco	Skype conference	16.10.2015	Discussion and agreement about the preparation of the workshop for re-defining the VET-4 qualifications: ETF activities, responsibilities and preparations to be completed by the VET Cente, tasks for the Ministry of Education and Science
15	Preparation of the Referencing Report	Core group Prof. Mile Dzelalija, ETF expert and members of the EQF AG ETF - Eduarda Castel Branco	Working sessions with discussions and hands-on work	22-27.11.2015	Reviewing the chapters on the response of MQF to the EQF criteria, the response of the NQF HE criteria and procedures of QF-EHEA, the description of MQF
16	Experimentation (phase II – completion): revision of existing qualification VET-4 years by describing them in (key) learning outcomes.  General information and capacity building on the process and results of the experimentation – for a wider group.	Core group All VET centre advisors, representatives from VET schools / teachers and enterprises of the 3 sectors (textile, banking and insurance, hotel-tourism). Representative of ESA. Approx. 50 representatives from economic sectors, teachers, employers from all regions.  ETF - Eduarda Castel Branco  Expert - Wojciech Stęchły, IBE, Poland	Workshop and training session	17-18.12.2015	Review and finalisation of key learning outcomes for the sample of qualifications.  Levelling to MQF.  General agreement on the common approach for future generalisation.

## Annex 4. Copies of the statements of the national quality assurance bodies (EQF Criterion 6)

### 1. Written statement of the Higher Education Accreditation and Evaluation Board



REPUBLIC OF MACEDONIA  
HIGHER EDUCATION ACCREDITATION AND EVALUATION BOARD

To:  
The European Qualification Framework Advisory Group

Subject: Referencing Report of the National Qualifications Framework to the European Qualifications Framework stated agreement

10-214/1  
24-12-2015  
City Trade Center  
P.O. Box 125  
1000 Skopje  
Phone: +389 2 3220509  
Fax: +389 2 3220509

Higher Education Accreditation and Evaluation Board is an independent national body in charge of quality assurance in Higher Education. The Board consists of 23 members nominated by the inter-university conference, Government, Macedonian Academy of Sciences and Arts, Student's organisations and Employer's associations. The activities of the Board are performed in accordance with The European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). The Quality Assurance System applies to all Higher Education Institutions and study programs, and covers teaching, learning, research, student support service and internal quality assurance/management

The Board was included from the very beginning of the implementation of the National Qualification Framework in the Republic of Macedonia and in the process of referencing the National Qualifications Framework to the European Qualifications Framework for Lifelong Learning as well as into Self-certification process of NQF-HE to QF-EHEA. The Board is represented in the National Board for the Macedonian Qualification Framework as well.

In June-July 2015 special sessions were held with officials of the Board for Accreditation and Evaluation of Higher Education. Comments and suggestions of the Board are incorporated in the Referencing Report.

The Referencing Report of the National Qualifications Framework to the European Qualifications Framework for Lifelong Learning as well as Self-certification of NQF-HE to QF-EHEA has been agreed by the Higher Education Accreditation and Evaluation Board.

President of the Higher Education  
Accreditation and Evaluation Board

Gorazd Rosoklija

Gorazd Rosoklija M.D, Ph.D  
Associate Professor-Psychiatry (MIND)  
Columbia University-College of Physicians and Surgeons  
New York, NY

## 2. Opinion of the National Examination Centre

To: Ministry of Education and Science  
Skopje

Subject: Opinion on the Referencing of the National Qualifications Framework to the  
European Qualifications Framework for Lifelong Learning and Self-Certification to  
the QF-EHEA

As national institution with important role in quality assurance of primary and secondary education the National Examination Centre has been involved in the whole referencing process with a member of the Working Group for Referencing the National Qualifications Framework to the European Qualifications Framework.

Additionally, a special session to discuss the draft Referencing Report with involvement of respective number of staff of the National Examination Centre took place in July 2015.

Having been acquainted with the content of the Referencing Report, the National Examination Centre is using the opportunity to thank the authors for having included the comments and recommendations of the Centre in the Referencing Report. The National Examination Centre has paid special attention to the quality aspects in the respective chapters, especially the Criterion 5 (EQF) and accepts the content of the Report.

Director  
of the National Examination Centre



Mirushe Ameti

### 3. Opinion of the State Educational Inspectorate



Adobe Acrobat  
Document

**Please, click on the icon in order to read the written statement of the State Educational Inspectorate on the EQF Referencing Report of the Macedonian Qualifications Framework and Self-Certification to the QF-EHEA**

**Annex 5. Copies of the letters of endorsement for the project TEMPUS ETF-SM-00050-2008, (2009-2012) signed by the Ministers of Education and Science in 2008 and in 2009 (QF-EHEA, Procedure 1)**



Adobe Acrobat  
Document

**Please, click on the icon in order to read the endorsement letter for the Tempus project with the development of NQF HE as the main objective. The letter has been issued in 2008.**



Adobe Acrobat  
Document

**Please, click on the icon in order to read the endorsement letter for the Tempus project with the development of NQF HE as the main objective. The letter has been issued in 2009.**

## **Annex 6. Opinions of the international experts on the EQF Referencing Report of the Macedonian Qualifications Framework and Self-Certification to the QF-EHEA (EQF Criterion 7)**

**Ms. Eduarda Castel Branco** – Employed in the ETF (EU Agency) since 2003, Eduarda Castel-Branco is involved in country-specific projects and in thematic operations (employment and qualifications). She managed ETF activities in countries of the Eastern and Southern Neighbourhood (notably: Georgia, Morocco), and in candidate countries (Republic of Macedonia). In this context she drafted a number of analytical reports and notes on education and training and employment policies / reforms (Georgia, Morocco and the Republic of Macedonia).

She coordinates activities of the experts' network on skills anticipation and matching of the Eastern Partnership, which is part of the work programme of the Platform 2 of the Eastern Partnership.

She was a policy officer in DG EAC (European Commission). Since 2013 she is ETF representative in the AG EQF. She was a member of the ET2020 Working Group on Adult Learning (2014-2015).

In 2014-2015 her activities included support to the institutional setting of the Moroccan NQF and assistance to EQF Referencing of the Republic of Macedonia. She contributed to carry out the Inventory of Qualifications in the country and review the synthesis report, and facilitated workshops and technical meetings with stakeholders and experts.

### **Opinion on the EQF Referencing Report presented by the former Yugoslav Republic of Macedonia (version of 08/01/2016)**

#### **Introduction**

Education and training, relevant qualifications, and innovation are recognised in the various national strategies as drivers for growth, better employment outcomes and social inclusion. High unemployment (notably youth unemployment) and mismatches (between available qualifications and demand in the labour market) are among the important challenges that the country needs to continue addressing. Synergy between relevant institutions and policies will remain a fundamental factor of success. The National Qualifications Framework (NQF) is one such catalyst for better-articulated dialogue across the qualifications system.

#### **The interactions between NQF implementation and EQF referencing**

Different user groups view the NQF as a platform and motivator supporting a renewed approach to reforms of the qualifications system. The NQF brings: i) governance based on systematic cooperation between education and employment stakeholders; ii) harmonised approach across sub-sectors of education and training to develop, describe and manage qualifications; iii) recognised space for diverse forms of learning – including non-formal and informal - in the system and in peoples' lives; iv) recognised centrality of the learning outcomes approach.

The NQF for LLL is young but is, gradually but with certainty, pacing forward. The NQF development process was long and intermediate achievements were at times in a state of lethargy - until end 2012. The reactivation of stakeholders' consultation and dialogue in 2013 and the subsequent adoption of the legal basis for the NQF for LLL (in autumn 2013) were the turn of a new page. But many of most noticeable steps in making the NQF a reality can be associated with the start and acceleration of the EQF referencing process - in the period 2014-2015.

EQF referencing means:

- Consensual recognition of the process as a new and important trigger for action as regards the provision of the NQF legal basis;
- Renewed stakeholders consultation mechanism dealing with new themes, inspired by the key criteria of EQF referencing (2, 3, 4 and 5);
- Systematization in 2014 of existing qualifications and programmes through the Inventory of all qualifications (all sub-sectors / formal and non-formal);
- Start of revision of existing VET (level 4) qualifications by introducing learning outcomes defined through a transparent and participatory approach involving VET and labour market players (completed the pilot phase);
- Start of application of concepts and agreed method for leveling of qualifications (VET), focusing on learning outcomes



- Some synergy with other ongoing NQF support projects, notably those dealing with design of methodological basis for description of qualifications and inclusion in the NQF;
- Launch of the NQF website, used initially as the database of documentation and information relevant for the EQF referencing report;
- Update of parts of the Inventory of qualifications in 2015 and its publication on the NQF website as the first model of a unified qualifications database / information system open for the public.

The discussions and consultations, in wider and smaller groups, organized for the EQF referencing process contributed much to better understanding of the content and requirements of the NQF legal basis, the role and meaning of the level descriptors, the new interpretation given to “qualification”, the complementarities for LLL between qualifications of formal and of non-formal contexts.

Comments on critical aspects of the current definition of level descriptors were expressed, and the leading Ministry is aware of these issues. One of such issues concerns the definition of sub-levels: the official position is that sub-levels are indispensable for the time being, as means to ascertain stakeholders’ acceptance of the NQF structure. Sub-levels could be interpreted as a solution for a period of transition. This also means that reflection on the post-transition NQF structure and revised level descriptors needs to be foreseen in the roadmap for further implementation of the NQF.

The numerous discussions on the results of the Inventory of qualifications and on the analysis of a sample of qualifications shed light into the “mysteries” of level descriptors, by making comparisons with learning outcomes of real qualifications and discussing the novelties of the concept of *leveling*.

This systematization and analysis of qualifications (Inventory) shows the picture - with details, gaps and problems – and this practical information was used in addressing criteria 3 and 4 of EQF Referencing. Later on, in 2016-2017, the Inventory is likely to inspire policy makers and practitioners, to exploit deeper some of the materials and conclusions on critical features of qualifications – when the three large projects directed to education and training reforms (2 EU and 1 World Bank) will effectively start their operations.

While the first complete version of the EQF referencing report is the output of an intensive 20-months process, involving efforts and commitment from several institutions, it is also a beginning and from many points of view, a valuable practice.

### **Key features of the organisation of the referencing process**

The European Training Foundation (ETF) provided advice, analysis, capacity building and support to networking and workshops throughout the process. The ETF team reviewed the various drafts of the report, by providing comments and suggestions.

The EQF referencing roadmap was defined and agreed with the stakeholders in a starting workshop (May 2014). In the meantime the multi-stakeholder working group was announced by the Ministry of Education and Science, so that a good degree of synchronization was rapidly in place between national leadership and participation from one side, and the expertise contribution from ETF – from the other.

The Ministry of Education and Science led the entire process and established a core group of four experienced staff members to draft the report. The core group eagerly interacted with the ETF team throughout the almost 2 years process, and actively participated in the many technical and capacity building meetings directly related to the report, as well as in other debates and workshops related with the Inventory of qualifications and the application of learning outcomes – also related with referencing.

From the start of the process, the Inventory of qualifications was part of the approach proposed by ETF. The output of the Inventory is gathered in a simple database, containing synthetic information from a large documentary base, on all currently existing programmes / qualifications in the formal education system, as well as verified adult education programmes. Although initially received with some skepticism by public bodies, it proved to be very valued by all stakeholders later on. Early discomfort was eventually overcome, via discussions in technical workshops, joint review of the findings and in particular, by finding a viable solution to the identified issues – the small pilot initiative to describe VET-4 qualifications in learning outcomes.

The report combines EQF referencing and self-certification (chapter 5 and 6). This unified approach had, from the start, full support by all stakeholders.

Meetings supporting interactions between stakeholders from higher education with those from secondary education (general and VET) turned out very useful, in particular in sharing knowledge and experience on the application of learning outcomes. Unlike other countries, the higher education domain has larger experience as regards the design of programmes / qualifications using learning outcomes, and legislation is enforced in this respect. Secondary VET has enacted in 2013 some new programmes and qualifications

based on learning outcomes, but for now these represent only a minority of the awarded qualifications in VET.

One of the concerns discussed from the start regarded the need to improve the frequency of the country's participation in meetings of the AG EQF. This aim was reached at the end of 2014. The international workshop in Skopje (October 2014), with participation of AG EQF members from Austria, Hungary, Montenegro), has contributed to this positive change.

The EQF referencing process faced problems, in particular: i) organizational and capacity; ii) effective involvement of some important stakeholders. The members of the core group did not enjoy specific time allocation to deal with the new tasks and themes: the group coordinated the partial drafts for chapters from the relevant agencies and national experts, organized meetings for reviews and in the last few weeks 2015 focused entirely on the finalization and fine-tuning of the report. In parallel, the effective involvement of some of the members of the officially nominated working group was very weak – in particular the Ministry of Labour and Social Policy, which hardly participated in the many workshops and technical meetings.

### **Qualifications in the NQF**

The text of the NQF is inclusive – provides for insertion of qualifications from primary to higher education, academic and professional, and from non-formal and informal pathways.

The text of the NQF establishes two types of qualifications: i) education level type; ii) vocational type (could also be translated as “occupational” type, to avoid misunderstanding with secondary vocational qualifications). The discussions held during the referencing process with the core group with the aim to better understand the place of each type, and to identify real examples of “vocational type” qualifications showed that more discussion is necessary with stakeholders from the various sub-systems of education and training, notably with the adult education and non-formal learning sector.

At the time of writing the inclusion of qualifications in the NQF followed somewhat different paths / logic of allocation to levels. Summarising:

1. By provision of the NQF Law: all qualifications from formal primary education; secondary arts and general education are automatically allocated to defined levels. (levels 1, 2, 4).
2. By provision of the law on higher education and QF HE: (re)-accredited programmes / qualifications of the three cycles– allocated in the sub-levels / levels as defined in the legal basis. Note: accreditation requires description of programmes / qualifications in learning outcomes.
3. Individual allocation: for qualifications from secondary vocational education (3 levels). Allocation is conditional for qualifications of VET-4 years of education, pending revision and definition in learning outcomes (at level 4). New qualifications (VET-3 years) are described in learning outcomes and can be included.

The inclusion of the new sub-sector (verified non-formal programmes for vocational qualifications – in levels 2 to 4) may require more time for decision. The verification procedure requires that programmes are based on occupational standards, follow a common structure, and are described in learning outcomes. By their features these programmes can fit the type “vocational” (or “occupational”), above-mentioned. This sub-sector knows a visible development since 2012: many new programmes have been developed by chambers and private providers – in response to market demand. The Employment Service Agency is one of the main users (customers) of these programmes – for training and retraining of unemployed / job seekers, funded by the Operational Programme for active labour market policies.

Table 39 is an attempt to summarise and link-up the response to three criteria – 3, 4 and 5. The structure of the table - by level and sub-level – attempts to show how this joined-up response influences decisions on the inclusion of qualifications in the NQF. This approach shows a number of open questions for further analysis and action (in the last column “Inclusion in the MQF”, notably at Level 4).

### Key issues:

- Levelling:
  - o Methodological framework for leveling: the already existing handbooks need to be used in practice. This may require parallel work on revision of existing qualifications to make them transparent and comparable for leveling. Existing experience and the handbook for development of qualifications will be instrumental, but wider capacity and expertise will be indispensable.
  - o Risks of bias in leveling decisions need to be addressed early, to avoid overly subjective decisions from sectoral qualifications committees and the tendency to request allocation to higher levels.
- Stakeholders' involvement:

- Systematic involvement of the relevant institutions of the employment and labour market domain is currently weak. In the future a sustainable solution is needed, given their role in governance foreseen in the text of the NQF Law.
- Trade Unions – in any format – are not represented in the working group, and were not invited to key meetings and debates. Presumably none of the trade unions is informed about the EQF referencing exercise.
- Transparency – as regards Higher Education Accreditation and Evaluation Board. (HEAEB)
  - At the time of writing, despite several requests, it was not possible to have access to a dedicated information platform / website or space of the HEAEB, which is a most important institution for higher education quality assurance, and for the coherent compliance with Criteria 4 and 5. The Referencing Report does mention the status of autonomy of the Board's work and the adopted roadmap to become a full member of ENQA (currently it is an affiliated member). It was not possible to visit / read information on accreditation decisions of the HEAEB.

### EQF referencing report

For a pedagogical purpose, the initial outline of the report contained references to Cedefop's analysis of challenges and issues in referencing, presented by EQF referencing criterion. This attention drawn to Cedefop's analysis from the start was reinforced through examples and discussions in the many workshops organized throughout the process. In this respect particular emphasis was given to observed weaknesses in meeting criteria 2, 3, 4 and 5. The core group used the findings and examples of several *EQF Notes* in the referencing process.

The key strengths of this referencing report can be summarized as follows:

- Attention to clarity and transparency: through use of examples and references to legislative texts, use of education data, formats of diplomas and certificates, examples of learning outcomes, examples of self-assessment reports (schools and higher education institutions).
- Clear and coherent description of the education and training system (Chapter 2).
- Detailed description of the process of development of the NQF, with special attention to stakeholders' involvement in the various types of working groups.
- Meeting the referencing criteria (Chapter 5): the report builds on the existing real situation, but in some cases adds elements related to future actions (planned reforms, new institutional development and international projects).
- Attention to Validation of non-formal and informal learning – in a specially dedicated Chapter

The description of the education and training system (Chapter 2), structured by sub-sectors, is valuable for the specific purposes of EQF Referencing, as well as for other aims, including as a baseline picture for the planned work on a new Lifelong Learning strategy. The information is organized in a format consistently used throughout each of the sub-sectors, making the chapter an easy-to-use reference. Reading the chapter is essential to understand the EQF referencing and self-certification chapters (5 and 6).

To the essential question whether the referencing report conveys a real and tangible state-of-play or rather a roadmap for future actions and intentions – often discussed in EQF referencing sessions – our opinion can be summarized as follows:

- The report is based on existing and valid legislation, as well as on selected current practice as demonstrated by the examples – presented and listed in the various chapters, particularly in Chapter 2. The analysis in Chapters 5 and 6 (referencing and self-certification) refers to the relevant headings of Chapter 2.
- The argumentation in Chapter 5 – the EQF referencing criteria – is based on a combination of references to texts of legislation, to results and information from the (independent) Inventory and analysis of qualifications, to practice and to outputs from stakeholder consultation meetings organized during the referencing process.
  - Under Criterion 3 the report honestly specifies weaknesses as regards the application of learning outcomes in part of the qualifications system.
  - Certain incoherencies as regards Criterion 4 are the result of the ongoing debates on the approach to take regarding those qualifications that are not described in learning outcomes (debates concern mainly VET-4). The novelty of the concept of "leveling" within a new paradigm of learning outcomes is in line with the text of the NQF law, but takes time to master in practice within such a short period of time by key stakeholders and decision makers.
  - Criterion 5 is addressed in much detail, referring consistently to input-process and output components of the quality assurance frameworks (primary and secondary education, higher education and adult education).

- o The report refers to the “Register” of qualifications – uploaded in the NQF website. While this register is a detailed and genuine database of qualifications – based on the Inventory above-mentioned – and is therefore excellent as reliable source of information, it could be questioned whether it can be considered a “Register” with a normative role. As it is, this database was originally conceived for systematization, analysis and research. Further development of the information contained in this database will be necessary to transform it into a Register. Further on the country can benefit of relevant grants (Erasmus+) for design of qualifications database.
- The recent establishment of the NQF Board and election of its chairperson gives new viability to generalize coherent leveling procedures. This is the new door for the future life of the NQF.

The report contains only very sporadic references to links with labour market information and employment policies, which underestimates the importance of these domains as regards the qualifications system and framework. This weakness confirms the above-mentioned limited involvement in EQF referencing of the institutions in charge of employment and labour market policies.

Next steps of NQF implementation need to take account of labour market information, anticipatory studies on demand for skills and results from tracer studies of graduates. Such information is being organized through the new Skills Observatory, under the umbrella of Ministry of Education and Science, but not mentioned in the referencing report.

**Eduarda Castel-Branco**

**08/01/2015**

**Prof. Dr. Mile Dželalija** - has been leading or participating as an expert in many international research and educational projects related to quality assurance in education, development and implementation of national qualifications frameworks, validation of non-formal and informal learning, recognition of foreign qualifications, joint study programmes, etc. Professor Dželalija has been responsible for the capacity buildings of national experts in various countries, development of methodological tools, theoretical base for NQFs implementation for various purposes, referencing and self-certifications to over-arching, and research analysis on impacts to the economy and society, and other relevant topics. He is a member or leader of different national and international bodies, EQF Advisory Group, ESCO Cross-sectoral Reference Group, management and advisory boards in Croatia and other countries.

### **Opinion on the MQF Referencing Report to the EQF and Self-certification to the QF-EHEA**

Prof. Mile Dželalija, PhD

The aim of the MQF referencing and self-certification report to the EQF and to the QF-EHEA is to verify the compatibility of the MQF with the EQF, and with the QF-EHEA. The report in many details presents the existing education and training system in the country and description of stakeholders' involvement during the development of the MQF. Moreover, the report gives background of the fulfilment and response to the EQF referencing criteria (and to the QF-EHEA criteria and procedures) demonstrating that the MQF is compatible with the EQF, and to the QF-EHEA, with some needs for further development. It presents also challenges and next steps for further improvement of quality and relevance of qualifications system in the country, and deeper involvement of employers and other stakeholders more related to the labour market.

The report is a comprehensive document with many details on the existing educational system, its quality assurance mechanisms, roles and responsibilities of main actors. Various examples and additional relevant documents in annexes in the report or on the websites give additional value and better view on the qualifications system and arrangements of the quality assurance mechanisms.

The report clearly presents three development phases of the MQF:

1. Preparatory phase, which includes the awareness and capacity building on the importance and relevance of development and implementation of NQFs.

2. Developing phase, focusing to development of all concepts, tools, guidelines and legislative for the MQF.
3. Implementation phase.

Relevant stakeholders have been involved in a different ways in the referencing and self-certification processes, including higher education institutions, quality assurance bodies, employers, students, ministries, chambers, education and training centres, etc. Some of them have been deeper involved and some less. Employers and other stakeholders more linked to labour market should be deeper involved in next phases of the development and implementation of the MQF.

Tables, illustrations and examples bring better understanding and, thus, the value of the report.

Glossary of main concepts, bring more transparency and understanding of the qualifications system in the country. Methodology and procedures for qualifications levels have been well described.

The eight levels and additional three sub-levels of the MQF cover the range of qualifications system in the country, from primary education to higher education. Each level is defined by level descriptors of learning outcomes, which are classified in three domains: knowledge and understanding, skills, and competence. Sub-levels, within the same level, have the same level descriptors for all domains, but have different requirements on credit value, representing the volume of qualifications. Thus, sublevels are related to the size of qualifications (number of credits). Sublevels are not related to the complexity of learning outcomes, which are usually in NQFs are presented by level descriptors.

Referencing process of the MQF to the EQF has been guided by the Core Group under the Ministry of Education and Science, with the aim to ensure fulfilment of referencing and self-certification criteria and procedures.

For the current time, the MQF is a reforming and communicative framework, giving a platform for better understanding interests of different stakeholders and facilitating implementation of learning outcomes, modernisation of quality assurance, validation of non-formal and informal learning, and other related concepts.

The report presents the aim of the MQF, which includes step-by-step process of creating a coherent and comprehensive system of classification of all qualifications, independently on the way of achievements (formal, non-formal and informal).

The Ministry of Education and Science is responsible for developing and implementing the MQF and for referencing and self-certificating it to the EQF and QF-EHEA.

The report includes seven main chapters (Description of the National qualifications system; Referencing and self-certification processes; National Qualifications Framework; Response to the EQF referencing criteria and to QF-EHEA self-certification criteria and procedures; Brief description of validation of non-formal and informal learning; and Challenges and next steps. In addition there are chapters on Glossary; Acronyms; References and Annexes).

The qualifications system has been described in details. The chapter is very well organised and structured. It includes description of:

- Formal educational and training system: Preschool education, Primary education, Secondary education (Gymnasium, Vocational, Secondary art, Secondary for students with special education needs, etc.); Post-secondary education; Higher education;
- Adult learning, and
- Recognition of foreign qualifications.

All parts of the qualifications system are explained using the same structure of the text, giving information on:

- Detailed general description;
- Legal framework;
- Strategies and other documents;
- Governance;
- Learning outcomes implementation;
- Quality assurance mechanisms;

- And very helpful summative table for each part of the qualifications system (Entry requirements; Education and training provision; Financing, Teachers qualifications; Expected learning outcomes; Assessment and awards; Progression routes; Labour market, and Quality assurance mechanisms).

As it is described in the report, formal education comprises of pre-school education (age between 0 and 6), primary education (3 times 3 years duration), secondary education (various programmes, gymnasium, vocational, art education, and education for students with special educational needs), post-secondary (specialized education and master exam), and higher education (with two profiles, and short and three cycles).

The report shows many details and characteristics of the education system – general and specific elements of subsystems, including descriptions of quality assurance, learning outcomes implementation and issues, teacher qualifications, etc.

Higher education is described as a system solely provided by autonomous institutions under public law, comprising of two profiles: academic and professional studies. Doctoral studies (qualifications at the eight level) are organised only as an academic strand at universities.

The quality assurance of higher education is conducted through the Higher Education Accreditation and Evaluation Board. The quality assurance body for quality assurance in higher education is an associate member of the ENQA, and the roadmap has been prepared for a full membership in ENQA and EQAR. To become a member of the EQAR, which is crucial for the implementation of the Bologna Process, there is a need for further preparation of the Higher Education Accreditation and Evaluation Board according to the ESG, including its full independent work.

Further, the report presents detailed phases during the design and implementation of the MQF. The consultation that has been undertaken in the process has been extensive, involving all key stakeholders and building ownership of the framework to ensure later better implementation. The work has been very extensive and detailed, from the decision, defining objectives and outcomes, organisation of the work, consultation with stakeholders up to the referencing and self-certification, and implementation. More intensive involvement of employers should happened within the next phases.

Last couple of years, the work on development and implementation of the MQF has been extensively presented in the country and internationally, making the process transparent to all stakeholders and partners.

Fulfilment of all EQF and QF-EHEA criteria and procedures has been presented in details:

- Criterion 1, the main actors are the Ministry of Education and Science, with the Working Group consisted of representatives from: the Ministry of Education and Sports, the Ministry of Labour and Social Policy, Centre for Adult Learning, VET Centre, Bureau for Development of Education, Employment Service Agency, State Statistical Office, Ministry of Information Society and Public Administration, Chamber of Commerce, Organisation of Employers and Chamber of Crafts. The NQF Law applies as of 30 September 2015, and according to the Law, the Government has established the National Board for the MQF.
- Criterion 2, the link between qualifications levels (and sub-levels) of the MQF and the level descriptors of the EQF and their comparison, from 1 to 8, have been transparently presented. Sub-levels are not defined by level descriptors, but only by requirements on number of credits. This means that sub-levels are more related to types of qualifications and less to the complexity of their learning outcomes.
- Criterion 3, it is clear that the MQF is based on learning outcomes, which is a significant change in current education practice in the country (as it is similar in many countries in the EU). It means that the role of the MQF includes reform of qualifications system, with a focus to the implementation of learning outcomes and quality assurance mechanisms, based on common principles. The aim of the MQF is also to develop validation of non-formal and informal learning. ECTS credit system is used in the higher education system, and ECVET is planned. Additional national credit system for general education has been also envisaged. Some of the qualifications and sectors need further steps regarding the implementation of learning outcomes, which is envisaged within the next phase of the implementation of the MQF.
- Criterion 4, the inclusion of qualifications in the MQF has been piloted extensively, and presented in the report in very details. Further steps have been prepared, including development of the common Register of qualifications.

- Criterion 5, in the national qualifications system there are quality assurance systems for: primary and secondary education (general/ VET/ art) and for higher education. They are regulated by the national legislations. All sub-systems have internal and external parts of quality assurance. There are external quality assurance bodies: State Education Inspectorate, Bureau for Development of Education, VET Centre, and the Higher Education Accreditation and Evaluation Board. Within the next phases of the implementation of the MQF, the work of quality assurance bodies should be organised more according to common principles of the quality assurance, which is envisaged.
- Criterion 6, the quality assurance bodies have been involved in the process, and agreed to the referencing process and report. Their statements are presented.
- Criterion 7, international experts from different sectors and countries have been included – higher education and VET, developed and developing countries, advisory group member, and more and less familiar with the qualifications system.
- Criterion 8, the report has been certified by relevant national bodies (the Ministry of Education and Science). It is stated that the report will be published on the official website: [www.mrk.mk](http://www.mrk.mk).
- Criterion 9, the report has been submitted to the Advisory group and, as planned, will be presented in February 2015.
- Criterion 10, it has stated that the classification of new qualifications will contain a clear reference to the MQF and EQF level.

Fulfilment of the QF-EHEA criteria and procedures has been also presented in a separate chapter.

There are several challenges presented, such as: further harmonisation of existing legislations with the NQF Law, further capacity building, introduction of ECVET system, strengthening the quality assurance system, development of the Register of qualifications and validation of non-formal and informal learning. All those are well presented and planned for next steps of the development and implementation of the MQF

As a concluding, the Referencing and self-certification report of the MQF is a comprehensive report. The report presents the existing education system in the country, including arrangements of quality assurance and learning outcomes implementation. Moreover, the report gives detailed and clear background of the fulfilment and response to the EQF and QF-EHEA criteria and procedures, demonstrating that the MQF is compatible with the EQF and QF-EHEA. As in some of other countries in the EU, further improvement of quality assurance system, according to common principles is planned, have been prepared and presented transparently in the report.

Prof. Dr. Mile Dželalija  
(December 31, 2015)

**Mr. John O'Connor - 2012-2016** Head of Qualifications and Skills Policy at Quality and Qualifications Ireland (QQI). Responsible for leading policy development and review of the Irish NFQ. Co-ordinate activity as Irelands designated EQF-NCP with responsibility for national development and implementation of the European Qualifications Framework.

**2008-2012** - Policy Development Officer with the National Qualifications Authority of Ireland (NQAI). The principal function of the NQAI was to develop a framework of qualifications for the recognition and award of qualifications in the State, based on standards of knowledge, skill or competence to be acquired by learners. Related to this the NQAI had the function of establishing the policies and criteria on which the framework of qualifications are based.

**2005-2008** - Academic Registrar responsible for Institutional Quality Assurance at Portobello College Dublin.

**1994-2005** - College Lecturer in Human Resource Management, European Industrial Relations and Corporate Social Responsibility.

### **Relevant International Qualification Framework Policy Networks:**

- Member of the European Qualifications Framework Advisory Group
- Irish Representative on the Member States Working Group for European Skills Qualifications Competencies and Occupations (ESCO)
- Member of the ESCO Maintenance Committee (2010-2014)

**The opinion of Mr. O'Connor to the draft EQF Referencing Report of the Macedonian Qualifications Framework and Self-Certification to the QF-EHEA will be provided separately.**

### **Twinning project**

**Further improvement of the system for development and implementation of the National Qualifications Framework (MK 13 IB SO 02)**



### **Note on the draft of The EQF Referencing Report of the NQF of the Republic of Macedonia and Self-Certification to the QF-EHEA**



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