

**STRATEGY FOR VOCATIONAL EDUCATION AND TRAINING
IN A LIFELONG LEARNING CONTEXT
2013 - 2020**

and

ACTION PLAN

**BETTER SKILLS
FOR A BETTER TOMORROW**

Skopje, 2013

Final approved version - Not edited or formatted

Content

	Preface	
	Abbreviations	
	Acknowledgements	
	Executive Summary	
1.	Background	10
	1.1. Why do we need a VET Strategy.....	11
	1.2. Life and work evolve	11
	1.3. New age – new skills	14
	1.4. The VET Strategy in an international context	17
2.	VET system – main features, opportunities and challenges	21
	2.1. The environment in which VET operates.....	22
	2.2. The structure of the VET system.....	26
	2.3. Progression and transition	32
	2.4. Attractiveness of VET	33
	2.5. Legislation	37
	2.6. Challenges	38
3.	Strategy Framework	47
	3.1 Guiding principles	48
	3.2 Vision and goals of the Strategy	49
4.	The future VET system	51
	4.1 VET in the function of strengthening of social cohesion and social inclusion.....	51
	4.2 Attractive vocational education and training	54
	4.3 Quality and relevance – guarantee for competitiveness	60
	4.4 Governance, resources, capacity and accountability in the future VET system	65
5.	Efficient and effective implementation of the VET Strategy and Action Plan	69
6.	Stages in the implementation of the Strategy	69
	References	
	Action Plan	79

PREFACE

Education and training is a key component of Europe 2020 and plays a fundamental role in supporting smart, sustainable and inclusive growth in Europe.

Vocational education and training (VET) holds a priority place as contributor to human capital development, to economic growth, to reduction of unemployment, to better employment and social cohesion in the Republic of Macedonia. Such demands on VET policy show no sign of abating as the economic crisis persists and challenges the world and all our policies.

The system of vocational education and training shall meet the needs of the individual citizens and skills demand of the labour market - now and in the future.

At a time when demand for new skills is growing as never before, VET ought to encourage innovation, competitiveness, new partnerships, and prepare citizens for employment in the domestic and global labour markets.

The European dimension in vocational education and training in the Republic of Macedonia is translated through development of key competencies, the application of quality criteria, enhanced transparency of the system, networks for cooperation and high-quality teachers and trainers.

Reforms in vocational education and training intend to strengthen lifelong learning, to make mobility a reality, to improve the quality, effectiveness and efficiency of education and training. Moreover, VET shall promote equity, social cohesion and active citizenship.

Imperative challenges incited the development of this Strategy for Vocational Education and Training in a lifelong learning context (2013-2020): the rapid development of new knowledge and technologies, frequent changes in the labour market, growing demand for highly qualified labour, aging of the population, impact of globalisation, and the process of accession of the Republic of Macedonia to the European Union.

The strategy emphasises development of vocational education and training oriented to the common European goals, the priorities formulated in the Bruges Communiqué (2010) and the strategic framework for European cooperation "Education and Training 2020".

The strategy and action plan for vocational education and training in the context of lifelong learning 2013-2020 build on a comprehensive collaborative analysis of the existing system of vocational education and training, included consultation with all relevant stakeholders in the Republic of Macedonia.

The strategy intends to improve the effectiveness of the functioning of the existing system of vocational education and training in terms of quality and output, i.e. in terms of its

effectiveness and relevance for youth and adults, for the market labour and continuing education.

The strategy addresses the following priority areas:

- Vocational education and training and its role in strengthening social inclusion and cohesion;
- The attractiveness of education and training as an aware choice for youth and adults;
- The quality and relevance of vocational education and training, as guarantee for competitiveness;
- Good governance, resources, capacity and accountability in the future system education and training.

The strategic objectives of vocational education and training contemplate:

- Enhancing the attractiveness, relevance and quality of vocational education and training, allowing it to play a major role in promoting business performance, competitiveness and innovation;
- Providing youth and adults with diverse and flexible learning opportunities to acquire skills that will be needed for career development and to stimulate entrepreneurial attitude, promoting their participation in further education and training and contributing to active citizenship and personal fulfilment;
- Promoting the highest quality and social inclusion, contributing to better employability, mobility and safety in the workplace, improving anticipation and management of change in the labour market and enhancing business competitiveness.

The strategy and action plan for vocational education and training in the context of lifelong learning (2013-2020) provide a comprehensive basis for further reforms in key areas: curriculum, infrastructure, capacity of teachers and trainers, management teams, collaboration with higher education, development of social partnership, competitiveness, entrepreneurship and innovation, as factors for development.

It provides a framework and direction for donors' assistance in education and training, and for subsequent planning activities and implementation of IPA II, in the period up to 2020.

The ownership of the whole process by the authorities and all social partners was demonstrated through the support, expert advice and leadership provided by the Ministry of Education and Science, the Centre of Vocational Education and Training, and the Council of the VET strategy.

The European Training Foundation (ETF), through continuous support, expertise, advice and recommendations, contributed to seeking coherence with the relevant EU policies and good practices. The support of ETF allowed this long-standing plan to become a reality.

The strategy will serve policy makers in education, the social partners, providers of education and training and all stakeholders engaged in supporting the vocational education and training system.

Our gratitude and congratulations to the experts' team and all those who participated in the development of the strategy, as well as in coordination and monitoring the whole process.

Our gratitude to all involved for their dedication, hard work and contribution in producing this document, as a step in the reform of vocational education and training.

The new strategy is designed and focused on what is relevant for all stakeholders and provides responses to the question of where we are now and where we want to be in the future.

Panche Krlev, M.Sc.
Minister of Education and Science

ABBREVIATIONS

2-y. VET	Secondary vocational education of 2-year duration
3-y. VET	Secondary vocational education of 3-year duration
4-y. VET	Secondary vocational education of 4-year duration
AE	Adult education
AEC	Adult Education Centre
ALM	Active Labour Measures
BDE	Bureau for Development of Education
CEDEFOP	European Centre for the Development of Vocational Training
ECVET	European credit system in vocational education and training
ECTS	European Credit Transfer System
EPR	European Peer Review
EQAVET	European framework for quality assurance in VET (previously EQARF)
EQF	European Qualifications Framework
ESARM	Employment Service Agency of the Republic of Macedonia
ETF	European Training Foundation
EU	European Union
GDP	Gross domestic product
HE	Higher education
HEAEB	Higher Education Accreditation and Evaluation Board
HVS	Higher vocational specialisation
LLL	Lifelong learning
LM	Labour market
M&E	Monitoring and evaluation
ME	Master exam
MoE	Ministry of Economy
MoES	Ministry of Education and Science
MoF	Ministry of Finance
MoLSP	Ministry of Labour and Social Policy
NAEPM	National Agency for European Education Programmes and Mobility
NDC	Nansen Dialogue Centre
NFIL	Non-formal and informal learning
QA	Quality assurance
RM	Republic of Macedonia
SE	Secondary education
SEC	State Examination Centre
SEI	State Education Inspectorate
SEN	Special education needs
SSO	State Statistical Office
TVET	Technical vocational education and training
VET	Vocational education and training
VNFIL	Validation of non-formal and informal learning
ZELS	Association of Units of Local Self-government

Acknowledgements

The authors of the Strategy for Vocational Education and Training would like to use this opportunity to thank the institutions and individuals who took active part in the research carried out as part of this study and made an invaluable contribution to its formulation.

Special gratitude is due to Mr Pance Krlev, Minister of Education and Science, and to Ms Eduarda Castel Branco, ETF Country Manager and Coordinator of this Project, and Mr Manfred Wallenborn, ETF expert. We extend special thanks also to Ms Elena Ivanovska, Chairperson of the Stakeholder Steering Group, to the members of the Stakeholder Steering Group, and to Mr Igor Nikoloski, Adviser to the Minister, and also to the Director of the Centre for Vocational Education and Training, Mr Zeqir Zeqiri and the staff from the Centre, for their contribution in the coordination of and support to the process of development of the VET Strategy and Action Plan.

The Strategy would not have been so comprehensive and exhaustive, if not for the contribution of the staff from the VET Centre, the representatives of the ESARM and of the Chamber of Commerce of Macedonia. We would like to thank them for their efforts in data collection and facilitation of conditions for efficient field work.

We would like to acknowledge the immense efforts of the Expert Team Members Avzi Mustafa, PhD, Natasha Angeloska-Galevska, PhD, Elizabeta Tomeska-Ilievska, PhD, Elena Rizova, PhD, and Sonja Andonova, MA. Recognition is also due to Elena Misik, MA, for the successful coordination of the process and her expert contribution. We would like to extend our gratitude to the international experts, Mr Bostjan Zgonc-Rozman, Mr Elido Bandelj and Mirjana Kovac, MA.

Our gratitude goes to the Expert Team Leader, Mr Zoran Velkovski, PhD, thanks to whom the Strategy comes to us in its present form.

Executive Summary

The Macedonian vocational education and training as a system has been under enormous pressure for modernisation in the last decades. In addition to economic and political globalisation, technological innovations brought about fast changes in the types of jobs and content of work in the national economy, with permanent changes in the demand for qualifications and new skills; the open market caused expansion of the opportunities for successful transition to work both on a national and on an international level, and the complexity of the demand for new skills at the labour market strongly determine the structure, organisation and content of vocational education and training.

The current system of vocational education and training in the country demonstrates both systemic and programmatic shortcomings. A huge number of persons without qualifications, problems in the relevance of syllabi and curricula, VET which is unattractive to youth and adults, poor collaboration between education institutions and the business sector, the need for new profiles and skills for continuation of education and/or successful transition to the labour market and euro-integration processes highlight the need for modernisation of the country's VET.

This Strategy should help VET grow into a key agent in the development of the workforce, in the creation of an economy that uses its human capital better and becomes increasingly information and knowledge based, in strengthening individual and social productivity, in the economic development and growth of the country, in the improvement of the quality of life, in ensuring full social participation, in employment, in strengthening the employability and professional development of youth and adults and realisation of mobility on national and international level.

The Strategy and measures proposed therein should enable VET to strengthen its attractiveness, relevance and quality and be the driving force in promoting business success, competitiveness and innovations. VET should offer more diversified and flexible learning opportunities for youth and adults to acquire skills that are necessary for their career development and that stimulate entrepreneurial spirit, whilst fostering participation in further education and training, and contributing to active citizenship and personal fulfilment, as well as promote excellence and social inclusion, contribute to greater employability, mobility and job security, enhance anticipation and management of labour market changes and encourage business competitiveness.

The coming period should see measures and activities undertaken in four key areas which are expected to contribute to the realisation of the desired situation in vocational education and training, namely:

- Strengthening the role of vocational education and training in achieving social cohesion in the country and preventing social exclusion of youth and adults which is due to lack of qualifications and skills for achieving participation in the labour force and improvement of quality of life in general,
- Strengthening the attractiveness of vocational education and training through raising public awareness on the opportunities it offers, building diverse and flexible pathways for learning and professional guidance in a lifelong learning context, and development of key competences for lifelong learning,
- Improving the quality of vocational education and training through establishing a system for quality assurance and application of a new pedagogy, and its relevance to the needs of the labour market, as a guarantee for competitiveness,
- Strengthening and innovating the mechanisms for good governance, utilisation of resources, the capacities and accountability in the future VET system and the social dialogue.

1. Background

The Strategy for Vocational Education and Training in a Lifelong Learning Context with the thereto annexed Action Plan is a result of a systematic analysis of the vocational education and training system, on the basis of which the future development of this education subsystem is defined. The Strategy aims at improving the performance of the existing VET system from the perspective of quality of delivery and educational outcomes, effectiveness and relevance for learners (young and adult), as well as for the labour market and further education.

Following negotiations between the VET Centre and ETF and in consultation with the Ministry of Education and Science, it was agreed in 2011 to develop a VET Strategy and Action Plan, based on a comprehensive collaborative research of the current VET system, including consultation with relevant stakeholders and interest groups. Coordination Group¹ was established to support and coordinate the process. Later, MoES launched the Stakeholder Steering Group², which met regularly to monitor the process and ensure its harmonisation it with other actions of the Government of the Republic of Macedonia. The activities of the Stakeholder Steering Group contributed to strengthening ownership over the VET Strategy development process as well as to building capacity for the further enhancement of the VET system in the country.

The European Training Foundation supported the process of development of the VET Strategy and Action Plan in its entirety and provided funding for the work of the independent team of local experts, who carried out the activities leading to the final draft of the VET Strategy and Action Plan. These activities included a comprehensive and participatory consultation process across the country, involving all key stakeholders, relevant state bodies, donors, experts, social partners, and the business and VET communities.

The research phase encompassed analysis of relevant reform documentation, reports, analyses, previous evaluations, statistical data as well as data collected through field research carried out by the Expert Team. Special attention was given to international cooperation in VET and tendencies and practices in VET in Europe and the world. The Strategy provides an overview of the situation and analysis of critical points, and offers possible solutions for establishment of a sustainable and efficient system of vocational education and training in the Republic of Macedonia.

¹ The Coordination Group comprises representatives of the Expert Team and the advisers and Director of the VET Centre.

² Stakeholders represented on the Stakeholder Steering Group are MoES, MoLSP, MoE, VET Centre, AEC, BDE, SSO, ZELS, ESARM, Chamber of Commerce, as well the Expert Team Leader.

The Strategy is a product of collaborative research focused on perceptions of stakeholders on the situations in VET and its impact on the social, economic and education sphere in the country, including: VET teachers and students, VET school directors, university professors and students, professional associations, education authorities, non-governmental organisations, representatives of the business sector, representatives of local authorities, international institutions with vested interest in VET, and a number of other individuals directly or indirectly involved in VET or benefiting from its results. The research is primarily qualitative in nature and uses, in addition to the analysis of reform documentation and statistical data, data and information collected by way of interviews, questionnaires and focus groups (for details on the Methodology, see Annex 1).

1.1 Why do we need a VET Strategy

In its efforts to resolve some of the problems of the country and to create a strong and functional, not only national but also European “architecture”, the VET system faces a most serious challenge in having to respond to questions such as: how should it be designed, what mechanisms should it have at its disposal, and which goals should it strive to achieve in order to prepare youth and adults for all changes and challenges they face and will face throughout their lives? Education today, unlike in the past, is required to achieve two basis goals: the first one is based on global values and supports the main developments characteristic of the contemporary globalised world, namely collaboration, compatibility, competitiveness, integration, etc., and the second one is based on the national culture and values and supports the resolution of national problems and development issues. It must do so with consistent respect for the principles of solidarity and social justice and through combining efficiency, adaptability and creativity.

Moreover, VET does not only contribute to individual development through educational achievement, but at the same time also to enhanced labour market opportunities for the learners and greater competitiveness of the economy. VET innovation and reform is addressed within this socio-economic context.

1.2 Life and work evolve

What will be the characteristics of education and training, that we can expect in the coming years but that is not yet visible to us all? The near future surrounds us with all its social and technological connections in the country and abroad. Quick, dynamic change is all around us and transforms the way we live, think, work and learn on a daily basis.

Processes of economic, political, educational, cultural and environmental globalisation confront us with the fast expansion of scientific achievements and innovations, dynamic progress of technics and technology and development of the economy, the business sector and

organisational structures. The daily onrush of innovations with a shrinking shelf-life and time periods in between the emergence of technological innovations, their integration and up-take, their application and replacement by new technologies, makes them out-dated and obsolete faster than ever before, faster than the world expected. What we call evolution in technics and technology causes in fact a revolution in our everyday life and work. The one thing that is certain is that nothing is certain, permanent and easily predictable. We are constantly surrounded by various embodiments of changes and we must rise to the challenges.

We live in times of pronounced economic turbulence, accompanied by crises which are hard to predict. In 2012, the world faced serious employment challenges and a huge job deficit. The three years of continuous crisis on the global workforce markets generated increase in unemployment by 27 million at the beginning of the crisis, which, according to an ILO projection will in 2016 reach 206 million unemployed throughout the world.³

In 2011, 74 800 000 young people aged 15-24 were unemployed globally, which is an increase of over 4 million from 2007. The global unemployment rate of young people of 12.7% is a full percentage higher than its pre-crisis level. Globally, young people are almost three times more likely to be unemployed than adults. Black scenarios, in the context of current developments, forecast little hope for significant increase in employment opportunities for young people in the near future.⁴

Due to the interdependence of the economies of the European countries, the crisis caused a chain reaction which spared no country from unwanted consequences in all sectors. As is highlighted in "Europe 2020"⁵, the economic crisis erased the stable values of economic growth and creation of jobs, which were a result of the efforts of European countries made in the last decade. EU GDP fell by 4% in 2009, whereas industrial production fell back to the level it had had in the nineteen-nineties. This triggered unemployment of 23 million people, or 10% of the active population in the countries of the European Union. Public finances suffered a heavy blow, with an average deficit of 7% of the GDP and debt levels of over 80% of the GDP. In simple terms, two years of crisis wiped out the fiscal consolidation of the last twenty years.⁶

It is widely acknowledged that present times are characterised by *intellectualisation of the profession and of labour*. In the past, the economy fought for competitiveness through mass production, cheap labour force, raw materials, energy, technology and later automatisation. The economy of today pursues its competitiveness through digital technology, knowledge and innovations. It is entrepreneurship oriented and thrives through alliance between businesses and strategic partnerships.

³ ILO (2012): Global Employment Trends 2012 - Preventing a deeper jobs crisis, International Labour Office, Geneva

⁴ Ibid

⁵ European Commission (2010): EUROPE 2020 - A strategy for smart, sustainable and inclusive growth, Brussels, 3.3.2010, COM(2010) 2020 final

⁶ Ibid

Information technology developments, especially in mobile technologies, made it possible for work to be less dependent on time and space. We are all witnessing dynamic changes in the structure, contents and processes of work. Work is today more complex from a cognitive aspect, necessitating team work and collaboration, and more dependent on social skills and technological competences. It is more mobile and less dependent on geography than in the past. Hence, there is a need of fast reforming of the workforce market in order for it to function better, and of devoting special attention to upgrading of skills.

Another trend is stirring commotion among the public and policy-makers throughout the world. The trend in question relates to the expansion of the workforce, which exerts additional pressure on education and training systems and job offers. Reports of the United Nations indicate that in the last decade, working age population has increased globally by about 600 million.⁷ At the same time, the number of those working in the informal sector is on the rise, in direct relation to the economic situation.⁸ This situation, despite declining birth-rates, is a result of raising the retirement age limit and increase in life expectancy.

A similar trend is evident in our country. As can be seen from Table 1, the participation rate of the working age population (15-64 years) was 68.29% in 2002, increasing gradually each year to reach 71.10% in 2012.

Table 1. Working age population in Macedonia (15-64)

year	population	working age population	men	women	%
2012 ⁹	2 059 794 ¹⁰	1 464 629	742 418	722 210	71.10
2011 ¹¹	2 058 539	1 457 219	738 210	719 009	70.78
2010 ¹²	2 055 004	1 447 957	733 393	714 564	70.46
2002 ¹³	2 022 547	1 381 352	698 997	682 355	68.29

This trend should sound alarm in education and training. The older population will evidently participate at a higher rate in the workforce, which affirms the significance of adult education

⁷ UNESCO (2012): Transforming Technical and Vocational Education and Training Building skills for work and life, United Nations Educational, Scientific and Cultural Organization, Paris 2012

⁸ OECD (2009): Development Centre Studies Is Informal Normal?: Towards More and Better Jobs in Developing Countries

⁹ SSO, Labour Market, News Release – Active population in the Republic of Macedonia, Results from the Labour Force Survey, IV trimester 2012, 18.03.2013

¹⁰ According to Eurostat, accessible at:

<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tps00001&tableSelection=1&footnotes=yes&labeling=labels&plugin=1>

¹¹ SSO, Labour Market, News Release – Active population in the Republic of Macedonia, Results from the Labour Force Survey, IV trimester 2011, 18.03.2013

¹² SSO, Labour Force Survey, 2010, Statistical Review: Population and social statistics, Skopje, November 2011

¹³ SSO, Census of the population, households and dwellings in the Republic of Macedonia, 2002

and the need to better integrate non-formal education into the overall educational system. On the other hand, problems arise also in the process of creating new jobs and employment, especially for adults who have lost their jobs or are returning to the labour market.

The new age requires resoluteness and perseverance. Changes in life and work present serious challenges we need to respond to adequately and timely. Instead of waiting for change to come upon us, we need to rise and undertake all actions necessary to ensure development of our economy and wellbeing for all. As stated in the foreword to the European Strategy 2020, “The crisis is a wake-up call, moment where we recognise that “business as usual” would consign us to a gradual decline, to the second rank of the new global order. This is Europe's moment of truth. It is the time to be bold and ambitious.”¹⁴

In such unpredictable future which is, the prosperity of our country must undoubtedly be pursued in a global competition of ideas, knowledge and skills. We must improve the skills of the people and adapt them to the specific demands of the new economy, and strengthen our capacities for research and development. These are the pillars on which our future should rest.

1.3 New age – new skills

High unemployment, technical progress and globalisation, on one hand, and reorganisation of production processes and aging of the population, on the other, have significantly changed the demand for skills in the last decades. As a result of these long-term trends, according to CEDEFOP analyses, it is not certain that skills and qualifications acquired in the education system will be in able to meet current and emerging needs, which means that mismatch and gaps will possibly persist in the chain of skills supply and demand.¹⁵

The transformation of knowledge about the work into skills for performing the work, highlights the need for a workforce which not only possesses specialised knowledge, relevant for the jobs, but also possesses developed generic knowledge and skills necessary to adapt to new technologies and to change the reality in which it operates. Today, more than ever, it is of crucial importance for all citizens to receive high quality education and training to be equipped with key competences¹⁶ they need to be economically active and employable and improve life overall.

¹⁴ José Manuel Barroso, Report of the Commission, Europe 2020 – Strategy for Smart, Sustainable and Inclusive Growth, Brussels, 2010

¹⁵ CEDEFOP (2012): From education to working life - The labour market outcomes of vocational education and training, Luxembourg: Publications Office of the European Union, 2012

¹⁶ Competences are taken to signify the ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development). The entire professional terminology used in VET is available in: CEDEFOP (2008): Terminology of European education and training policy, Luxembourg: Office for Official Publications of the European Communities, 2008

Consequently, each country should focus on continuous strengthening of the workforce with knowledge, skills and attitudes that cannot be acquired only through the formal education system.

In order to overcome disparities between education supply and education demand, the European Commission launched in 2008 the initiative “New Skills for New Jobs”. The goal of this initiative was to improve anticipation of future skills needs, to develop better matching between available skills and labour market needs, and to bridge the gap between the worlds of labour and education.¹⁷ Anticipation and matching of the labour market and the skills needs has emerged as a top priority for the EU. To this end, the European Commission will support in the coming period the establishment of sectoral councils for skills on a European level for initiatives coming from social partners or appropriate observatories.¹⁸ In this context, many EU countries have established offices, councils or observatories tasked with anticipation and forecasting of skills that the labour market needs, through pooling the efforts of representatives of the labour market and of providers of educational and training services.

Ensuring the right mix of skills is another one of EU’s priorities. For this commitment to come to fruition, it is necessary for the education and training system to deliver the right combination of skills, including digital and transversal key competences, media literacy and communication in a foreign language. In the process, the system must ensure that young people graduating from secondary or higher education possess skills and competences necessary for making a speedy and successful transition towards employment.¹⁹

The fight against early termination of schooling and low educational achievements in basic skills such as literacy, numeracy/mathematics and science, including of adults, is an essential element for inclusion, employment and growth. Continuing training must reach the benchmark of 15% of all adults participating in lifelong learning.²⁰

Adults with low education attainments are seven times less likely to continue their education and training than those with higher education attainments, thus missing out on opportunities for acquiring much needed new skills.²¹ This approach necessitates better collaboration between all stakeholders, especially labour market and education, and moving away from traditional approaches of appraising skills only through formal learning.

¹⁷ European Commission (2010): Agenda for new skills and jobs: EU sets out actions to boost employability and drive reform, Strasbourg, 23 November 2010

¹⁸ COM(2008) 868, 16.12.2008. Council conclusions of 9.3.2009 and 7.6.2010. 'New Skills for New Jobs: Action Now' Expert Group Report, February 2010

¹⁹ European Commission (2010): Agenda for new skills and jobs: EU sets out actions to boost employability and drive reform, Strasbourg, 23 November 2010

²⁰ Council conclusions on the “Strategic Framework for European cooperation in education and training ET(2020)” (doc. 9845/09)

²¹ European Commission (2010): Agenda for new skills and jobs: EU sets out actions to boost employability and drive reform, Strasbourg, 23 November 2010

Special emphasis is increasingly devoted to enhancing entrepreneurial competences of youth and adults. Entrepreneurship is more and more seen as an agent of future development. "If Europe wants to stay competitive, it must invest in its people, in their skills, in their ability to adapt and in their ability to innovate. This means that we need to encourage a real change of mind-set in Europe towards entrepreneurial attitudes and this starts by instilling a spirit of entrepreneurship from early education onwards." ²²

Implementation of approaches based on competences and skills will bring comprehensive changes in the education system, the labour market, as well as in their interaction. Changes are expected in the operation of employment services, in skills assessment, design of profiles, in delivery of training, collaboration between education and training providers, work of career centres, etc. It is necessary to strengthen the collaboration between employment service agencies and centres for career/professional guidance, in order to ensure that clients (young people and adults) receive genuine information on the labour market and opportunities for further education and training.

It is important to ensure in the coming period that employers are encouraged to cooperate, invest and participate in education and training activities, especially in vocational education and training and higher education. Such a partnership should result in continuing development and innovation of educational profiles, implementation of multidisciplinary curricula and qualifications, and facilitation of work-based learning.²³ To this end, activities must be undertaken that entail efficient implementation of legislative, institutional and funding arrangements for continuing TVET, and encouraging enterprises and individuals, through incentives, to invest in the development of skills, including validation of prior learning, and using appropriate approaches to lifelong career guidance and counselling.²⁴

Various analyses indicate that applied skills, such as reading comprehension and mathematics, outweigh basic knowledge on all educational levels; whilst they are still fundamental for the abilities of the new workforce to efficiently perform their respective tasks, employers emphasise that applied skills, such: foreign language command, critical thinking and problem solving, oral and written communication, teamwork and collaboration, diversity, ability to apply information technology, leadership, creativity and innovation, abilities for lifelong learning and self-direction, professionalism and work ethics, ethics and social responsibility, are abilities companies seek in future workers.²⁵

²² European Commission - Press release, Entrepreneurship education on the increase, Brussels, 13 April 2012

²³ European Commission (2010): Agenda for new skills and jobs: EU sets out actions to boost employability and drive reform, Strasbourg, 23 November 2010

²⁴ Unesco (2012): Transforming Technical and Vocational Education and Training Building skills for work and life, United Nations Educational, Scientific and Cultural Organization, Paris 2012

²⁵ The Conference Board, Corporate Voices for Working Families, the Partnership for 21st Century Skills, and the Society for Human Resource Management (2006): Are They Really Ready To Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce, survey, ISBN No. 0-8237-0888-8

1.4 The VET Strategy in an international context

Latest pertinent European Union documents provide the framework in which the VET Strategy is designed and implemented. Special attention is given to the Copenhagen Process and the Bruges Communiqué, which outline general objectives for all European VET systems. As a signatory, the Republic of Macedonia needs to take due account thereof and ensure that its VET Strategy is in close harmony, esp. as regards the goals of the VET system. Given that the Republic of Macedonia is part of Europe and shares the problems in VET, the recommendations provided in EU documents and related trends underpinning VET reforms in EU countries, create the foundation on which solutions provided in this Strategy rest.

The VET Strategy in a LLL perspective is based on all national actors directly or indirectly linked to VET assuming responsibility for implementation of global policies governing this education segment. In this sense, the state needs to assume responsibility for the implementation of the goals, principles and recommendations enshrined in European and global documents focusing on development of education. Strategic approaches, priorities and recommendations contained in: “*Education for All*” (2000)²⁶, the *UN Millennium Development Goals (2000)*²⁷, the Lisbon Agenda (1997 and 2001)²⁸, the Copenhagen Declaration (2002)²⁹, the Memorandum on Lifelong Learning (2000)³⁰, the Maastricht Communiqué (2004)³¹, the Bordeaux Communiqué (2008)³², the Bruges Communiqué (2010)³³, the Torino process (2010)³⁴, the European Commission’s “*Education and Training – 2020*”³⁵ and the *Bologna Process*³⁶ present a reference

²⁶ UNESCO (1990): World Conference on Education for All - Meeting Basic Learning Needs, Jomtien, Thailand, 5-9 March

²⁷ UNDP (2000), Millennium Development Goals (MDG) - United Nations Millennium Declaration, Millennium Summit in New York, 6-8 September

²⁸ EC (1997), Convention on the Recognition of Qualifications Concerning Higher Education in the European Region, Lisbon; Commission of the European Communities (2001), Report from the Commission: The Concrete Future Objectives of Education Systems, Brussels, 31.01.2001, COM(2001) 59 Final

²⁹ European Council (2002): Declaration of the European Ministers of Vocational Education and Training, and the European Commission, convened in Copenhagen on 29 and 30 November 2002, on enhanced European cooperation in vocational education and training - “The Copenhagen Declaration”, Copenhagen

³⁰ Commission of the European Communities Brussels, 30.10.2000 Sec(2000) 1832 Commission Staff Working Paper - A Memorandum on Lifelong Learning

³¹ Maastricht Communiqué, on the Future Priorities of Enhanced European Cooperation in Vocational Education and Training (VET), 14 December 2004 (http://ec.europa.eu/education/lifelong-learning-policy/doc/vocational/maastricht_en.pdf)

³² The Bordeaux Communiqué on enhanced European cooperation in vocational education and training, Communiqué of the European Ministers for vocational education and training, the European social partners and the European Commission, meeting in Bordeaux on 26 November 2008 to review the priorities and strategies of the Copenhagen process

³³ The Bruges Communiqué on enhanced European Cooperation in Vocational Education and Training for the period 2011-2020, Communiqué of the European Ministers for Vocational Education and Training, the European Social Partners and the European Commission, meeting in Bruges on 7 December 2010 to review the strategic approach and priorities of the Copenhagen process for 2011-2020

³⁴ The Torino Process, accessible at: http://www.etf.europa.eu/Web.nsf/pages/Torino_Process_EN

³⁵ The Council of the European Union (2009): Notices from European Union Institutions and Bodies, Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (‘ET 2020’), Official Journal of the European Union (2009/C 119/02)

³⁶ Bologna Process European Higher Education Area: Accessible at <http://www.ehea.info/>

framework which presents goals which the state, and thus its education system, should pursue in the coming period.

The VET Strategy of the Republic of Macedonia emerges in an environment of intensive activities in this area in the broader European environment. Building on the fundamental goal of the *Lisbon Strategy*, “Europe to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion”³⁷, the members of the European Union developed a dynamic process of initiatives for reforming VET systems. The starting point was that “although national governments are responsible for education and training, some challenges are common to all member countries: aging societies, skills deficit among the workforce and global competition need common responses and for the countries to learn from each other”. The focus was placed, in the process, on lifelong learning which is to become reality throughout Europe and which is seen as key to growth and jobs as well as to opportunities for the individual’s full participation in social life.

The VET Strategy rests on the conclusions and recommendations of the Copenhagen declaration which underscores that “the transition towards a knowledge based economy capable of sustainable economic growth with more and better jobs and greater social cohesion brings new challenges to the development of human resources”.³⁸ In these efforts, “the development of high quality vocational education and training... notably in terms of promoting social inclusion, cohesion, mobility, employability and competitiveness” is key.³⁹ The European Commission highlights the importance of strengthening management of institutions for education and training and developing effective systems for quality assurance. It similarly emphasises the significance of taking into account future skills requirements and labour market needs in education and training planning processes.⁴⁰ The Lisbon goals, as stated in the Maastricht Communiqué, can be achieved through „strengthening the contribution of VET systems, institutions, enterprises and social partners” through: use of common instruments, incentive effects of tax systems, greater participation of persons with diverse needs, partnerships for quality assurance, etc.”⁴¹

The *Bordeaux Communiqué* recommendations (2008) placed into the spotlight initiatives for implementation of tools and schemes for promoting collaboration in the area of VET on a

³⁷ Commission of the European Communities (2001), Report from the Commission: The Concrete Future Objectives of Education Systems, Brussels, 31.01.2001, COM(2001) 59 Final

³⁸ European Council (2002): Declaration of the European Ministers of Vocational Education and Training, and the European Commission, convened in Copenhagen on 29 and 30 November 2002, on enhanced European cooperation in vocational education and training - “The Copenhagen Declaration”, Copenhagen

³⁹ Ibid

⁴⁰ The Council of the European Union (2009): Notices from European Union Institutions and Bodies, Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (‘ET 2020’), Official Journal of the European Union (2009/C 119/02)

⁴¹ Maastricht Communiqué, on the Future Priorities of Enhanced European Cooperation in Vocational Education and Training (VET), 14 December 2004 (http://ec.europa.eu/education/lifelong-learning-policy/doc/vocational/maastricht_en.pdf)

national and European level, the improvement of the quality and attractiveness of national VET systems and the links between VET and the labour market, as well as strengthening European collaboration arrangements.⁴²

The Ministers of Education of the member countries revised the future priorities for VET established in Copenhagen, by adopting the Bruges Communiqué and defining the goal to make by 2020 the European VET systems more attractive, relevant, career-oriented, innovative, accessible and flexible and excellent than in 2010.⁴³

The priorities emerging from the Copenhagen process are an inherent part of the EU fundamental strategy “Education and Training 2020”⁴⁴, where member states clearly present their vision for education and training in the year 2020, expressed through the commitments for:

- making lifelong learning and mobility a reality;
- improving the quality and efficiency of education and training;
- promoting equality, social cohesion and active citizenship;
- enhancing creativity and innovation, including entrepreneurship, at each level of education and training.

In this sense, one of the major priorities of each country, including the Republic of Macedonia, is the strengthening of the system of VET to respond to the challenges it faces by establishing a flexible organisational structure and developing mechanisms and instruments which will enable it to offer timely the skills demanded by the labour markets and life in general, and to contribute in the realisation of the benchmarks set in “Education and training 2020” (see Box 1).

⁴² The Bordeaux Communiqué on enhanced European cooperation in vocational education and training, Communiqué of the European Ministers for vocational education and training, the European social partners and the European Commission, meeting in Bordeaux on 26 November 2008 to review the priorities and strategies of the Copenhagen process

⁴³ The Bruges Communiqué on enhanced European Cooperation in Vocational Education and Training for the period 2011-2020, Communiqué of the European Ministers for Vocational Education and Training, the European Social Partners and the European Commission, 7 December 2010

⁴⁴ The Council of the European Union (2009): Notices from European Union Institutions and Bodies, Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training (‘ET 2020’), Official Journal of the European Union (2009/C 119/02)

Box 1: EU Education and training 2020 benchmarks - status: 21/03/2013⁴⁵

1. **By 2020, at least 95% of children between 4 years old and the age for starting compulsory primary education should participate in early childhood education.** Participation in early childhood education lies at 29.6% against the EU-27 average of 92.3%⁴⁶, pointing out that additional efforts need to be made to reach the EU level.
2. **By 2020, the share of low-achieving 15-years olds in reading, mathematics and science should be less than 15%.** Through participating in PISA 2015, the country will be able to establish its achievement level against this benchmark.
3. **By 2020, the share of early leavers from education and training should be less than 10%.** Early school leaving⁴⁷ with a remarkable improvement of 10.8 percentage points between 2006 and 2012 (from 22.8 to 12.0%), the country performs better than the EU-27 average (12.9%). The female indicator is slightly worse than the male.
4. **By 2020, the share of 30-34 year olds with tertiary educational attainment should be at least 40%.** In the period between 2006 and 2012, with an increase by 10.3 percentage points, the country reached 21% (against the EU-27 average of 35.5%, 2012)⁴⁸. In line with trends elsewhere the female indicator is higher.
5. **By 2020, an average of at least 15% of adults (25-64 years old) should participate in lifelong learning.** Participation in adult learning lies at 3.3% against the EU average of 9.3%. The country registered an increase from 2.3% to 3.3% between 2005 and 2009 (outperforming many other Southeast European countries as well as Turkey⁴⁹). Data for 2011 show an increase to 3.4%.⁵⁰
6. **At least 20% of higher education graduates and 6% of 18-24 years-olds with an initial VET qualification should have had a period of study abroad.** The European Commission's Education and Training Monitor 2012 specifies that graduate data are not yet available for many countries and it is not possible to indicate the level at which the benchmark currently lies. Looking at enrolment data, the country performs relatively well, with 6.6% (2010) of all higher education students enrolled in another EU member state, EEA or candidate country⁵¹.
7. **Share of employed graduates (20-34 year-olds) having left education and training no more than three years before the reference year should be at least 82%.** In 2011, the total country employment rate (population 20-64) was 48.4% (and only 38.8% for females), which compares low to the EU-27 average of 75.2% (and 62.3% for females)⁵².

⁴⁵ Country summary box according to ETF (2013), Torino Process 2012, former Yugoslav Republic Macedonia, forthcoming.

⁴⁶ European Commission, Education and Training Monitor 2012, SWD(2012) 373/2. accessed on: 18/03/2013, accessible at : http://ec.europa.eu/education/news/rethinking_en.htm

⁴⁷ http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators

⁴⁸ http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020_41&language=en

⁴⁹ European Commission. 2001 c, p. 35. European Commission. 2001 c, p. 35. Bulgaria: 1.4%; Croatia: 2.3%; Romania: 1.5%; Slovakia: 2.8%; Turkey: 2.3%. Data source: Eurostat (LFS database), May 2010. This indicator refers to persons aged 25 to 64 who stated that they received education or training in the four weeks preceding the survey (numerator). The denominator consists of the total population of the same age group, excluding those who did not answer to the question 'participation to education and training'. Both the numerator and the denominator come from the EU LFS. The information collected relates to all education or training regardless of relevance to the respondent's current or possible future job.

⁵⁰ SSO, Situation from 16.11.2012; According to the SSO, participation in LLL represents participation of persons aged 25-64 who take part in the process of education and training in the total population from the same age group.

⁵¹ European Commission, Education and Training Monitor 2012, SWD(2012) 373/2. Accessed on: 18/03/2013, accessible at: http://ec.europa.eu/education/news/rethinking_en.htm. str. 41

⁵² http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=0&pcode=t2020_10&language=en

2. VET system – main features, opportunities and challenges

Today's global economic crisis triggered and is expected to generate additional pressure on the country's vocational education and training system. A great challenge for VET is expected to lie in the adaptability of those who lose their jobs in an environment of reduction of public and private funding, and the ability of VET to provide sufficient competences and aptitude for mobility in work and learning to those young people and adults who are or will be in the process of education and training. To what extent can VET fulfil its new role depends primarily on education policies, on the commitment and capacities of those implementing the best possible solutions and on the ability to efficiently utilise the resources and capacities available to the country.

In parallel to economic and political interventions and reforms, the country stands is faced with a challenge to improve the quality and efficiency of vocational education and training. It strives towards harmonising and adapting this system to the standards intrinsic for the EU member countries.

In the last two decades, a number of reform interventions and activities were carried out in VET in the Republic of Macedonia, with the following features:

- efforts to strengthen the legislative environment in VET
- changes in the structure of vocational education and training, through:
 - increase of the duration of compulsory education through introduction of compulsory secondary education,
 - introduction of curricula with different durations and for different levels of qualifications,
 - establishment of adult education as an inherent element of the overall education system,
 - complementing the network of public education institutions with privately owned institutions,
- introduction of the State Matura and external assessment,
- first steps towards defining the National Qualifications Framework,
- enhancing (in 2012) the work of developing new standards of occupations, qualifications and revised syllabi for certain profiles mainly in 2-y. and 3-y. VET,
- commencement of decentralisation in management and governance and transfer of competences and responsibilities from the central to the local level,
- changes in the system of funding,
- certain improvements in the equipment and physical facilities in VET schools,
- attempts to strengthen social partnership through signature of concrete Memoranda between the ministries and professional bodies responsible for VET and chambers, as well between individual VET schools and companies,

- strengthening the institutional capacities for support to VET (establishment of VET Council and Centre, Adult Education Council and Centre, etc.),
- initiatives for modernisation of VET institutions,
- curriculum innovations (change of goals, introduction of new subjects, interdisciplinary approach, and adaptation of the curriculum to the needs of clients, etc.),
- training of teachers from VET schools,
- attempts to create inclusive schools,
- efforts for active involvement of stakeholders in development and decision-making processes,
- entry of private capital in vocational education and training,
- orientation towards efficient education policies.

Issues such as: How to develop an efficient curriculum which meets the needs of a wider group of clients (students, parents, employers, educational facilities, society in general, etc.)? What kind of initial education teachers need and how to position an efficient and dynamic system for professional in-service training of teachers? How is the school administration to be reorganised? What is the role of the education inspection? How are data to be collected on the work of schools and destinations of students upon graduation? How are relevant stakeholders to be involved not only in the work and decision making of schools, but also in the development of educational policies? How is high quality learning to be ensured? How is an efficient education dialogue to be established and who is to take part in it? How is efficient management of reforms to be set up?, etc., will exhaust the attention of the expert community and competent institutions.

2.1 The environment in which VET operates

Vocational education and training operates in an environment strongly affected by a number of factors that presents challenges for its change and improvement of its functioning.

The most pronounced problem the country faces is high unemployment. The official unemployment rate, according to the Workforce Survey (ILO definition), amounted in the third trimester of 2012 to 30.6%⁵³ and is the highest in Europe.

⁵³ SSO: Labour market, Active population in the Republic of Macedonia, Results from the Labour Force Survey, III trimester 2012

Table 2: Key indicators on the labour market in Macedonia⁵⁴

year	Working age population	Active population			Activity rate	Employment rate (15-64)	Unemployment rate
		total	employed	unemployed			
2004	1 594 557	832 281	522 995	309 286	52.2	32.8	37.2
2005	1 607 997	869 187	545 253	323 934	54.1	33.9	37.3
2006	1 618 482	891 679	570 404	321 274	55.1	35.2	36.0
2007	1 628 635	907 138	590 234	316 905	55.7	36.2	34.9
2008	1 633 341	919 424	609 015	310 409	56.3	37.3	33.8
2009	1 638 869	928 775	629 901	298 873	56.7	38.4	32.2
2009/IV	1 642 360	921 534	622 720	298 814	56.1	37.9	32.4
2010/IV	1 652 026	954 928	659 557	295 371	57.8	39.9	30.9
2011/IV	1 659 180	937 326	639 340	297 986	56.5	38.5	31.8
2012/III	1 670 550	940 657	652 498	288 159	56.3	39.1	30.6

Source: SSO

In the third trimester of 2012, the activity rate was 56.3%, with an activity gender gap of 22.2%.⁵⁵ The share of women in the total active population in the RM in the third trimester of 2012 is 38.9%, with men making up for the remaining 61.1. The activity rate of women is lower than that of men, primarily as a result of the traditional family role of women in society, especially among women of ethnic minorities, hence their employment rate is well below the employment rate of men of (47.4%) at 30.8%.⁵⁶

Unemployment is most pronounced among youth aged 15-24, with a rate as high as 52.1%.⁵⁷

Within the total number of unemployed, the dominant group are those with completed secondary education of 4-year duration (42.00%) and those with lower education attainments⁵⁸ (42.27%).⁵⁹ Unemployment is especially high in urban areas (65.75%)⁶⁰, which is understandable given the fact that the economic crisis and the transition impacted most strongly the large industrial capacities which had previously catered for the majority of the workforce. Persons with low skills have a higher participation rate in the group of unemployed (63.0%), and those with high skills a lower rate (37.0%).⁶¹

⁵⁴ SSO: Labour Market, Active Population in the Republic of Macedonia, Results from the Labour Force Survey, III trimester 2012

⁵⁵ SSO: Labour Market, Active Population in the Republic of Macedonia, Results from the Labour Force Survey, III trimester 2012

⁵⁶ SSO: Labour Market, Active Population in the Republic of Macedonia, Results from the Labour Force Survey, III trimester 2012

⁵⁷ SSO: Labour Market, Active Population in the Republic of Macedonia, Results from the Labour Force Survey, III trimester 2012

⁵⁸ Pertains to persons with 3-year secondary education, with primary, incomplete primary education and without education.

⁵⁹ SSO: Labour Market, Active Population in the Republic of Macedonia, Results from the Labour Force Survey, III trimester 2012

⁶⁰ Source: ESARM, Situation from 08.01.2010

⁶¹ Source: ESARM, Situation from 31.10.2012

In regard to length of unemployment, 82.6% of all unemployed are long-term unemployed; further 62.21% have been waiting for over 4 years.⁶² According to data from the end of 2009, this percentage is highest among persons with incomplete primary education (72.40%) and persons without education (61.16%).⁶³

In an environment of educational abstinence, fast outdated of knowledge and rapid dynamics of technological development, long-term unemployment becomes a serious problem. It results with out-dated competences and declining work abilities. The percentage of long-term unemployment is much higher than the average of the Central and Eastern Europe countries of 55.3% in 2002 and than the EU average of 40.2%. It is concerning that close to two thirds of the unemployed have been waiting for over 4 years. This is extremely detrimental to their working competence and employment chances.

In 2011, the country's employment rate of persons with tertiary education, although the highest, dropped by 1.5% in comparison to 2010. The employment rate of persons with secondary education, which is regarded as the minimum level necessary for successful integration in society, was 58.3%, with the lowest employment rate of 34.3% found among persons with at most completed primary education.⁶⁴

The majority of those with a job (51.86%) are employed in the services sector, whereas 29.04% are employed in industry and 19.09% in the agriculture sector.⁶⁵ Although precise data are not available, the general assumption prevails that a large portion of the registered unemployed are active in some form of economic activity in the so-called "grey economy". Research of the Employment Services Agency of the RM reveals that a sizeable portion of the unemployed register only for the purpose of being eligible for social welfare.

In 2011, ESARM registered a total of 225 347 new employments – permanent and temporary and seasonal work. From the total number of newly employed, 38.20% are permanent employments, whereas the rest are temporary employments or seasonal hire. In comparison to the previous year, an increase of 3.07% in new employments can be noted.⁶⁶

Data on education attainment of the employed reveal that 24.50% have completed primary education at most; 12.36% are with 3-year secondary education and further 42.17% of the employed have completed 4-year secondary education; 20.96% of the employed hold a 2 or 3-year post-secondary degree or a higher education degree.⁶⁷ In comparison with 2009 and 2010, an increase is noticeable in the number of employed having completed 4 -year secondary

⁶² SSO, Labour Market, Labour Force Survey, 2011

⁶³ Source: ESARM, Situation from 31.12.2009

⁶⁴ SSO, Sustainable development, 2012, Skopje, 2012

⁶⁵ Calculated according to: SSO, Labour Market, Labour Force Survey, 2010

⁶⁶ ESARM: Review of registered applications for employment from the register and from outside the register for unemployed persons in the period 01.01.2010-31.12.2010 and 01.01.2011-31.12.2011

⁶⁷ SSO, Labour market, Active population III trimester, 2012

education and of those with higher education degrees, at the expense of those employed with a lower educational attainment.

The development of small and medium enterprises, as well as the growth in the industry and services sector impacts to a small degree the increase of the employment rate, due to the slow economic development of the country and the poor financial potential of the population.

In recent time, the private sector has been offering the population limited opportunities for employment compounded with a sense of insecurity among the employed. Although the rate of persons employed in the private sector grew from 41.6% in 1999 to 74.96% in 2011,⁶⁸ the private sector has failed to absorb the individuals who had lost their jobs as a consequence of the economic crisis and the transition.

Companies with 1-9 employees make up 78.51% of all registered companies. Companies without any employees (or companies that do not reveal the number of employees) make up for 14.24% of all companies, followed by companies with 10-19 employees with 3.29%, companies with 20-49 employees with 2.08%, companies with 50-249 employees with 1.6% and companies with over 250 employees with 0.27%.⁶⁹ The majority of companies with 1-9 employees are concentrated in the trade, crafts and services sector.

A high number of rural inhabited places (of a total of 1728) are either fully depopulated (141) or have extremely low population numbers, and very soon, due to the age composition of their inhabitants are highly likely to become depopulated (455 settlements have under 50 inhabitants and additional 180 under 100 inhabitants). On the other hand, in a relatively small number of villages (dominantly situated in the western and north-eastern part of the country) the concentration of the population is very high.⁷⁰

In regard to population aging, in the period 2000-2011, the share of the young population (0-14) in the total population decreased from 22.28% in 2000⁷¹ to 17.3 % in 2011⁷², whereas the share of the older population (65 and over) increased from 9.98% in 2000⁷³ to 11.8% in 2011.⁷⁴

⁶⁸ Ibid.

⁶⁹ SSO, Business entities, Situation: 25.02.2011

⁷⁰ SSO, Macedonia in numbers 2011

⁷¹ Calculated according to: SSO, PC-AXIS documents for the requested area: Population estimations, Population in the Republic of Macedonia on 30.06. by specific age group, gender, municipality as per administrative division of the territory from 1996, by year. Accessible at: [http://makstat.stat.gov.mk/pxweb2007bazi/Database/Statistika po oblasti/Naselenie/Proceni na naselenie/Proceni na naselenie.asp](http://makstat.stat.gov.mk/pxweb2007bazi/Database/Statistika%20po%20oblasti/Naselenie/Proceni%20na%20naselenie/Proceni%20na%20naselenie.asp)

⁷² SSO, <http://www.stat.gov.mk/OblastOpsto.aspx?id=2> (situation from 30.06.2011)

⁷³ Calculated according to: SSO, PC-AXIS documents for the requested area: Population estimations, Population in the Republic of Macedonia on 30.06. by specific age group, gender, municipality as per administrative division of the territory from 1996, by year. Accessible at: [http://makstat.stat.gov.mk/pxweb2007bazi/Database/Statistika po oblasti/Naselenie/Proceni na naselenie/Proceni na naselenie.asp](http://makstat.stat.gov.mk/pxweb2007bazi/Database/Statistika%20po%20oblasti/Naselenie/Proceni%20na%20naselenie/Proceni na naselenie/Proceni na naselenie.asp)

⁷⁴ SSO, <http://www.stat.gov.mk/OblastOpsto.aspx?id=2> (situation from 30.06.2011)

The education attainment of a significant portion (41.67%) of the population over 15 is low; 2.24% have no education at all, 8.01% did not complete primary education, and 31.41% completed only primary education.⁷⁵ Of the remaining population, 9.42% completed 3-year and 34.39% 4-year secondary education, whereas only 2.47% 2-year or 3-year post-secondary and 12.05% higher education⁷⁶. In the period between 2002 and 2011, the number of persons with low education attainment decreased by 8.23%, while the number of those with higher education increased by 5.02%. On the other hand, the participation of persons with higher education in the body of unemployed increased in the same period by 8.23%, whereas the participation of persons with lower educational attainment decreased by 11.05%.⁷⁷ This trend clearly indicates that in the coming period, persons with high skills levels will put additional strain on the labour market and employment processes.

In regard to the participation of adults in the processes of lifelong learning, little progress has been made in the last period. In 2011, 3.4% of adults participated in forms of adult education.⁷⁸ This is very low in comparison with the EU-27, which has an average of 8.9%. Certain EU countries have exceeded the 2020 benchmark of participation in lifelong learning of 15%, such as: Denmark (32.3%), Switzerland (29.9%), Sweden (25.0%) and many others, whereas some countries, such as Bulgaria (1.2%), Greece (2.4%), Hungary (2.7%) and Romania (1.6%), like Macedonia, need to invest significant efforts in reaching the said benchmark.⁷⁹

2.2 The structure of the VET system

Every system for vocational education and training in the world comprises more or less organised or structured education levels and activities that aim to provide people with the knowledge, skills and competences necessary to perform a job or a set of jobs, whether or not they lead to a formal qualification. VET is independent of venue, age or other characteristics of participants and previous level of qualifications. Vocational education and training may be job-specific or directed at a broader range of occupations. The major importance of VET for individuals, enterprises and society is widely acknowledged, and is perceived as a key element of lifelong learning.⁸⁰

⁷⁵ SSO, MAKStat Base: Working age population according to economic activity, gender and educational attainment, Situation from 04.12.2012

⁷⁶ SSO, MAKStat Base: Working age population according to economic activity, gender and educational attainment, Situation from 04.12.2012

⁷⁷ Ibid.

⁷⁸ SSO, Situation from 16.11.2012; According to SSO, participation in LLL is the participation of persons aged 25-64 who partake in education and training processes, in the total population from the same age group.

⁷⁹ EUROPEAN COMMISSION: Education and Training Monitor 2012, Rethinking education: investing in skills for better socio-economic outcomes, Strasbourg, XXX, SWD(2012) 373/2

⁸⁰ According to: Vocational education and training – key to the future, Lisbon-Copenhagen-Maastricht: mobilising for 2010, Cedefop synthesis of the Maastricht Study, Luxembourg: Office for Official Publications of the European Communities, 2004

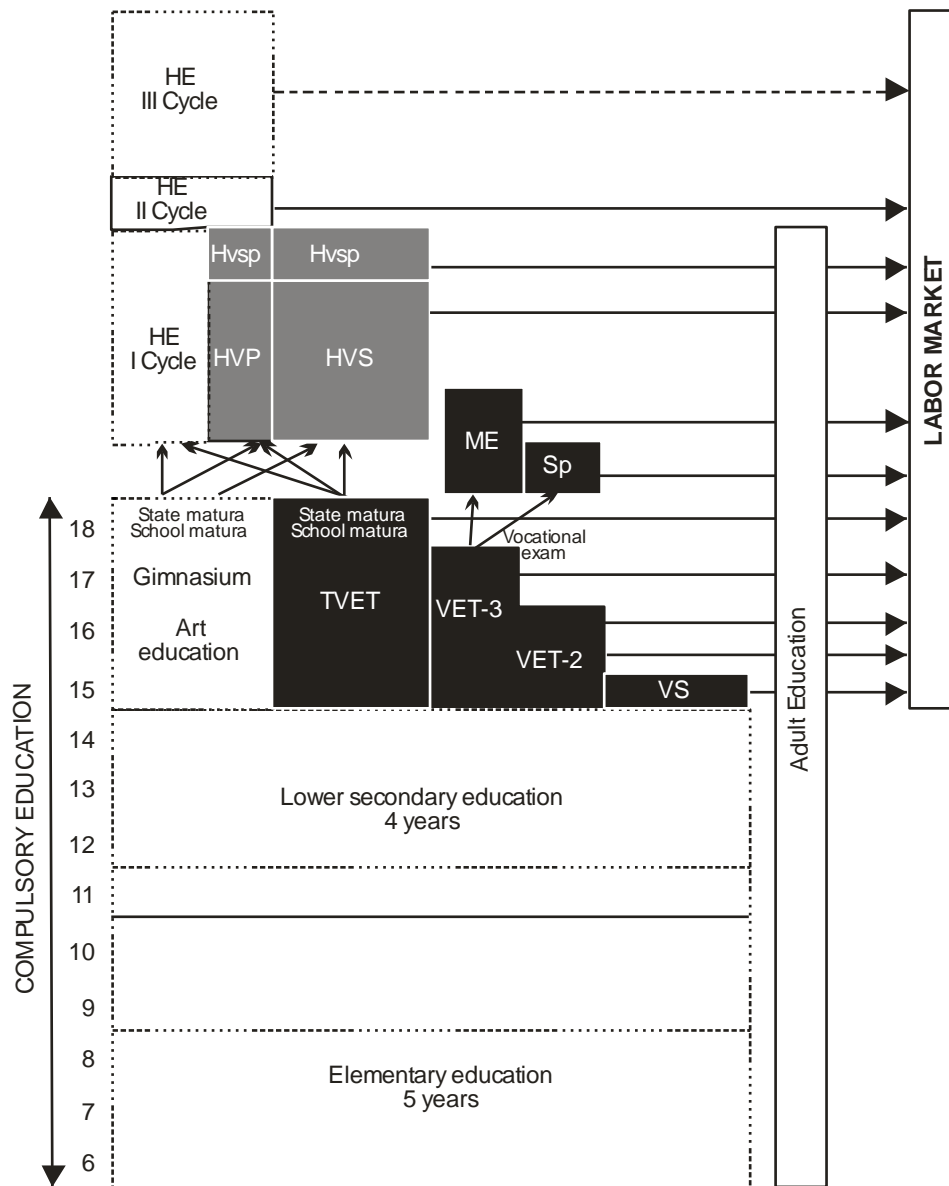
VET takes a variety of forms in different countries and also within a given country. It can be organised as prevocational training to prepare young people for transition to a VET programme at upper secondary level. Initial VET normally leads to a certificate at upper secondary level. It can be school-based, enterprise-based, or a combination of both (as in the dual system).⁸¹

VET education and qualifications are acquired in the Republic of Macedonia through: vocational skilling (acquisition of low-level vocational skills)⁸², secondary vocational education with 3 or 4 year duration, post-secondary vocational education (specialist education and master exam) and higher vocational education (public and private higher vocational schools and vocational university study programmes which are not part of academic programmes).

Chart 1. Structure of the VET system in the country

⁸¹ Ibid

⁸² This form of VET is realised through examination for low-level qualification (ISCED 3 level) carried out by the regional chambers of crafts or the chambers of commerce, respectively.



In the last two decades, the system of vocational education and training in the country has been subject to reform and under constant social and market pressure for further modernisation. The achievement of the goals set in the National Programme for Development of Education 2005-2015 formed the framework of the following interventions in VET:

- **Legislation:** Law on VET was adopted; compulsory secondary education was introduced;
- **Policies:** Concept for State Matura, School Matura and Final Exam was adopted and introduced in secondary VET, Concept for vocational skilling with 2-year duration, Concept for secondary vocational education for occupation (3-year VET) and Concept for post-secondary education were adopted;

- **Institutional strengthening:** VET Centre and VET Council and Adult Education Centre and Adult Education Council were established; training and exams of candidates for directors of secondary schools;
- **Programmatic:** part of curricula and syllabi for educational profiles in TVET were revised; allotment of practical training in TVET was increased to up to 20%; occupational areas in technical education were redefined and decreased (from 24 to 14) and also educational profiles (from 64 to 45), as a continuation of the PHARE reforms; Methodology for standards of occupations was developed, as well as 30 standards of occupations for 4-year and 51 standards of occupations for 3-year and 2-year secondary VET; Methodology for development of curricula was developed; standards for practical training of students at employers were developed;
- **System:** innovation of curricula for 3-year and 2-year VET is underway. The new Methodology for development of standards of occupations developed in 2009 was the basis for the standards of occupations for 13 occupational areas and is a novelty in secondary VET. Unlike the approach pursued in the past, it applies a competence based approach through a dynamic process of social dialogue with active participation of a large number of key partners on a national level and special focus on the needs of the labour market in coming years.⁸³ This approach is in tune with the efforts of the country for practicing the standards common to the European Union and for modernisation of secondary VET.

2.2.1. Vocational skilling

The lowest level of vocational education is vocational skilling (VS), aimed at aimed at adults and providing low levels of qualifications or training for a job. Most often, beneficiaries of this education offer are persons without qualifications. In the course of 2011, 163 persons took part in this VET form, or 0.29% of all VET users for the given year.

2.2.2. Secondary vocational education

The basic platform on which the country's VET system is built is secondary vocational education of 4-year duration (TVET) and 3-year duration (3-year VET), whereas 2-year VET is being currently developed following the new VET Concept.

Secondary education is carried out in 99 public (10 state schools, 21 schools of the City of Skopje, and 68 municipal schools) and 13 private schools.⁸⁴

⁸³ See: VET Centre (2012): Results from the Twinning project "Support to the modernisation of the education and training system"

⁸⁴ According to: Public call for enrolment of students in public secondary schools for the school year 2012/2013 in the Republic of Macedonia, MoES

According to the type of secondary education and curricula delivered in the public schools, 16 are general education schools and 40 vocational schools, whereas 34 schools offer both general and vocational education; 4 are vocational schools for students with special education needs and 5 are art schools.⁸⁵

The number of secondary vocational schools by occupational areas is as follows⁸⁶: agriculture-veterinary 11, forestry-wood processing 8, geology-mining and metallurgy 7, machine engineering 25, electro-technical 20, chemistry-technology 15, textile-leather fabrication 17, graphic 4, personal services 9, construction-geodetics 8, traffic 11, catering-tourism 12, economy-law and trade 17, medical 16, sports general school 3, and art education 6.⁸⁷

13 private secondary schools operate in the Republic of Macedonia, of which 6 schools offer vocational education (in the economy-law and trade, medical, personal services, traffic and catering-tourism occupational areas).⁸⁸

The low educational attainment of part of the country's population and the large number of students leaving or not continuing their education after the compulsory primary education were the reason for the Government of Macedonia to extend in 2006 the duration of compulsory education into secondary education.

2.2.2. Post-secondary vocational education

The Law on VET establishes two forms of post-secondary VET, namely the Master Exam (Мајсторски испит) and Specialisation (Специјализација). The Master Exam (for which training takes 2 years) allows the successful candidate to act as trainer of students in the formal VET system. However, the Master Exam mechanism has for some years been inactive and is used less and less as a way of upgrading education. Specialisation (which takes 1 year) enables candidates to enhance vocational knowledge and acquire sets of operational skills. This kind of education has been plagued by weaknesses for a number of years and is carried according to curricula developed in 1989. Most frequent motivation for uptake of this form of post-secondary education is the possibility for promotion or for new employment on a better job.

In 2011, 449 persons (45 women) completed specialisation.⁸⁹ Data on Master Exam are not readily available, but the consultation process revealed that after the revision of the relevant procedures in 2010, no Master Exam has been organised.

⁸⁵ Ibid

⁸⁶ Ibid

⁸⁷ Number of schools indicating where respective occupational areas/curricula are taught; one school can offer training in several occupation areas.

⁸⁸ SSO, Primary and secondary schools at the beginning of the school year 2011/2012, 2.4.12.04/718

⁸⁹ SSO, News release, 2012

2.2.3. Higher vocational education

The Law on Higher Education provides for the existence of universities and higher vocational schools.⁹⁰ Higher vocational educational schools (Високи стручни школи) are either independent private higher vocational schools or public higher vocational schools which are organisational units of existing universities. The small number of higher vocational schools does not provide sufficient opportunities for greater participation of youth in higher vocational education; 2102 persons enrolled in higher vocational school in the academic year 2010/2011, of whom 1853 in public higher vocational schools and 249 in private higher vocational schools, or 3.32% of the total number of students in higher education.⁹¹

In parallel to higher vocational schools, there are also a number of vocational study programmes which are offered as part of university study programmes and are with 3-year duration as opposed to the academic programmes of 4-year duration. There is no clear picture on the number of students attending higher vocational education within respective faculties. . In its endeavours to make vocational education and training more accessible to young people, the state has increased the enrolment quota for higher vocational study programmes. According to the number of enrolment places in the first study cycle 2011/12, vocational study programmes of 3-year duration represented 5.01% of the total number of available enrolment places at the public universities.⁹²

Shorter forms of vocational education and training on a higher education level do not exist. Most often the vocational study programmes in higher education provide a higher vocational qualification and are aimed at transition to the labour market.

The system of vocational education and training is evidently poor in its offer. A huge gap exists in the space between secondary vocational education and higher vocational education, both in regard to institutions and to users/students. Master exam and specialisation, as only representatives in this area, with all their shortcomings are only a mere reflection of a system for post-secondary vocational education and training.

It is also evident that post-secondary VET has not yet established itself in higher education. Although higher vocational schools exist, independent or as part of universities, they are regulated by the Law on Higher Education, which makes no clear distinction between vocational and academic institutions and programmes. The same is true of vocational studies with 3-year duration within universities. The implementation of the recommendations of the Bologna

⁹⁰ It needs to be mentioned that higher vocational schools and higher vocational programmes in higher education, although aimed at the labour market, are not treated in the legislation as part of the VET system.

⁹¹ SSO, News release, 2012

⁹² Government of the Republic of Macedonia, Decision on number of students to be enrolled in year 1 at the public higher education institutions, 2011/2012, 1.03.2011

process has not managed to make a clear distinction between academic and vocational programmes. In the process of their reform, universities put the main focus on academic programmes, whereas the vocational often lack clear direction and are less numerous than in the past. Given the increasing demands for employment of workers who possess higher skills and qualifications, the development of a system of post-secondary and higher vocational education emerges as one of future priorities.

2.3. Progression and transition

In regard to vertical mobility/transition, VET users are given the opportunity to progress vertically (from lower into higher education level) after meeting specific preconditions, i.e. taking equalising exams. For example, students who have completed 3-year VET may continue their education, after passing equalising exams, and acquire a technical qualification and take the State Matura or Final Exam, which entitles them to apply for enrolment at a university. The same applies to higher education, with the difference that progression is carried out through recognition of credits. Graduates from first cycle of vocational studies (3-years) can progress to second cycle of studies – 1-year vocational specialist studies. They are also entitled to transitioning into academic study programmes, after taking equalising exams.

Horizontal mobility in secondary education is problematic; there is lack of mechanisms for facilitating the process. Thus, a large number of students have no opportunities for transitioning from vocational into general education, and vice versa. Secondary education syllabi have not been modularised and their design does not take into account credits. This is a great obstacle for those students wishing to change their type of education. A lot of time and resources are wasted and knowledge gained through prior learning remains invalidated.

Horizontal mobility in higher education follows recognition of credits. Unlike secondary education, the process of transitioning is more transparent and more dynamic, in both national and international context.

Transition from secondary into higher education remained until 2006 at 46%, only to increase in 2009 to 85% (according to the News release of the Ministry of Education and Science from 29 July 2009), reaching, according to latest information over 90% in 2012. This increase is due to national policies within which comprehensive action was undertaken to increase the number of higher education institutions in the country. This same period saw the establishment of a large number of private universities and higher vocational schools. The expansion of the network of higher education institutions and the GoM/MoES measures to decrease the private costs of studying, i.e. the tuition fees, are the main reasons for the improvement of the transition rate of secondary school graduates into higher education.⁹³

⁹³ ETF (2010) : Collaborative Evaluation of the Impact of Reformed 4-year VET, Skopje

Modularisation is a relative novelty in our country. Higher education embarked on curricular reform in this direction by modularising its study programmes and introducing ECTS. Nevertheless, 10 years down the line, problems in the correct implementation of the Bologna recommendations still persist. There are still study programmes that are not designed according to student workload and the characteristics of the final qualification, and are not based on learning outcomes.

2.4. Attractiveness of VET

To what degree is the VET system attractive to youth and adults? Table 3 shows that the highest concentration of persons participating in the system for vocational education and training is in secondary vocational education of 4-year duration (85.85%), whereas secondary vocational education of 3-year duration reveals a declining trend of enrolment. In comparison with 2007⁹⁴ when 7052 students attended this type of education, their number in 2011 dropped by 28.27% to 5058 students. At post-secondary VET level, specialisation shows small coverage, with no participation whatsoever in the master exam in 2011.

Table 3: Overview of students in vocational education and training in the Republic of Macedonia /2011⁹⁵

Levels	Types of VET	Number of students	%
Secondary vocational education	Vocational skilling	163	0,29
	3-year secondary VET	5058	8,88
	4-year secondary VET	48882	85,85
	special secondary schools	287	0,50
Post-secondary vocational education	Specialisation	449	0,79
	Master exam	0	0
Higher vocational education ⁹⁶	Higher vocational schools	2102	3,69
Total		56941	100,00

The overview of the number of students in higher vocational education presents data only on students in public and private higher vocational schools. In 2011 public vocational schools were attended by 1853 students and private higher vocational schools by 249 students. As no clear picture is available on the number of students in university vocational programmes of 3-year duration, they are not presented.

This overview allows for a conclusion that *post-secondary vocational education* does not provide the desired service. Both forms comprising this sub-system have shortcomings and are evidently not sufficiently attractive for youth and adults.

⁹⁴ SSO, Primary and secondary schools at the end of the school year 2006/2007 , Statistical Review No. 2.4.8.03, Skopje, June 2008

⁹⁵ SSO, Primary and secondary schools at the end of the school year 2010/2011 , Statistical Review No. 2.4.12.06/720, Skopje, June 2012

⁹⁶ The part on higher vocational education lacks students enrolled in vocational study programmes at universities who are not among the students of the vocational higher schools.

The ratio of students in vocational as opposed to general education in 2001 was 70% to 30% in favour of vocational education. In the meantime, the interest in, and hence the offer of, general education has increased, changing the ratio. Today, this ratio is only 58.39% to 40.45% in favour of vocational education.⁹⁷

Table 4: Students in secondary education according to the type of education

Type of education	2007/2008 ⁹⁸	2008/2009 ⁹⁹	2009/2010 ¹⁰⁰	2010/2011 ¹⁰¹	2011/2012 ¹⁰²
	Total	Total	Total	Total	Total
Secondary education / total	94545	93843	95343	94155	93064
General education	38214	38373	38527	38013	37646
Art education	854	1015	1221	1071	1080
Vocational education	55477	54455	55595	55071	54338
VET students as % of total	58.7%	58.0%	58.3%	58.49	58.39

From the data presented, one might get a false impression of the interest of students for learning and for the selection of their secondary education destination. There has been an evident trend for increasing the interest and pressure of students for enrolling into secondary general schools in the last decade. However, due to the limited enrolment quota in general education schools, those students failing to enrol, most often due to poorer achievements in primary education, as a rule enrol into secondary vocational schools. Given that the network of secondary schools is predominantly intended for vocational education, a remnant from the past, the public capacities are limited to 1390 general education classes and 2047 vocational education classes.¹⁰³ If possibilities existed for greater enrolment quota in general education, it would be logical to assume that the ratio between general and vocational education would turn in favour of the former.

Is vocational education an attractive destination for young people? The answer is unfortunately no. With few exceptions, namely the medical and economy/law occupational areas, the other areas are less attractive. This has consequences for VET programmes of shorter duration (2 or 3 years). The low value attributed on the labour market to these qualifications contributes to the practice for young people to enrol in technical programmes with the intention to continue their education. A strong economy can make lower level qualifications attractive, but a weak one has an adverse effect on their attractiveness for enrolment.

One more feature additionally distorts the impression about the interest of youth in vocational education. Youth in some smaller towns do not have the opportunity to choose between

⁹⁷ SSO, News release: Population and social statistics, 2.4.12.04/718

⁹⁸ SSO, Primary and secondary schools at the beginning of the school year (for 2008, 2009 and 2010)

⁹⁹ Ibid, 2009.

¹⁰⁰ Ibid, 2010

¹⁰¹ SSO, News release: Population and social statistics, 2.4.11.04/683

¹⁰² SSO, News release: Population and social statistics, 2.4.12.04/718

¹⁰³ SSO, Primary and secondary schools at the beginning of the school year 2011/2012, News release 2.4.12.04/718

general and vocational education or to choose a vocational school according to their propensity or interest, because in that location only one type of vocational school exists. They always have the option to travel to or reside in another town where there is a secondary school in line with their interests. However, given the declining finances available to families, the majority of these young people opt for using the services of the schools that operate in their hometowns, although they do not offer areas or profiles they are truly interested in. This has negative effects on the transition of graduates into higher education. Most often, these graduates opt for study programmes that are not in continuation of their secondary vocational education, but reflect their true interest. Statements by university students and unemployed, offered during the research, only confirmed this conclusion. Despite the positive measures undertaken to remedy this situation, such as free transportation, free textbooks, housing in student dormitories, scholarships, etc., it still affects the selection process. Thus, the issue of the nature of secondary schools in smaller town and of the curricula that attract small number of students is brought to the forefront of the debate.

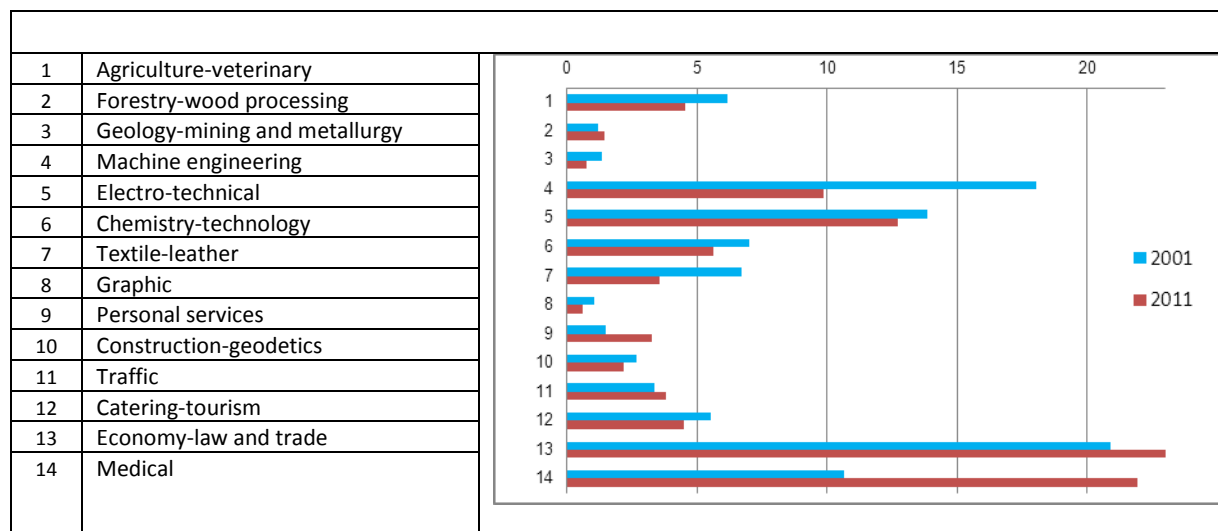
Table 5: Regular secondary schools, classes, students and teachers

	Schools	Classes	Students				Teachers					
			total	female students	graduates		total		full-time		part-time	
					total	female	total	female	total	female	total	female
1998/1999	96	2902	89775	43653	21510	-	5557	3012	-	-	-	-
2003/2004	96	3032	93791	44887	23621	11341	5863	3278	4891	2716	972	562
2004/2005	100	3134	94053	44701	24225	11312	5946	3375	5107	2875	839	500
2005/2006	101	3184	93908	44530	25588	11763	6136	3432	5277	2930	859	502
2006/2007	104	3219	93763	44334	25629	11794	6280	3541	5311	2961	969	580
2007/2008	107	3237	92753	44387	24700	11463	6438	3714	5529	3149	909	565
2008/2009	110	3295	93164	44643	24210	11543	6832	3953	5810	3342	1022	611
2009/2010	111	3372	95343	45820	25345	11941	7008	4041	6001	3404	1007	637
2010/2011	114	3 441	92848	44773	24846		7197	4225	6113	3574	1084	

Source: SSO, 2001; 2009; 2010; 2011, 2012. data pertain to regular secondary schools

In the period between 1998 and 2011, the number of schools increased, whereas the number of students remained stable, with slight fluctuations. The ratio between male and female students shows equitable representation of female students of 45-48% throughout the entire period. In parallel to the expansion of the network of schools, there has been increase in the number of teaching staff.

Chart 2. Students in secondary vocational schools according to occupational areas and period ¹⁰⁴



Data indicate that occupational areas which cater for highest numbers of students are the medical, economy-law and trade, electro-technical and machine engineering occupational areas. This does not necessarily mean that these are more attractive than other occupational areas. This may also be due to the available capacities for delivery of education and training in a respective occupational area. Within the school network, the occupational area with the highest representation and the one offering most enrolment places is machine engineering. However, the most pronounced decline in interest for enrolment is noted precisely in the machine engineering occupational area. Interest is also evidently declining in agriculture-veterinary, geology-mining and metallurgy, graphic, chemistry-technology, construction-geodetics and partly electro-technical occupational areas, whereas there is slight increase in personal services, traffic and forestry-wood processing. Restructuring the network of facilities in VET is a complex process and may bring about negative effects in VET schools due to possible loss of jobs, need for requalification, recruitment of new staff, new equipment, additional funding, etc. Herein lies the reason that it has not yet been tackled. However, the evident disparity between offer and interest and between offer and uptake merits further analysis of the entire school network in regard to the questions to what extent does it reflect the interests and needs of young people and the economy, and to the question of its cost-effectiveness. The advantages that this process might bring by far outweigh possible negative effects.

The decision to make secondary education compulsory for all children, starting from 2008, has had positive effects not only on progression rates from primary into secondary education, which improved significantly to 95% in 2011, but also on the decrease of the drop-out rate in secondary education. Data from 2010/2011 reveal that 1496 (1.61%) secondary school

¹⁰⁴ SSO, Situation 2001 and 2011

students¹⁰⁵ discontinued their education, which in a 4-year schooling cycle amount to 4-5% on a multi-cohort level.¹⁰⁶ This decline in early leaving was expected, given that the amendments to the Law on Secondary Education provide for fines for parents who do not send their children to secondary education, and also given the positive measures for support to groups at risk (free transportation, scholarships, free textbooks, etc.).

Despite of the efforts made to decrease the number of students who discontinue their education, including improvement of infrastructural facilities, provision of free textbooks and scholarships and conditional cash transfers to vulnerable students and families, incomplete coverage and drop-out, although at a lower rate, still continue to plague the country's VET system.

2.5. Legislation

Although certain changes in the legislative framework were made recently, some of the old shortcomings are still present today. The majority of changes focused on systemic issues; we can single out the following as most significant developments: the establishment of professional institutions for support to education such as the VET Centre, the State Examination Centre and the Adult Education Centre, which came out of the Pedagogical Institute of Macedonia; the operation of the Bureau for Development of Education (formerly Pedagogical Institute) is regulated through separate law, for the first time separate Laws on VET and on Adult Education were adopted, State Matura was introduced in secondary education, the duration of compulsory education was firstly extended to 9 years (from 8) and later with the proclamation of secondary education as compulsory in 2007 to even 13 years; external assessment as a form of assessment of quality in primary and secondary education was introduced, a new Law on Higher Education was adopted in line with the Bologna recommendations, etc. However, despite the great number of successful interventions, specific issues in the area of education remain unregulated or inappropriately regulated.¹⁰⁷

The Law on VET leaves many gaps and needs to be revised. In this form, it resembles a Law on the VET Centre, rather than a law regulating VET, than a law on vocational education and training. The competences of different VET relevant bodies and institutions are regulated in different other laws, which leaves ample room for inconsistencies in regard to their functioning. Its relation to the Law on Secondary Education and Law on Adult Education is inconsistent and incomplete.

¹⁰⁵ SSO, Primary and secondary schools at the end of the school year 2010/2011, Skopje, June 2012

¹⁰⁶ Students who drop-out are those students who have deregistered officially, i.e. have withdrawn their documents in the course of the respective school year.

¹⁰⁷ See more in: ETF (2010) : Collaborative Evaluation of the Impact of Reformed 4-year VET, Skopje

A review of the legislation reveals partial inconsistency and overlap of competences of different bodies and institutions operating in this sector.¹⁰⁸ Most often, legislative amendments and supplements were not accompanied by timely revision of by-laws, especially those regulating competences on national, local and school level, creating contradictions and inconsistencies in the implementation of legal provisions and slow implementation of interventions. A most obvious example of this lack of harmonisation lies in the detailing of the competences of the VET Centre, BDE, AEC and SEI.

The VET Centre, as the most important body in VET is not clearly hierarchically positioned and defined. It still lacks financial and institutional autonomy and is weak in regard to its physical and staffing capacities. This situation is highly detrimental for the planning and implementation of its activities and fulfilment of its responsibilities.

2.6. Challenges

2.6.1. Need for new skills

The labour market in the Republic of Macedonia is only beginning to demand higher skills and education. According to the ESARM Skills Need Analysis on the Labour Market for 2011/2012¹⁰⁹, the majority of new employments expected in the next 12 months, according to the level of required knowledge (education), will require persons with completed secondary education (67.3%), predominantly in processing, trade, transportation and construction; persons with completed primary education (15.7%), primarily in the processing industry, agriculture, hunting and forestry and construction. Small demand exists for persons with higher education (9.9%), primarily in the processing industry, in professional, scientific and technical activities, trade and finance and insurance.

The same analysis reveals that employers highlight the need for command of foreign languages (English, German, Italian), familiarity with basic computer applications, as well as advanced knowledge and skills in IT, communication skills, ambition, responsibility, confidentiality, precision, team work, data entering and reading skills, flexibility, sales, marketing and management skills.¹¹⁰

The research carried out in 2012 for the needs of this Strategy, set out, among other things, to refresh the information on required skills desirable for work and employment by the country's business sector.¹¹¹ In one of the research instruments, the business community was provided

¹⁰⁸ ETF (2010): Collaborative Evaluation of the Impact of Reformed 4-year VET, Skopje

¹⁰⁹ ESARM: National report from the Skills Needs Analysis at the Labour Market in the Republic of Macedonia for 2011/2012

¹¹⁰ Survey carried out in 2011, based on a sample of 2956 business entities (companies).

¹¹¹ The representative sample included 110 small, medium and large companies covered by the research in 6 locations with different techniques and instruments.

with a list of 32 desirable qualities, and was asked to assess them for priority in the company's respective work and recruitment processes. Results reveal that in our economy, the diploma still strongly impacts the processes of employment and work. Close to 96% of employers believe that the candidate for employment/the worker must possess a diploma for appropriate education.

It is evident that the business sector in our country still puts its faith in certificated qualifications and expects the formal system of education and training to bridge the gap between supply and demand of skills. Opportunities for implementation of mechanisms for validation of skills acquired outside of the formal system have still not found their rightful place.

In addition, the business sector puts higher values on the fundamental (for the occupation area) and the specific (for the respective occupation) vocational competences. Small and medium enterprises list the following qualities as having dominant priority for them: possession of driving license, problem solving abilities, good communication abilities, foreign language command, professional attitude towards work, ability to work under pressure, ability to detect errors, ability to take criticism and learn from it. The other qualities are ranked in the category "least needed". Unlike them, the large companies strongly emphasise the need for candidates/workers to demonstrate confidence, teamwork abilities and adaptability.

Qualities such as: mathematical skills, entrepreneurial skills, broad general culture, leadership skills and IT knowledge and skills, are assessed as having a very low priority. This is only seemingly surprising, as we need to keep in mind the features of the sample covered in the research, as well as the general picture of the country's economy. The companies in question are mainly small and medium sized companies, representative of companies with small and medium-sized companies which make up for over 90% of the total number of companies in the country. As a rule they have a small number of staff and are engaged in production or services.

On the other hand, we need to keep in mind that the bulk of the country's production (measured as gross output at basic prices) is based on low technology content (45%), 43 per cent is medium technology production and only 1 per cent falls in the category of high technology production.¹¹² In such an environment, when domination of high technology production, which most often assumes application of IT and sophisticated technology is absent, the position of mathematical, entrepreneurial and IT skills should hardly surprise us. However, this does not diminish the necessity of developing these competences/skills, because there is only one path for the development of the country's economy – high technology production. Therefore, education and training, by its nature focused on the future and preparing individuals for the future, will have to ensure the development of these desired competences.

¹¹² Mojsoska-Blazevski, N., Kostadinov, A., Greg, K., von Uekskul, E. (2012): Policies for skills towards economic diversification in the Former Yugoslav Republic of Macedonia, International Labour Organization; Team for Technical Assistance to Decent Work and Office for Central and Eastern Europe. - Skopje: MOT, 2012, p. 12

In addition to skills needed for successful transition to work, it is extremely important to also develop skills for continuation of education. The analysis demonstrated that graduates continuing to university lack a number of skills necessary for successful continuation of their education. In the opinion of university professors, they have not developed and/or acquired sufficiently time management abilities, leadership skills, strong work ethics, abilities to accept criticism and learn from it, research abilities, problem solving skills, logical thinking abilities, error recognition skills, ability to work under pressure, general broad culture, independence, presentation skills, professional ethics and ability to handle stressful situations. Half of the surveyed professors also stated that VET graduates completely lack above all entrepreneurship skills. Their interpersonal skills, communication skills, mathematical abilities and foreign language command were also assessed as missing.

Although the satisfaction percentages given are not very high, tertiary education is satisfied with the following skills and qualities of graduates: self-confidence (61.5%), team work abilities (53.8%), IT knowledge and skills (53.8%), obedience (46.2%) and positive attitude (46.2%).

The results point to the shortcomings of secondary vocational education in the satisfactory imparting of skills and qualities necessary for successful continuation of education. In an environment where higher education is the dominant destination for secondary school graduates, there is a clear need for improving and strengthening the students' acquisition of skills/qualities they require.

The Strategy needs to highlight this fact and recommend measures for overcoming the gap between skills supply and demand, i.e. between the three types of skills: *certificated* (skills represented by the certificate/diploma), *personal* (skills that the person actually possesses) and *market* (skills demanded by the labour market).¹¹³

2.6.2. Collaboration with the business sector

The collaboration with the business sector and the realisation of practical teaching are the most challenging aspects of VET. This question must receive fullest attention in future. The problems and obstacles are diverse: business sector partners are difficult to find, the dynamics of realisation of practical training is difficult to plan, resources (consumables and materials) for effective carrying out of practical teaching in the schools are scarce, the equipment and technology students use in the process of practical teaching in schools is out-dated and obsolete and differs greatly from the one used in companies, the motivation of companies for enhanced collaboration with schools is poor, etc.

¹¹³Velkovski, Z. (2005): *Lacrimae mundi*, Bureau for Development of Education, Skopje

The collaboration between educational institutions and the business sector on policy and regulatory levels has been yielding results recently. However, it is unfortunate that a number of provisions focusing on this topic contained in the regulations have not been fully operationalized, thus limiting their applicability in the practice. For example, the VET Centre has signed a number of Memoranda for collaboration with VET stakeholders, but this initiative has not resulted in anything concrete yet. The Law on vocational education provides in Article 11 for the possibility for the Chambers to submit proposals to the VET Centre for innovation of VET syllabi and curricula and proposals for design of new standards of occupations. This possibility is not used in practice. Article 15 of the same law entitles employers to use incentives (financial, tax and customs benefits) if they take part in the realisation of practical training of VET students. This option has also not been used due to the lack of defined mechanisms for its implementation.

The education and the business sectors achieve more dynamic and strategic collaboration in higher education. Motivated by the legal obligations and needs for new skills for the new jobs, universities are investing enhanced efforts in the intensification of the collaboration with the business community. This includes development of mechanisms to bring students closer to the world of labour and improve their employability. The efforts for a systemic approach have been yielding effects lately through the conclusion of agreements between universities, chambers of commerce and the business sector.

2.6.3. Practical teaching and training

Vocational education and training consists of general education, vocational-theoretic education, practical teaching (theoretical part of the practical training) and practical training.

The allotment and share of practical teaching/training in the syllabi needs to undergo change. Its scope has been revised in the 2-year and 3-year VET, but needs to be revised also in technical vocational education and training, which caters for the greatest number of students in VET. The time allotted currently to practical teaching and training in TVET lies between 9% and 20%, and merits increasing. Global tendencies indicate that employers are increasingly inclined to hiring secondary school graduates with technical qualifications, thus improving the chances for their successful transition to the labour market. To this end, it is necessary to strengthen, in addition to the acquisition of competences for continuation of education, also the acquisition of competences/skills necessary for transitioning to the labour market.

Planning of practical training is a problem in itself. The rigidity of the syllabus makes it hard to plan efficiently and effectively the concentration and time distribution of practical training, which are closely linked to the character of the respective profile, and companies are not always ready and able to adapt to the schedule foreseen in the syllabus. A higher degree of flexibility needs to be introduced to enable schools to decide more independently on the timing

when practical training is to be carried out and to harmonise the schedule with their business partners, respecting in the process the requirements for quality realisation of practical training.

Infrastructural capacities in VET present an additional problem. It is necessary to improve the situation in secondary VET through provision of laboratories, workshops, demonstration facilities, equipment and consumables. This improvement will facilitate strengthening the practical teaching in schools and ultimately improvement of the quality of learning. We also need to keep in mind the possibility for utilising existing infrastructure and capacities of companies, with a view to their greater involvement in the process of students' acquisition of practical-vocational competences, thus decreasing the costs for this purpose.

Internship is included in the educational programmes and is part of the active labour measures at national and local level. Internship is primarily focused on students and the unemployed. The internship programmes enable employers to identify suitable future personnel. Therefore, national and developmental programmes targeting this issue include initiatives to encourage this process.

Gaining work experience by training through volunteering marginalises VET students. The current form of volunteering allows for the practice to be carried out only in non-profit organisations, thus limiting opportunities for graduates/students to volunteer in companies corresponding to their occupational area, which are as a rule profit companies, to enhance their skills and gain working experience that carries significant weight in the process of employment.

2.6.4. Syllabi and curricula

Analyses show weaknesses in the development of syllabi and defining of profiles in VET due to the lack of a quality analysis of the labour market and its needs. The relevance of the profiles produced by the VET system for the labour market and types of competences graduates possess and their applicability in an environment of technologies are key challenges facing VET.

The current set-up of the VET system does not allow for fast and timely reaction to the changes in the demand for new profiles and skills. The absence of quick procedures for changes in the syllabi and curricula, introduction of new and deletion of unnecessary profiles, and mechanisms for forecasting the needs of the labour market are "bottlenecks" in the functioning of the VET system.

In this sense, the research identified need for changing the procedures for syllabus and curriculum innovation and amendment. They are said to be slow and long, adversely affecting the possibility for the curricula to timely respond to the changing demands for skills of the labour market. The current procedures hamper quick reaction of VET to the developments in the business sector and achievement of a higher degree of relevance.

2.6.5. Quality

Control of quality in VET is regulated with the provisions of the Law on amendments and supplements to the Law on secondary education¹¹⁴, Law on amendments and supplements to the Law on secondary education¹¹⁵, Law on amendments and supplements to the Law on secondary education¹¹⁶, Law on education inspection¹¹⁷ and Rulebook on integral inspection¹¹⁸, Law on vocational education and training¹¹⁹ and Indicators for quality of the work of school¹²⁰. Although quality assurance in VET is partly regulated through laws and by-laws, the impression remains that it is one of the most pronounced weaknesses in VET. For example, the Law on vocational education and training makes no reference to the issue of quality assurance.

Control of the quality in VET is carried out internally (self-evaluation) and externally (integral evaluation). Self-evaluation as regular practice for defining the development directions of the secondary VET schools has still not come to life and still serves the purpose and is carried out only as part of the integral evaluation.

The external quality control is defined through the role of the State Education Inspectorate. By carrying out the external integral evaluation, it carries out the obligation for conducting supervision/control of the quality in the VET institutions. The Rulebook on the manner and procedure for conducting the inspection supervision of the education inspection¹²¹ makes reference only to the integral evaluation, without addressing the issue of quality assurance, with special focus on indicators developed for assessing the quality of the work of the schools. Unfortunately, some of the quality indicators are not appropriate for the specificities of VET, are too general and in poor communication with the European Quality Assurance Reference Framework for VET.

Apart from the system for quality control in VET, there is not system for support and/or system for quality assurance, which would decentralise the issue of quality assurance through active participation of a broad base of stakeholders in the process of strengthening the quality in VET.

In addition to systems for control/quality assurance, teaching and learning play a central role in strengthening the quality in VET, as well as the teachers as implementers of this activity.

¹¹⁴ Official Gazette of the RM No. 67/04 from 04.10.2004, art. 50 to amend art. 108

¹¹⁵ Official Gazette of the RM No. 35 from 23.03.2006, art.89-b

¹¹⁶ Official Gazette of the RM No. 33 from 9.03.2010, art. 29, para 2

¹¹⁷ Official Gazette of the RM No.52 from 04.07.2005

¹¹⁸ Official Gazette of the RM No. 86/06, Skopje

¹¹⁹ Official Gazette of the RM No. 71 from 08.06.2006

¹²⁰ RM, MoES, SEI, Skopje.

¹²¹ Official Gazette of the RM No. 86/2006

The consultation process demonstrated that the in VET is less than satisfactory both from the viewpoint of employability and vocational competences of graduates, and also of their competences for continuation of education. Teaching and learning in VET are plagued by weaknesses in the area of use of contemporary learning models and strategies and assessment of student achievements.

The initial education of VET teachers and instructors in VET does not provide future and current teachers and instructors with appropriate pedagogical-didactic and andragogical competences. The pedagogical qualification VET teachers and instructors, as part of the initial training system of those studying at teacher training but also non-teacher training faculties has been inconsistent in the last several decades. It does not nearly satisfy the requirements for training a competent and effective teachers or trainers for VET.

During the consultation process, the VET teachers themselves identified as areas in greatest need of attention: the improvement of practical teaching/collaboration with the business sector (57.57%), innovation of syllabi and curricula (51.51%), changes in the educational profiles (48.48%), improvement of textbooks and equipment/didactic aids (48.48%) and strengthening the school budget (45.45%).

The issue of textbooks is a frequently highlighted problem in VET. Too much time is wasted in discussions how many and what kind of textbooks the VET system needs. Too great a focus and dependence on the textbooks is connected to the unyielding idea that teaching and learning serve the purpose of delivering the contents of the textbooks instead of developing the competences of students. Without wanting to marginalise the important of textbooks, it must be said that teaching based on learning objectives and outcomes makes use of the textbook as only one of the many teaching and learning resources. This approach puts at the forefront the competences that students need to acquire and eases the tension around textbooks and the too great teacher focus and dependence on them.

The teaching and learning approach needs to move away from the traditional notion of focusing on fundamental vocational and specific vocational competences. New pedagogical approaches take into account the skills of the workforce that are constantly evolving and the respective emphasis on the flexibility and importance of transversal competences, such as: problem solving, change management, entrepreneurial skills, communication skills, pair work, relations with co-workers and clients, IT literacy, creativity, self-confidence, professional ethics, etc. These demands need to find their answer in the goals and contents of teaching and learning in vocational education and training.

2.6.6. Financing and decentralisation

Problems in the financing of VET are one of the most important topics affecting its stockholders. The costs of financing VET fall mostly on the Ministry of Education and Science, on the basis of its work programmes and annual budget approved by the Government. Financing of VET schools follows a methodology for establishing criteria for allocation of block/lump sum grants for secondary education to municipalities and the city of Skopje.¹²² The municipalities receive block grants from the Ministry of Education and Science which are in general used for salaries, student transportation and heating costs. Part of the funds is allocated to development issues. Part of the operational costs is covered by the schools themselves or by the respective municipality.

Municipalities maintain on-going dialogue with the institutions of the government around increasing their financial resources and improving the methodology of determining the criteria for allocation of block grants, with special emphasis on the differences between and specificities of municipalities and education institutions.¹²³ To this end, in the period between 2009 and 2013, The Government undertook measures for strengthening the financial power of the municipalities, through¹²⁴:

- Permanent increase of the percentage of the revenues from the VAT that is allocated to municipalities from 3% (in 2009) to 3.4% in 2010, 3.7% in 2011, 4% in 2012, and to 4.5% in 2013, ensuring increase in the municipality budget revenues;
- Increase in the distribution of the revenues from sale of construction land to a 20 : 80 ratio in favour of the municipalities;
- Increase in the distribution of the revenues from mineral ore concessions to a 22:78 ratio in favour of the municipalities;
- Introduction as of 2013 new revenues from concessions for use of water resources for production of electrical energy, which are to be distributed to a 50%:50% ratio (until 2016 the ratio will be 25% for municipalities and 75% for the state budget).¹²⁵

To complement these systemic measures, the Government, through loans from international financial institutions, carries out intervention projects in education, aimed at reconstructing primary and secondary schools, equipping classrooms, constructing and reconstructing school gyms, tennis playgrounds, opening and equipping laboratories, etc.¹²⁶

¹²² Budget of the RM for 2011 and 2012, Directive on the methodology for allocation of dedicated and block grants in secondary education, Official Gazette of the RM 176/2011; interviews with directors, review of school budgets

¹²³ ZELS, Glasilo, July 2012

¹²⁴ Ministry of Finance – Sector for budgets and funds, Opinion following the letter from the Ministry of Education and Science from February 2013, 21 March 2013

¹²⁵ Ibid

¹²⁶ Ibid

It is expected that these measures will contribute to strengthening the financial power of municipalities, and thus help create dynamic and quality support to vocational training and education. It is especially important for the municipalities to strengthen their capacities for utilisation of local sources to enhance their potentials for support.

The country's allocation of resources for education has been between 5% and 6% of the GDP in recent years, which is at the level of OECD developed countries.¹²⁷ The amount of the state expenditures and overall expenditures for initial VET is difficult to calculate, because they fall into the overall funding of secondary, post-secondary and higher education, or are part of intervention measures and international projects, and because there is no clear distinction between general and vocational education at the respective level.

Public financing of continuing VET is mainly carried by the Ministry of Education and Science through, the work of the Centre for Adult Education, and the Ministry of Labour and Social Policy, through the Active Labour Market Programmes. The ESARM, funded by the state budget and resources it generates (membership fees, user charges, etc.), covers most of the costs of training for employment, new qualifications and training for acquisition of skills demanded by the labour market for persons without any or with low qualifications levels.

In addition to funding allocated from the state budget, VET receives additional funds through projects, most often implemented by international donors, and special funds from different Government ministries. Some schools organise income generating activities, such as training for outside users, provision of diverse services and production and sale of products. Unfortunately, such practices are rare.

Recent developments indicate that decentralisation does not entail mere redistribution of power, but also devolution of responsibilities which directly determine the status and role of local political and administrative centres of power. Assuming responsibilities in education requires also assuming responsibility for its financing.

In an environment of increased allocation of resources from the state to the municipalities, it is to be expected that the financial support of local authorities for VET should also increase. However, despite this, the consultative process revealed dissatisfaction on the part of schools with the financing system. Most often, this dissatisfaction is focused on the lack of resources for developmental issues, equipment and expendables, pointing to the existence of open issues between the state, local governments and VET schools in the area of financing, highlighting the need for strengthening the social dialogues between these stakeholders.

¹²⁷ Ibid

3. Strategy Framework

The VET Strategy represents further operationalization of the strategic goals and objectives defined in the “National Programme for Development of Education in the Republic of Macedonia 2005-2015”¹²⁸ and the country “Vocational Education and Training Policy”¹²⁹. These documents reflect the recommendations contained in the European initiatives for development of vocational education and training, such as Lisbon (2000), Copenhagen (2002), Maastricht (2004), Helsinki (2006), Bordeaux (2008) and Bruges (2010). The recommendations adopted in and governing the actions in the European Union in the area of modernisation and reform of vocational education, with special emphasis on the Bruges Communiqué, present the basic platform on which the solutions offered in this Strategy rest.

The VET Strategy pays due attention to the solutions presented in other strategic documents adopted by the Government of the Republic of Macedonia, which address different sectors, such as: employment, economic development, poverty reduction and elimination, etc. It takes also into account the experiences from the reforms carried out in the education system in the Republic of Macedonia, as well as the results of internationally funded projects in this area, initiated and implemented with the assistance of the European Training Foundation, the PHARE, CARDS and IPA Programmes, GTZ, USAID and other programmes and projects implemented by the Government of the Republic of Macedonia and the Ministry for Education and Science, in cooperation with the Bureau for Development of Education and the Centre for Vocational Education and Training.

The foundations of the VET Strategy are rooted in the consultation process with the expert and policy-making communities on the future of VET in the country.

The VET Strategy outlines a system well positioned to adequately respond to the established current and future challenges. The proposed harmonisation is founded on flexible institutional set-up and development of mechanisms and instruments that will enable it to timely offer skills and demanded by the labour markets, and necessary for continuation of education and life in general. VET needs to be in a constant dynamic relation with the labour market and society as a whole. Changes occurring in all areas impose the need for establishing such a system that can timely react to and implement change for this relation to be maintained and for VET to fulfil its role of a distributor of competent workforce, on one hand, and individuals prepared for continuation of their education, on the other.

¹²⁸ Ministry of Education and Science (2005), National Programme for the Development of Education in the Republic of Macedonia 2005-2016, Skopje

¹²⁹ Ministry of Education and Science (2010), Concept for VET in the Republic of Macedonia, Skopje

3.1. Guiding principles

The basic principles on which the reform and modernisation of vocational education and training in a lifelong learning context is to rest, must reflect the contemporary situation and tendencies in VET, the economic, political and cultural development of the country, trends resulting from globalisation processes and the international context, as well as the interests of stakeholders.

Vocational education and training is founded on following principles:

Quality: The principle of quality is a key principle in vocational education and training. VET must be in tune with the standards of quality developed applied in the international environment and with the mechanisms for quality assurance relevant for this tier of education and training. Improvement of the quality of VET will have as its outcome increased attractiveness of and confidence in VET.

Relevance: VET must be relevant to the successful transition to and performance of young people and adults in the areas of work, further education and life in general, and respond to demands coming from the labour market and society.

Collaborative approach: Vocational education and training must develop in partnership with stakeholders: the Government, the business sector, unions, employer associations and chambers, research institutes and institutions, VET service providers, local government, sectoral committees, parents and students. The collaborative approach to creating education policies and to delivery of VET is the only possible approach in an unpredictable future.

Decentralisation: Decentralisation in VET is a necessity which improves its efficiency, agility and alertness, and enables it to timely react to changes in the economic and overall social sector. Any VET system able to timely adapt to changing demands is and will remain a recognised priority sector. Decentralisation in education facilitates redistribution of competences and responsibilities for the main education issues, such as:

- control and quality of education,
- teacher professional development,
- allocation and distribution of funds,
- development of VET,
- (mis)match between workforce and local job offer, and learning opportunities available to young people and adults,
- improvement and efficient use of research and innovation results,
- quality collaboration between education and the economy,
- management of human and material resources,
- speedier revision of standards of occupations, education profiles, curricula and modules,
- openness of syllabi and curricula;

- better coordination in the revision and functionality of the network of VET providers, etc.

Inclusiveness and equity: VET must be accessible to all regardless of age, sex, social background, religion, physical or mental disability, political or ideological affiliation, etc. This implies realising the right of all individuals to education in line with his/her potentials, interests and needs. VET reflects the measures and qualities for better integration of all citizens in the economy and society in general.

Institutional and programme diversity: VET must be designed so as to meet the needs of all groups at risk, including: the employed and the unemployed; persons returning to the labour market, the long-term unemployed, persons with developmental challenges, early leavers, etc. The VET system must develop a network of diverse institutions and programmes aimed at: 1) addressing economic and social demands, and 2) meeting the needs of diverse groups of users.

Effectiveness and accountability: Proper monitoring of progress in VET should result in transparent and easily accessible evidence for the general public and stakeholders. Accountability, based on the realisation of short-term and long-term goals, should be an inseparable feature of VET and institutions involved in it. The future VET system requires competent management and transparency of results and achievements. Efficient utilisation of available funding and diversification of funding sources (national and international, private and public, central and municipal, and such as obtained through income generation activities of providers themselves) is the only way to achieve the desired better results in an environment of scarce resources.

3.2. Vision and goals of the VET Strategy

Interventions in the country's vocational education and training will result in a system which reflects the demands and visions of all its citizens and the intentions for the future vocational education and training to be an attractive destination for young people and adults, operating at a level of quality that enables all to adapt to and transform the quickly changing future.

VET will become a key factor in the development of the workforce, in the establishment of an economy that makes better use of its human capital and evolves towards an information and knowledge-base, in strengthening individual and social productivity, in the economic development and growth of the country, in the improvement of the quality of life, in achieving full social participation, in employment, in strengthening the employability and professional development of young people and adults, and realisation of mobility on national and international level.

What is the goal of VET? There is more than one answer to this question. The business community demands that the goal of VET should be to train and prepare students and learners

for successful transition to the labour market (*Homo faber, Homo technologicus*), to provide them with necessary knowledge and skills that employers demand. For universities, the goal of VET should be to prepare students for successful continuation of their education and mastering of scientific knowledge (*Homo scientificus, Homo educanus*). For parents, it is important that VET meet the wishes and inclinations of their children and ensure them a quality and safe future. For politicians, the goal of VET varies often and depends on their interests. If they speak from an economic viewpoint, then, in their opinion, VET should prepare capable workers. In this sense, there are continuing appeals for youth to enrol in VET. If the topic is higher education, then VET should prepare them for successful continuation of education. Very rarely do we hear that VET should develop an independent and creative person (*Homo sentimental, Homo creator*), with potentials that enable him/her to successfully accomplish his/her civil and societal role (*Homo politicus, Homo socius*) and with competences for developing an appropriate culture of living (*Homo amans*). Rarely, extremely rarely, are these goals spoken of in combination.

VET must be viewed and defined in the context of lifelong learning, i.e. educating a man capable to learning in continuation (**Homo discens**).

VET needs to become an attractive and credible option for youth, and an effective opportunity for skills refreshment / retraining of youth and adults in urban and rural communities, contributing to competitiveness of the employed and for employability of job seekers.

In order to make the vision for VET in the country a reality, the Strategy for VET in a lifelong learning context aims to meet the following goals:

- *To enhance the attractiveness, relevance and quality of VET and enable it to play a key role in the improvement of professional performance, competitiveness and innovation.*
- *To offer more diversified and flexible learning opportunities to young people and adults to acquire the skills that are necessary for their career development and that stimulate entrepreneurial spirit, whilst fostering participation in further education and training, and contributing to active citizenship and personal fulfilment.*
- *To promote excellence and social inclusion, contribute to greater employability, mobility and job security enhance anticipation and management of labour market changes and encourage business competitiveness.*

4. The future VET system

The analysis of the challenges and trends in the country's VET system, which is the basis of this Strategy, reveals different levels of development in separate parts of the VET system, bottlenecks and critical intervention points. If we want vocational education and training to reach the desired development level and to assume in future the role of generator of change and "factory" for production of educated and with skills armed young people and adults, that not only adapt to the future unpredictable reality, but are also able to change and innovate it, then the priority areas for implementation within the proposed Strategy are as follows:

1. VET in the function of strengthening social cohesion and social inclusion
2. Attractiveness vocational education and training
3. Quality and relevance – guarantee for competitiveness
4. Good governance, resources, capacities and accountability in the future VET system.

The following elaboration of each goal provides for the measures that need to be implemented in the coming period.

4.1. VET in the function of strengthening social cohesion and social inclusion

Vocational education and training must strengthen its function for prevention of possible social exclusion. The number of persons without any qualification is a very high (41.67% of the working age population¹³⁰). If we add to this number those persons with low qualifications that are not in demand at labour market any more, and also the persons who have completed 4-year general education, then the percentage becomes alarming, as they are not competitive at the labour market and can hardly be regarded as employable. This puts them at a very high risk of exclusion from work, and thus of social exclusion. This population group must in the coming period be at the forefront of concern in the development and implementation of education and training and employment policies.

Within this diverse category of persons at risk of social exclusion are persons with low skills who have left school / dropped out or have not continued their education and training after the completion of compulsory education.¹³¹ Decreasing the number of early school leavers is an important measure for enhancing the skills of the population, increasing the employment rate

¹³⁰ SSO, Labour Force Survey 2011, Skopje, 2012

¹³¹ Persons schooled in the system where compulsory education lasted 8 years.

and promoting social inclusion. In 2011, early leavers made up for 13.5% of the total number of persons with primary education or less for the same age group.¹³² In the period from 2002 (when it was 30.1%) to 2011, this percentage dropped by 16.6%. This decrease is mainly due to the extension of duration of compulsory primary and introduction of compulsory secondary education.¹³³ Drop-out is more pronounced among the female population (15%) than among the male population (12%).¹³⁴ The EU Strategy 2020 requires that by 2020 the percentage of early leavers should not exceed 10%.¹³⁵

In addition to the attention that needs to be devoted to early leavers and persons with low basic skills levels, care must be also taken of other groups at risk of social exclusion, which include: women (in regions and among ethnic groups with a high unemployment rate), persons who have lost their job and are looking for work again, the long-term unemployed, members of ethnic minorities, migrants/persons returning from abroad who have acquired qualification/skills, persons with education handicap on account of industrial reorganisation, older workers, young people facing problems during the transition towards work, persons with developmental challenges, etc. It is necessary to undertake measures that will decrease the threat of their exclusion.

There is growing awareness of the importance of recognition and validation of competences in a number of countries in Europe. It is often the case that an individual embarks on a process of learning without completing it. During that period, specific knowledge and skills are acquired which are then lost in educational abstinence. Young people and adults acquire knowledge and skills in a formal, non-formal and informal way. Significant resources, energy and time are invested in this process, which are not valued and validated and which do not help the individual in question meet the formal requirements for employment and/or work. This reality and fact, that knowledge and skills are created outside of the confines of formal education and training has challenged almost all European countries to develop legal provisions for their recognitions irrespective of whether they were acquired in the formal, non-formal or informal sector. This new policy enhances employment and inclusion, strengthening at the same time the self-confidence of the respective beneficiaries.

On the other hand, the new framework for recognition of non-formal learning require reforms for the introduction of a quality assurance system and strengthening the necessary trust; for developing new forms of assessment based on competences and flexible and modularised training; and for strengthening individuals and institutions willing to participate in and benefit from this new paradigm.

¹³² SSO, Situation from 16.11.2012; According to SSO, this indicator is defined as participation of persons aged 18-24 who have no or at most primary education in relation to the total population from the same age group.

¹³³ SSO, Macedonia in numbers, 2012

¹³⁴ SSO, Women and men in the Republic of Macedonia, 2012

¹³⁵ European Commission (2010): EUROPE 2020 - A strategy for smart, sustainable and inclusive growth, Brussels, 3.3.2010

Undertaking measures in this respect will respect the set-up of the system for vocational education and training in the country; initial focus will be placed recognition and validation of lower levels of skills acquired by way of non-formal and informal learning.

To strengthen this priority area, in the period until 2020 the following goals and measures shall be realised:

A1: Strengthening the monitoring of secondary VET early leavers

- *By 2015 introduce a system for monitoring VET students*
- *By 2015 to establish school-based mechanisms and practices for detection of students under risk of leaving school early*

A2: Strengthening career guidance services in VET schools

- *By 2015 hire and train staff for career guidance in VET schools*

A3: Preventing early leaving

- *By 2015 link social welfare to the obligation for regular attendance and completion of compulsory education*
- *By 2014 strengthen scholarships to students from socially vulnerable groups*
- *By 2015 introduce educational mediators as additional assistance in primary education to ensure Roma students stay at school and graduate, and transition into secondary education*
- *By 2015 introduce educational mediators as additional assistance in secondary VET to ensure Roma students stay at school and graduate, and transition into higher education or to the labour market*

A4: Supporting students with special education needs

- *By 2015 provide training for VET teachers for working with students with SEN in mainstream schools*
- *By 2020 adjust syllabi and curricula in mainstream VET schools to students with SEN*
- *By 2016 improve the physical infrastructure in mainstream VET schools for students with SEN*

A5: Strengthening interethnic integration and cohesion in VET

- *By 2015 commence implementation of joint curricular and extracurricular activities in VET schools aimed at strengthening inter-ethnic integration and cohesion, including practical training (practical teaching, vocational practice and summer internships)*

A6: Strengthening the employability of the workforce

- *By 2020 train youth and adults without qualifications at ISCED 3 level and higher*
- *By 2016 prepare and commence with the implementation of short, dynamic and flexible courses for acquiring skills that respond to the needs of the labour market for youth and adults with qualifications*

A7: Establishing a system for validation of non-formal and informal learning

- *By 2015 analyse the possibilities for establishing a system for validation of non-formal and informal learning*
- *By 2018 develop procedures, mechanisms and programmes for VNFIL within the NQF, following competence/learning outcome based curricula and appropriate assessment procedures*
- *By 2020 ensure implementation of the system for VNFIL*

4.2. Attractive vocational education and training

There are evident weaknesses in the process of curriculum development. Strong criticism and requests can be heard also in regard to practical teaching, the need for introduction of new subjects, revision of the ratio between general education and vocational subjects, the need for introduction of new profiles, strengthening of the students' acquisition of skills with special emphasis on soft skills (communication skills, team work, interpersonal skills, leadership skills, time management, etc.), need for textbooks, etc.

Vocational education and training needs to grow into an attractive destination for youth and adults and increase its significance in the eyes of the general public as an instrument for individual and social development. In this context, system must be developed that entails diverse pathways for learning for youth and adults, that is open and accessible for all, irrespective of gender, physical condition and social background, ethnic and religious origin, that collaborates with the labour market and serves the function of development of the country, etc.

VET must become a pleasant place and environment for learning, innovation, research and acquisition of key skills imperative for successful transition to further learning and/or work and life in general.

To strengthen this priority area, the following goals must be achieved by 2020:

Goal B1. Raising public awareness on the attractiveness and opportunities offered by VET

To make VET attractive, strong mechanisms need to be built will improve and enhance practical teaching and work-based training and learning of students in order to prepare them for integration into the world of labour. It is exceptionally important to introduce incentives for the business sector to ensure its greater involvement in and collaboration with VET, and also to introduce different models of practical training, such as apprenticeship (learning a trade/craft as an apprentice).

Student workload is another factor that determines the attractiveness of VET. Syllabi and curricula are extensive, and the workload of VET students is far greater than that of general education students. The research revealed significant dissatisfaction among VET students, teachers and management with the workload and volume of teaching prescribed by the VET syllabi and curricula. This situation marginalises the efforts for application of contemporary teaching models, extracurricular activities, learning based on research and investigative procedures, as well as greater interaction in the teaching and learning processes.

Possibilities for transitioning into higher education also affect the attractiveness of VET. Problems arise in the realisation of the State Matura. Due to differences in duration of periods certain subjects, eligible to be selected in the State Matura, are studied, students in technical VET are at a disadvantage in comparison to secondary general students. In addition, the Law on higher education, which regulates the transition of students from secondary VET to higher education, allows for enrolment into university studies with School Matura and even Final Exam. The importance of the State Matura is marginalised in this way, calling into question its role and function within the education system.

In the absence of a well-developed system of post-secondary and higher vocational education and training, the main pressure of VET graduates continuing their education is in higher academic education. This practice, despite our commitment to increasing the number of persons with higher education, causes a number of problems, such as: the importance of the State Matura, which was designed as a condition for transition into higher education is marginalised and its application is undervalued; the motivation of students for taking the State Matura declines because of the option to continue into higher education also with completed School Matura or Vocational Exam; a vacuum appears on the workforce market of persons with secondary school qualification which puts additional stress on the processes of employment

and meeting the demands of the labour market; the transition of persons with lower competences directly leads to decline of the quality in higher education, etc.

This situation must be remedied by on one hand revising the concept for the State Matura as it relates to VET and undertaking measures to align it with the specificities of technical VET, and on the other introducing mechanisms that will enhance both the attractiveness of higher education and the adequacy of the transition. Introduction of higher levels of vocational education and training, namely post-secondary and higher vocational education and training will ease the pressure on university academic programmes and will enable young people to build a professional career, to advance in their occupation, outside of university academic programmes.

These shortcomings have an adverse effect of the attractiveness of VET to young people and adults; it is not an attractive destination and the pressure for enrolment in secondary vocational education is far smaller than for enrolment in general education. The only way to change this is to undertake coordinated measures for increasing its attractiveness.

To achieve this goal, the following measures need to be undertaken and realised by 2020:

- *In 2014 establish the optimal student workload in secondary VET*
- *In 2013 carry out revision of the State Matura and adapt it to the specificities of secondary VET*
- *In 2013 analyse the effects and application of the legal possibility for enrolment into university education with School Matura or Final Exam*
- *By 2015 undertake activities to raise public awareness on the importance and attractiveness of VET*
- *By 2020 continuing modernise the equipment and laboratories in VET schools*
- *By 2016 conclude agreements for increasing the attractiveness of research and innovation through systematic and structured collaboration between university laboratories, new laboratories in VET schools and industry research centres*
- *Between 2014 and 2020 continuously organise regional/national innovation competitions for VET students by occupational area*
- *By 2018 establish of a system for monitoring processes (progression of students and work of VET schools) and tracking outcomes (destinations of graduates)*

Goal B2. Building diverse and flexible pathways for learning and professional guidance in the context of lifelong learning

Vocational education and training is expected to meet the needs and interests of different groups of clients. Globalisation, aging of the population, the economic crisis and the humbling dynamics of technical-technological development, and the dynamics of everyday life in general, keep generating new target groups, such as: older workers, persons returning to the labour

market, long-term unemployed, etc. These groups differ from the young VET users in their education history, prior knowledge, experiences, ambitions, desires and motives. Their education and training cannot follow the traditional set-up of the VET system and learning models practiced therein. Therefore, it is necessary to develop diverse pathways and opportunities for education and training that will help these groups acquire new or upgrade the existing qualifications/competences, and this can be achieved through introduction of a high degree of flexibility in the approach and delivery of education and training services. These flexible pathways for learning and training presuppose integration of formal, non-formal and informal learning and development of an institutional basis for delivery of learning and training. They will be invaluable and irreplaceable to the said groups and will help increase the attractiveness, efficiency and cost-effectiveness of vocational education and training. This approach makes the concept of lifelong learning a reality. In addition, flexible learning pathways can make a fundamental contribution to improving the relevance of VET also for youth students.

Education supply can be strengthened by adapting the curricula to regional and local demands and individual needs, by introduction of modularised programmes for learning and training, establishment of new programmes based on competences, accumulation and transfer of credits and setting up and putting into operation a system of post-secondary vocational education and training. In the process, care should be taken to enhance opportunities for skills acquisition by means of fast and short courses, as an addition to secondary VET or as part of the non-formal system of education and training. Installing such programmes will increase the flexibility of the VET system as well as educational offer and the capacities of the system to quickly respond to and meet the demands of the labour market with the necessary skills.

Of supreme importance is the completion of the process of development of the National Qualifications Framework; it will serve as the foundation for revision of qualification level, development of standards of competences, new programmes, syllabi and curricula, improvement of the vertical mobility of students and learners, delineation between academic and vocational higher education study programmes, etc.

The state needs to broaden the scope of its interest to not only students in the formal education process, but also those who are employed. It is necessary to focus attention in vocational education and training to workers in small and medium sized companies and to older workers. The potentials of companies must be used for their transformation into “learning organisations”. The working place needs to develop into an environment for offering services for professional orientation and training, and social partners must give due attention and priority to information, support and professional guidance.

Future focus should also cover skills for career and learning management. How young people choose their future profession is a process with many shortcomings. Broad, timely and relevant data and information on opportunities available for transitioning to the labour market and for continuing education are lacking. Introduction of professional orientation in primary education,

expansion and development of career centres and student services in secondary and higher education, respectively, as well as human resource development centres in the local self-government, is a pertinent action for the future. Support must be provided to young people in the development of their identity from the very start of primary education and in the planning of their career during secondary education, as well as assistance to adults for career change. This should result in early detection of interests and inclinations and timely acquisition of skills, knowledge and attitudes necessary for planning and management of life, work and career.

To achieve this goal, the following measures need to be undertaken and realised by 2020:

- *By 2015 develop and implement a methodology for revision of curricula following the principles of outcome/ competence based learning and modularisation with the aim of their harmonisation with European trends for implementation of ECVET*
- *By 2016 complete the process of development of standards of occupations and curricula for 2-y., 3-y. and 4-y. VET*
- *By 2014 evaluate the effects of the work of the existing career centres in VET schools*
- *By 2016 new career centres operate in all VET schools*
- *By 2015 develop mechanisms for provision of career guidance to VET students and information on career opportunities*
- *By 2016 establish mechanisms for provision of information and career guidance to primary school students, acquainting them with career possibilities*
- *By 2015 introduce apprenticeship as a model for practical training in secondary VET*
- *By 2015 introduce apprenticeship as a model combining training and practical work as a practice leading to a recognised qualification in line with current ALM, skills training and other forms of non-formal training*
- *By 2016 revise the laws, bylaws, procedures and programmes for post-secondary education in accordance with the Concept for Post-secondary Education and the NQF (level 5 of the EQF or higher)*
- *From 2013 to 2020 enhance the mobility of VET teachers, trainers and students through international cooperation, learning and work in partner VET schools and companies, including practical training (practical teaching, vocational practice and summer internships abroad)*

Goal B3. Developing key competences for lifelong learning – visa for the future

Current research reveals that the development of vocational competences linked to an occupation is a key dimension for the innovativeness in vocational education and training. Changing conditions impose integration of the general and vocational competences so they become an inherent element of VET curricula, and the context in which learning takes place has its reflection in learning outcomes.

Curricula are required to develop the necessary vocational competences sought by the labour market or sectors beyond national borders. Timely identification and/or forecasting of competences and skills demanded on the labour market is invaluable for the development of the economy, workforce and society. They must be identified and taken into account in the process of redesigning and reforming of VET curricula and the continuing training of young people and adults.

Curricula must ensure the acquisition and development of key competences for lifelong learning, which enable young people and adults acquire basic skills that create the foundation for future life and work, namely: Competence for communication in the mother tongue; Competence for communication in a foreign language; Mathematical competence and basic competences for science and technology; Digital competence; Competence for learning how to learn; Social and civic competences, Sense of initiative and entrepreneurship¹³⁶; and Cultural awareness and expression.

It is especially important to strengthen entrepreneurship in education and training at all levels, including schools, universities and VET in general. The Rethinking Education Initiative of the European Commission states that “This will encourage education institutions to develop more entrepreneurial approaches in areas including leadership, teacher development as well as curriculum delivery”.¹³⁷ Development of entrepreneurial skills and spirit must not depend only on the quality of realisation of a separate subject taught in primary and secondary education. It is a process which is to be realised in a cross-curricular manner and become a constituent part of the work of all teachers irrespective of the level of education (primary, secondary, post-secondary, higher) and irrespective of the manner of realisation (regular teaching, extracurricular activities, project work, research, etc.). Its presence must be strengthened also in initial training which prepares teachers for all tiers of education.

The future procedures for validation and assessment of teaching and learning outcomes in VET must promote a process of identification of the level of development and acquisition of key competences among VET students. To this end, we must ensure that teachers possess the necessary competences for imparting and developing key competences for lifelong learning among young people and adults in the teaching and learning process, and apply appropriate learning strategies and assessment and validation practices.

To achieve this goal, the following measures need to be undertaken and realised by 2020:

¹³⁶ Sense of initiative and entrepreneurship refers to an individual’s ability to turn ideas into action. It includes creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports individuals, not only in their everyday lives at home and in society, but also in the workplace in being aware of the context of their work and being able to seize opportunities, and is a foundation for more specific skills and knowledge needed by those establishing or contributing to social or commercial activity. This should include awareness of ethical values and promote good governance. In *Key Competences for Lifelong Learning – A European Framework*, annex to the Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning, Official Journal of the European Union of 30 December 2006/L394.

¹³⁷ Commissioner Vassiliou's press statement on Rethinking Education, Strasbourg, 20 November 2012

- *By 2016 revise study programmes for initial education of VET teachers to integrate key competences for lifelong learning*
- *By 2016 revise secondary VET curricula to include key competences for lifelong learning and career management skills*
- *By 2018 train VET teachers in development of key competences for lifelong learning career management skills in curricular and extracurricular activities*
- *From 2014 to 2020 introduce a cross-curricular approach and strengthen entrepreneurial learning that enhances self-confidence, critical thinking, creativity, economic and financial literacy, knowledge of the world of labour, communication skills, etc.*

4.3. Quality and relevance – guarantee for competitiveness

Improving the attractiveness, accessibility and quality of VET is of paramount importance in order to allow vocational education and training to play a major role in the strategies for lifelong learning and to facilitate enhancement of equality, business performance, competitiveness and innovation, and to create opportunities for young people and adults to acquire skills that are necessary for their career development, that enable them to participate in training, to be active citizens and achieve personal fulfilment. This entails improvement of the quality of VET, through enhancement of the quality and competences of school teachers, trainers and management, through introduction of flexible pathways in all education levels and through improving the public awareness on the opportunities offered by VET.

Quality as an overarching value in any education system and subsystem, including VET, permeates all goals and measures presented in this Strategy, but also embraces specific ones, aimed at improving practical teaching and training, ensuring delivery and acquisition of key competences, improving management of and support to the VET system, etc. In order to assure that quality is sought and achieved, we must develop appropriate procedures, mechanisms and instruments, organised in a system for quality assurance.

To strengthen this priority area, the following goals need to be achieved by 2020:

Goal C1. Quality assurance

In addition of highly motivated and high quality teachers and trainers, quality in VET requires the establishment of a quality assurance system, which includes a sustainable monitoring and evaluation system based on processes and outcomes in VET, which assess the situation in VET, the impact of new programmes on students, on the labour market and higher education, registers and timely responds to feedback from VET beneficiaries - students, employers, universities, schools and other stakeholders.

The quality assurance system to be instituted in support of improving the quality of VET as a guarantee for employability and competitiveness, must take into account specific requirements and principles:

- QA should be constituent and integral part of the management and development of VET providers and foster accountability and transparency;
- Policies and procedures for QA should be harmonised with the NQF and the national ECVET system, and with EQAVET (EQARF) on an EU level, and address adequately input, context, process and output dimensions and pay special attention to outcomes, including destinations of graduates;
- QA procedures in VET should bring together internal and external mechanisms, and serve as a platform for stakeholder involvement and empowerment; and
- the Republic of Macedonia should join and actively participate in the EQAVET Network.

QA affects all stakeholders in that it by facilitates on-going insight into the quality of VET identifies ways for its improvement. To this end, the state will undertake measures for establishing procedures, mechanisms, instruments and collaboration practices for monitoring, evaluating and enhancing quality in VET, to ensure competitiveness not only on an individual, but also on a general socio-economic level.

To achieve this goal, the following measures need to be undertaken and realised by 2020:

- *By 2015 define a system and framework for quality assurance in VET, which integrates internal and external mechanisms and involves stakeholders, in line with EQAVET*
- *In 2013 redefine indicators and procedures for quality assurance in VET, in line with EQF, EQARF and NQF*
- *By 2015 develop instruments and mechanism for monitoring and control of the delivery of practical training*
- *By 2015 establish a system for professional and career development of teachers and trainers in secondary VET*
- *By 2016 deliver didactical training of SEI inspectors*
- *From 2014 to 2020 ensure on-going participation of RM in international assessments of quality of education (PISA)*
- *From 2014 to 2020 strengthen the technological competences of the employed in all strategic sectors defined in the Strategy for promotion of export 2011*

Goal C2. New skills through new pedagogy

The demands for new skills require changes in the current ways of teaching and learning – they require a new pedagogy. If the new demands are focused on strengthening different kinds of competences, i.e. fundamental, specific vocational and transversal competences, then it is

questionable whether the current organisation of teaching and learning and the learning models respond to the new demands.

Inclusion of VET-appropriate IT in the teaching, work and business processes is of special importance for the future of the VET system. IT supported learning enhances innovativeness in teaching and learning, both in initial and continuing VET. It not only aids understanding, but also enhances the development of IT competences of students in a given context. IT cannot and must not be simply a subject of theoretical learning and application of basic operations. It must “come to life” in the everyday work of teachers and students, and must reflect the reality or simulate the future destinations of students, above all the jobs towards which they aspire.

In order to harness this potential, the role of support mechanisms for teachers and trainers need to be revised, new models of creating and using learning contents must be designed, new pedagogical methods need to be developed and greater involvement of the business sector needs to be ensured. Teaching and learning must not be left to lag behind changes in work and everyday life, they must develop alongside. They need to take into account the lifestyles of the young people and properly and cleverly use them in the processes of learning. Application of teaching models based on young people’s lifestyles, such as use of social networks, of the internet, preoccupation with mobile telephony, non-formal associations, value preferences, etc., which differ from the lifestyles of the older generation, can lead to greater attractiveness of VET, better outcomes from learning and training and higher motivation among young people for learning.

Assessment of student achievements is one area in need of substantive changes. Current assessment is focused on verification to what extent the students can reproduce the contents of the textbook, mostly through tests of knowledge. This approach favours memorising on the part of students and debases the functionality of learning. The future must bring greater focus on development of models for assessment which take into account student competences (knowledge, skills and attitudes) and which reflect the goals of VET, demonstrating greater connectivity with the labour market and life in general.

All these shortcomings necessitate interventions in the initial education and training of teachers and trainers. This system needs to prepare teachers and trainers to efficiently work with young people and adults in an environment of evolving conditions for work and life. Teacher training must inevitable include training in companies, during their initial education and their work in the VET system. This requirement is especially valid for teachers responsible for practical teaching.

The new approach to pedagogy requires that appropriate support and assistance services are provided by professional institutions mandated with curriculum development and monitoring. In this sense, the capacities of the VET Centre, the AEC and the BDE need to be enhanced through further building the skills of advisers for innovative curriculum development, including

introduction of ECVET and distance learning programmes for adults, and for competence-based student/learner assessment.

The concept “learning organisation” stresses the need for companies and their employees to be actively involved in a dynamic process of learning as a source of and place for improving performance. This concept can ensure that teaching and learning in VET are carried out through innovative way of links and collaboration between companies and education and training providers. Promotion of team work, learning partnerships, and more extensive presence and involvement of employees in the teaching and learning processes in education institutions will to a large extent improve the quality of learning

To achieve this goal, the following measures need to be undertaken and realised by 2020:

- *From 2014 to 2020 continuously strengthen andragogical competences of teachers in secondary VET*
- *From 2013 to 2020 continuously enhance innovativeness and entrepreneurial spirit through training of VET teachers on learning through research*
- *From 2014 by 2020 continuously strengthen the competences of VET teachers for development and application of new models for developing of student competences through teaching and learning adapted to their lifestyles*
- *By 2015 modernise assessment in secondary VET*
- *By 2016 improve the quality of VET textbooks and teaching/learning resources that encourage development/acquisition of competences*
- *By 2016 strengthen the quality of trainers and teachers delivering practical teaching in VET*
- *By 2020 develop distance learning in VET*

Goal C3. VET relevant for the labour market

The analysis of the labour market needs to be created through an open dialogue with the business community, as a starting point for the development of the curriculum. VET curricula are over a decade old.¹³⁸ That is too long; things have changed greatly in the meantime. The need for new knowledge and skills, for new profiles and new technologies has changed to a large degree. It is the opinion of the business sector that the profiles produced by the VET system do not meet its needs, not only in regard to necessary skills, but also in regard to types of profiles.¹³⁹ This directly and adversely impacts also the attractiveness of VET. In future, each

¹³⁸ At the moment, education profiles in 3-year VET are being revised, and standards are being developed for every profile. Educational profiles in TVET and post-secondary are out-dated and in need of revision and designing following the new methodology.

¹³⁹ This conclusion was arrived at in the Evaluation of reformed 4-year VET in 2010, and was confirmed through the research carried out for the needs of the Strategy.

syllabus needs to be aligned with the tendencies in the given vocational area and achieve high compatibility with the syllabi delivered in the education systems of EU countries.

The network of VET schools must correspond to the economic, demographic and cultural environment in which it operates. Forecasts of workforce development and skills needed should be in tune with local development and the local economy in the context of the wider economic development of the country. The planning of education profiles and skills that will be required in the future should primarily stem from local needs and development plans.

In regard to mechanisms for curriculum interventions, it is evident that the VET Centre, as institution competent for curriculum development, needs to strengthen its presence and work in the field; only through more frequent contacts with schools and employers can it find out how the curriculum functions and what are the proposals and demands of the stakeholders.

To achieve this goal, the following measures need to be undertaken and realised by 2020:

- *In 2013 introduce the National Qualifications Framework in VET*
- *By 2018 harmonise current syllabi and curricula and study programmes in VET with the adopted NQF*
- *By 2015 improve the process of development and application and stakeholder involvement of the annual analysis of the labour market and necessary profiles, knowledge and skills*
- *By 2016 strengthen the capacities of VET Centre and ESARM for anticipation of necessary skills*
- *By 2016 establish a system collaboration between ESARM, VET Centre and higher education for continuing monitoring of skills needs and availability/ dissemination of information on labour market needs and employability / abilities for further education of graduates*
- *From 2014 to 2020 continuously strengthen the relevance of VET syllabi and curricula*
- *From 2013 to 2020 strengthen the relevance and functionality of the network of secondary VET schools with operational plan for gradual adjustment to the needs of the local economy and development plans*
- *By 2015 improve the quality and relevance of practical teaching and training of students in secondary VET*
- *In 2013 increase the share of practical teaching and training in technical VET*
- *In 2013 establish mechanisms for strengthening the participation of companies in practical teaching and training of VET students*

4.4. Good governance, resources, capacities and accountability in the future VET system

The operationalization of the VET Strategy and the building of the future VET system in the country is directly dependent on the systems of governance in VET, available resources, physical and human capacities of the institutions and professional bodies directly involved in VET, who should shoulder the burden of the implementation of the Strategy, as well as on the decisions for delegating competence and responsibility.

The improvement in this priority area will directly depend on the successful realisation of the following goals:

Goal D1: Improving the efficiency of the national VET governance and support framework

The institutional set-up of VET is adversely affected by insufficient capacities and lack of clarity and overlap in the real execution of the functions. Delineation of competences and of the interaction related to VET policies is of key importance in the improvement of the collaboration between the key bodies and in their accountability. Consolidation of the institutional set-up and operation should follow an appropriate analysis of the legal foundation and an assessment of its impact.

The VET Centre lacks the necessary physical capacities in comparison with the responsibility it has for vocational education and training in the country. Conditions regarding space, equipment, materials, vehicles, IT equipment, etc., must be improved if this Centre is to provide the quality services it is expected to. In addition, the number of professional staff employed in the Centre is symbolic given the volume and nature of assignments it is expected to perform. An increase in their number is more than imperative; this increase must respect the necessity for any newly employment to follow the logic of professional competence. Also, the work of the Centre needs to be organised following criteria for establishment of goal-oriented services. In practice, this will result in establishment of institutional and individual planning and reporting procedures, which is expected to improve the institutional and individual performance and accountability. It will also help eliminate the practice of staff performing a wide spectrum of assignments, which in the present situation of understaffing is a great burden for them.

A need has also been identified for establishing a special department tasked with monitoring and tracking of the situation in vocational education and training and on the labour market. At the moment, the Centre lacks such a department or service, or a person responsible for this, for the purpose of professional execution of its tasks, necessary activity. A possible solution, in line with the latest developments in the EU e.g.: Cedefop research, Skills Panorama and other actions linked with the New Skills and New Jobs initiative) and using funding from accessible EU programme, could be the establishment of a Qualifications Council, which would establish and maintain a dynamic collaboration with the business sector and would carry out regular analyses

of the relevance of the education supply to the labour market demands for qualifications / skills.

It is of paramount importance for the VET Centre to obtain financial independence from the BDE, in line with its professional autonomy. The current situation creates a multitude of problems in the operation of the VET Centre and impedes its development into an active partner in the processes of consultation, collaboration, research and implementation, as well as international collaboration and networking.

Some of the problems plaguing the VET Centre are common to the Adult Education Centre as well. Given the high expectations from this Centre in the future VET system, additional efforts need to be invested in strengthening its physical and human resources. Competence-based employments and goal-oriented services, enhancing in a similar way institutional and individual planning, reporting and accountability of this institution, and enhanced collaboration with the VET Centre are crucial for the future of this institution.

To achieve this goal, the following measures need to be undertaken and realised by 2020:

- *By 2014 harmonise the domestic VET terminology with the terminology in the EU*
- *In 2013 strengthen the legislative support to VET and eliminate overlaps in competences of institutions and professional bodies and speed up procedures for changes in educational profiles*
- *By 2018 strengthen the material and human resources of the VET Centre in line with the Strategy for development of the VET Centre*
- *By 2018 strengthen the material and human resources of the AEC*
- *By 2014 establish mechanisms and instruments for improving the strategic advisory function in VET*
- *From 2014 to 2018 carry out activities for raising the awareness of VET clients and service providers on the work of the VET Centre and the AEC*
- *In 2013 improve the capacities of competent institutions for their own capacity assessment and development planning*

Goal D2: Strengthening social dialogue

Governance in VET throughout the world operates on a multi-level and between multi-stakeholders, with the latest improvements in the legal framework of the country testify for the efforts for systematic involvement of key stakeholder communities, municipalities/local government and the relevant state bodies and agencies in VET policy.

For the country, it is especially important for the social dialogue to be enhanced in the VET governance and management processes. The role of stakeholders currently limited to use of

results of the functioning of the VET system needs to expand through participation in decision-making processes and governance in VET. This will help increase the level of their accountability for the interventions in VET and their effects, and provide a broader spectrum of opportunities for their active involvement in the functioning of VET.

The participation of the business sector in management and decision-making in secondary vocational schools and in quality assurance processes requires legislative measures and development and implementation of new collaboration models and mechanisms, to aid the transformation of the business sector as a stakeholder into a partner in VET.

Successful implementation of the Strategy requires further strengthening of the legislative framework and mechanisms for implementation and effectuation of partnership incentives at all levels in order to ensure effective relations between schools, students and employers, and the expected reduction of the mismatch of qualifications and skills that adversely affect transition to employment in the country.

To achieve this goal, the following measures need to be undertaken and realised by 2020:

- *By 2018 introduce the European Peer Review Model for quality assurance in secondary VET*
- *By 2015 establish a Council for Qualifications at the VET Centre*
- *By 2015 establish Occupational Councils for VET*
- *By 2015 establish Municipal Centres for Human Resource Development Planning (on pilot basis)*
- *In 2013 create conditions for improved collaboration participation of the business community in management of VET schools through legislation amendment*

Goal D3: Improving the efficiency of local VET governance and support

Funding for the public secondary VET system is provided by the Government. Enhanced efforts are needed and recommendable for seeking out and benefiting from diverse funding sources and schemes, and mechanisms should be developed for their utilisation as “models of cost-sharing between different partners in the educational process – the state, businesses and individuals, foundations and alumni – with public investment helping to leverage private sector match-funding”.¹⁴⁰ In the context of devolution of responsibilities, local governments should be encouraged, and on their part be interested, to secure additional resources to support local VET development, and companies “should increase investment in initial VET notably through their

¹⁴⁰ European Commission: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Rethinking Education: Investing in skills for better socio-economic outcomes, Strasbourg, 20.11.2012, COM(2012) 669 final

involvement in alternate training models, but also by supporting schools with adequate equipment”¹⁴¹. Education providers themselves should be encouraged to, and rewarded for, initiating and developing additional income generation activities, which whilst ensuring staff are remunerated and motivated for additional efforts, should also be used to improve the quality and relevance of education and training provided to all beneficiaries throughout the institution.

Similarly, it is necessary for measures to be undertaken to intensify the links between financing, strategic priorities and management of the planned changes. Change management must include mechanisms and procedures that guarantee that results from implemented activities reflect and are also assessed against planned goals. Efficient change management can be achieved through establishment of transparent goals and objectives, monitoring and evaluation of outcomes, and establishment of clear procedures for reporting achievements and mechanisms guarantee accountability for outcomes and results.

To achieve this goal, the following measures need to be undertaken and realised by 2020:

- *By 2015 strengthen the capacities of VET management structures*
- *In 2013, through legislative amendments provide opportunity for VET schools themselves to allocate the time provided for in the syllabus for practical teaching/training according to the needs of the occupational area*
- *In 2013 through legislative amendments strengthening the role of local government in VET*
- *In 2013 through legislative amendments increase the funding from the local government to VET*
- *By 2018 create conditions for strengthening the financial support of the business sector to secondary VET*

¹⁴¹ Ibid.

5. Efficient and effective implementation of the VET Strategy and Action Plan

The VET Strategy is part of the overall efforts of the state for strengthening its economy and improving the quality of social development. Thus, the Strategy should be viewed as an integral component of the state development plans in the coming period and as one of a number of strategies for attracting foreign aid and donations. For this to actually happen, coherent intersectoral/interagency collaboration and agreements are necessary to ensure its implementation, supported by capacity building of national VET experts. The implementation of the Strategy and the overall development of vocational education is a complex process, determined by a multitude of factors and highly dependent on the professionalism and competence of those responsible for the implementation of the planned goals and measures. Its monitoring requires pooling of capacities.

In order for the Strategy for Vocational Education and Training in a Lifelong Learning Context to be implemented efficiently and effectively, it is necessary to realise the following objectives at the very beginning of the process:

- *In 2013 establish a Council for implementation of the VET Strategy*
- *In 2013 organise a donor conference aimed at ensuring coordination and support to the implementation of the VET Strategy and Action Plan*

6. Stages in the implementation of the Strategy

The implementation of the Strategy and Action Plan for Vocational Education and Training in a Lifelong Learning Context will be carried out in several stages:

1. Presentation and dissemination of the VET Strategy
This stage entails development of informational and promotional materials (slogans, posters, fliers, video presentations, dedicated website, etc.) to facilitate transparency and timely availability of information related to and/or contained in the VET Strategy. The aim is to raise awareness among VET clients and the general public on the importance of the expected outcomes and planned measures, as well to mobilize them and rally their support. This activity will be implemented through the information services of the MoES/GoM with support from the VET Centre.

In addition, regional meetings and roundtables will be held with VET providers with participation of stakeholders, especially the business sector. The aim of these meetings

is to share the vision and goals of the VET Strategy with the groups that will implement the activities and measures and will benefit from the expected outcomes. The VET Centre will be responsible for this activity. School managers, teachers and trainers, learners and other stakeholders must be timely informed and actively included in order to avoid a top-down perception of the proposed innovation and reform and strengthen the sense of ownership.

2. Establishment of a Council for monitoring the implementation of the VET Strategy

This Council is an intersectoral body at a high decision-making level and comprises representatives of the key institutions directly responsible for respective aspects of VET, i.e. MoES, MoLSP, MoE, MoF, VET Centre and AEC, complemented by the business community. It is necessary for the members of this Council to have at their disposal the time, skills and systems necessary for performance of their assignments. The Council is tasked with coordination and monitoring of the implementation of the VET Strategy, collection of feedback from the field and maintaining links between all sectors, harmonization with respective sectoral strategies that have impact of the VET System or that the VET Strategy impacts, its review and revision (if necessary), and addressing of emerging obstacles (if any). This Council, on the basis of the goals and measures provided for in the Strategy and operationalized in the Action Plan delegates the responsibility for implementation of actions to respective institutions and/or individuals. On the basis of reports submitted by the designated implementers and based on the outcomes of the realization of the work plans for each goal and/or measure, it adopts decisions on completion, extension, revision or amendment of the interventions.

The Council may invite representatives of key donors and other relevant international partners to its meetings and discussions.

3. Implementation of the VET Strategy

The responsibility for this component rests with the institutions/individuals mandated with the implementation of respective goals/measures.

4. Monitoring of the implementation of the VET Strategy

The monitoring is based on review of regular written and oral reports submitted by designated implementers to the Council. Reports are to be submitted on a quarterly basis.

5. Mid-term Review of the implementation of the VET Strategy

The Review, carried out by independent experts, will evaluate the results of the interventions half way into the implementation period, preferably in 2017. It is expected also to provide recommendations for possible amendments to the Action Plan, if any are deemed necessary, to improve the quality of interventions in the second half of the implementation period.

6. Evaluation of the implementation of the VET Strategy

The evaluation will seek to appraise the final results and outcomes of the interventions. Under the guidance of the Council, the Evaluation will be carried out by independent experts, with logistical support from the VET Centre.

It is important to ensure that this process makes good and effective use of available EU programmes and funding in the areas of education as well as in employment, research and entrepreneurship. Moreover, capacity building opportunities accessible within the framework of EU cooperation in education and training, e.g. in the areas of quality in VET and qualifications/NQF, should be pursued and utilised.

This Strategy offers for the first time a long-term perspective for sector-wide reforms in VET and harmonization of the contribution and plans of international partners in the area of VET. The coordination between donors can be coherently structured and their interventions in and financing of VET reforms can be harmonised with the general sectoral policies and priorities set out in this Strategy. Its implementation will greatly benefit from coordinated and harmonised donor involvement and assistance. It is however, a responsibility of the institutions of the VET system to ensure preconditions for coherence and sustainability of project achievements and results.

The final outcomes and achievements of the VET Strategy will depend on the professionalism and dedication of all stakeholders mandated with implementation of its activities. Given the huge significance currently attributed to vocational education and training in the country, we expect strong support, commitment and constructive approach from all, regardless of any existing differences. The goals larger than any of us.

References

1. Bologna Process European Higher Education Area, accessible at <http://www.ehea.info/>
2. Budget of the RM for 2011 and 2012, Directive on the methodology for allocation of dedicated and block grants in secondary education, Official Gazette of the RM 176/
3. CEDEFOP (2012): From education to working life - The labour market outcomes of vocational education and training, Luxembourg: Publications Office of the European Union, 2012
4. Cedefop (2012): Trends in VET policy in Europe 2010-12 - Progress towards the Bruges communiqué, Luxembourg: Publications Office of the European Union, 2012
5. COM(2008) 868, 16.12.2008. Council conclusions of 9.3.2009 and 7.6.2010. 'New Skills for New Jobs: Action Now' Expert Group Report, Feb. 2010
6. Commission of the European Communities (2001), Report from the Commission: The Concrete Future Objectives of Education Systems, Brussels, 31.01.2001, COM(2001) 59 Final
7. Commission of the European Communities Brussels, 30.10.2000 Sec(2000) 1832 Commission Staff Working Paper - A Memorandum on Lifelong Learning
8. Commission of the European Communities, Proposal for a Recommendation of the European Parliament and of the Council on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training, Brussels, 9.4.2008
9. Commissioner Vassiliou's press statement on Rethinking Education, Strasbourg, Tuesday 20 November 2012
10. Communiqué of the European Ministers for vocational education and training, the European social partners and the European Commission, THE BORDEAUX COMMUNIQUÉ, on enhanced European cooperation in vocational education and training, Bordeaux, 26 November 2008
11. Council conclusions on the "Strategic Framework for European cooperation in education and training ET(2020)" (doc. 9845/09)
12. Council notices from European union institutions and bodies - Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), Official Journal of the European Union, 2009/C 119/07
13. EACEA P9 Eurydice, Key Data on Education in Europe 2009, July 2009
14. EC (1997), Convention on the Recognition of Qualifications Concerning Higher Education in the European Region, Lisbon; Commission of the European Communities (2001), Report from the Commission: The Concrete Future Objectives of Education Systems, Brussels, 31.01.2001, COM(2001) 59 Final
15. ECOTEC, Beyond the Maastricht Communiqué: developments in the opening up of VET pathways and the role of VET in labour market integration - Consolidated Final Report, 2008
16. ESARM : National report from the analysis of necessary skills at the labour market in the Republic of Macedonia for 2011/2012

17. ESARM, Entry of persons into the registry of unemployed with completed secondary vocational education (according to profile and occupation) at the age of 19 in 2009
18. ESARM, National Report: Analysis of the needs for skills at the labour market in the Republic of Macedonia, Skopje, June 2008
19. ESARM, Review of registered application for employment from the register and from outside the register of unemployed in the period from 01.01.2008 to 31.12.2008
20. ESARM, Review of registered application for employment from the register and from outside the register of unemployed in the period from 01.01.2009 to 31.12.2009
21. ESARM, Review of registered application for employment, according to the time period elapsed from the previous employment in the period from 01.01.2009 to 31.12.2009
22. ESARM, Review of registered application for employment, according to the time period elapsed from the previous employment in the period from 01.01.2008 to 31.12.2008
23. ESARM, Review of registered application for employment, according to the time period elapsed from the previous employment in the period from 01.01.2009 to 31.12.2009
24. ESARM, Review of unemployed persons according to age, status as of 31.12.2009
25. ESARM, Review of unemployed persons according to age, status as of 31.12.2008
26. ESARM, Review of unemployed persons according to level of education, status as of 31.12.2009
27. ESARM, Review of unemployed persons according to level of education, status as of 31.12.2008
28. ESARM, Review of unemployed persons according to national affiliation, status as of 31.12.2008
29. ESARM, Review of unemployed persons according waiting period, status as of 31.12.2008
30. ESARM, Review of unemployed persons with completed secondary vocational education, 31.12.2009
31. ESARM, Review of unemployed persons with completed secondary vocational education, according to the profile of schooling, waiting period and gender, status as of 31.12.2009
32. ESARM, Review of unemployed persons with completed secondary vocational education, according to profile of schooling, waiting period and gender, status as of 31.12.2009
33. ESARM, Review of unemployed persons with secondary vocational education, status as of 31.12.2009
34. ESARM, Review of unemployed persons with secondary vocational education, according to age, status as of 31.12.2009
35. ESARM, Review of unemployed persons with secondary vocational education, according to waiting period, status as of 31.12.2009
36. ESARM, Review of unemployed persons with secondary vocational education, according to national affiliation, status as of 31.12.2009
37. ESARM, Review of unemployed persons with secondary vocational education, according to profile of schooling, age and gender, status as of 31.12.2009
38. ESARM, Review of unemployed persons, status as of 31.12.2008

39. ESARM, Review of unemployed persons, status as of 31.12.2009
40. ESARM, Situation 03.02.2010.
41. ETF (2010): Collaborative Evaluation of the Impact of the Reformed 4-year Secondary Vocational Education, Skopje
42. ETF (2012): Legislative Framework and Institutional Setting, March 2012
43. ETF (2012): Skills Needs Forecast and Qualifications System, March 2012
44. ETF (2013a), Human Resources Review Report of the former Yugoslav Republic of Macedonia, Turin, 2012, forthcoming
45. ETF (2013b), Torino Process 2012, former Yugoslav Republic Macedonia, forthcoming
46. ETF, Report on the Labour Market in Republic of Macedonia, Final version 28 June - 30 September 2005;
47. European Commission - Press release, Entrepreneurship education on the increase, Brussels, 13 April 2012
48. European Commission (2010): Agenda for new skills and jobs: EU sets out actions to boost employability and drive reform, Strasbourg, 23 November 2010
49. European Commission (2010): EUROPE 2020- A strategy for smart, sustainable and inclusive growth, Brussels, 3.3.2010, COM(2010) 2020 final
50. European Council (2002): Declaration of the European Ministers of Vocational Education and Training, and the European Commission, convened in Copenhagen on 29 and 30 November 2002, on enhanced European cooperation in vocational education and training - "The Copenhagen Declaration", Copenhagen
51. Government of the Republic of Macedonia, Decision on the number of students for enrolment into the first year at public higher education institutions, 2011/2012, 1.03.2011
52. Government of the Republic of Macedonia, Ministry of Education and Science, Development and State of the Adult Learning and Education (ALE), National report of the Republic of Macedonia, April 2008
53. ILO (2012): Global Employment Trends 2012 - Preventing a deeper jobs crisis, International Labour Office Geneva
54. José Manuel Barroso, Report of the Commission, Europe 2020 – Strategy for Smart, Sustainable and Inclusive Growth, Brussels, 2010
55. Law on adult education (Official Gazette of the Republic of Macedonia No. 07 from January 2008);
56. Law on amendments and supplements to the Law on secondary education (Official Gazette of the Republic of Macedonia No. 49 from 2007)
57. Law on amendments and supplements to the Law on vocational education and training (Official Gazette of the Republic of Macedonia No. 117 from 18.09.2008)
58. Law on the Bureau for Development of Education (Official Gazette of the Republic of Macedonia No. 37 from 28.03. 2006);
59. Law on education inspectorate (Official Gazette of the Republic of Macedonia No. 52 from 04.07. 2005)
60. Law on higher education (Official Gazette of the Republic of Macedonia No. 35 from 14.03.2008)

61. Law on secondary education (Official Gazette of the Republic of Macedonia number 52 from 2002)
62. Law on State Examination Centre (Official Gazette of the Republic of Macedonia No. 142 from 10.11.2008);
63. Law on vocational education and training (Official Gazette of the Republic of Macedonia No. 71 from 08.06. 2006)
64. Manfred Wallenborn & Stephen P. Heyneman 2009: Should vocational education be part of secondary education?, Springer Science+Business Media B.V. 2009
65. Ministry of Education and Science (2005), National programme for development of education in the Republic of Macedonia 2005-2015
66. Ministry of Education and Science (2010), Concept for vocational education and training in the Republic of Macedonia, Skopje
67. Ministry of Education and Science of the Republic of Macedonia, News release from 06.11.2008
68. Ministry of Education and Science(2005), National programme for development of education in the Republic of Macedonia 2005-2016, Skopje
69. Ministry of Education and Science, Open call for enrolment of students in public secondary schools in the school year 2009/2010 in the Republic of Macedonia, 2010
70. Ministry of Education and Science, Open call for enrolment of students in public secondary schools in the school year 2011/2012 in the Republic of Macedonia, 2012;
71. Ministry of Education and Science, Rulebook on amendments and supplements to the Rulebook on the manner of taking exams and assessment of student results at the examinations within the State Matura in secondary general and vocational education, Official Gazette of the RM, No.61 from 15.05.2009
72. Ministry of Education and Science, Rulebook on amendments and supplements to the Rulebook on the manner of taking exams and assessment of student results at the examinations within the State Matura in secondary general and vocational education, Official Gazette of the RM, No.68 from 03.06.2008
73. Ministry of Education and Science, Rulebook on amendments and supplements to the Rulebook on the manner of organising and carrying out the assessment of student achievements, and also the manner of establishing the final student grades in public secondary schools, Official Gazette of the RM, No.61 from 15.05.2009
74. Ministry of Education and Science, Rulebook on manner of taking exams and assessment of student results at the exams within the State Matura in secondary general and vocational education, Official Gazette of the RM, No.140 from 21.11.2007
75. Ministry of Education and Science, Rulebook on structure, organisation and realisation of the exam for low-level vocational qualification , Official Gazette of the RM, No.29 from 27.02.2009
76. Ministry of Education and Science, Rulebook on the manner of organising and carrying out the assessment of student achievements, and also the manner of establishing the final student grades in public secondary schools, Official Gazette of the RM, No.165 from 30.12.2008

77. Ministry of Education and Science, Rulebook on the manner of taking exams and assessment of student results at the final exam in secondary vocational education of 4-year duration, Official Gazette of the RM, No.45 from 04.04.2008
78. Ministry of Education and Science, Rulebook on the structure, organisation and realisation of the master exam, Official Gazette of the RM, No.36 from 17.03.2008
79. Ministry of Education and Science/BDE (2007), Concept for Matura and final exam in secondary education of 4-year duration in the Republic of Macedonia, Skopje, 2007
80. Ministry of Finance of the Republic of Macedonia, Bulletin, January 2010
81. Ministry of Finance of the Republic of Macedonia, News release od 03.10.2008.
82. Ministry of Labour and Social Policy of the Republic of Macedonia, Strategy for demographic development of the Republic of Macedonia – 2008-2015, Skopje, 2008
83. Mojsoska-Blazevski, Nikica; Kostadinov, Aleksander; Gregg, Con; Von Uexkull, Erik; Mechkaroska-Simjanoska, Natasha (2012): Policies for skills towards economic diversification in the Former Yugoslav Republic of Macedonia, International Labour Organisation; Team for Technical Assistance to Decent Work and Office for Central and Eastern Europe. - Skopje: MOT, 2012, p. 12
84. MoVE-iT project, Overcoming Obstacles to Mobility for Apprentices and Other Young People in Vocational Education and Training, Summary Report, April 2007
85. News release of the Ministry of Education and Science from 29 July 2009
86. OECD (2009): Development Centre Studies Is Informal Normal?: Towards More and Better Jobs in Developing Countries;
87. OECD, Education at a Glance 2009, OECD Indicators, September 2009
88. OECD, Learning for Jobs, OECD Policy Review of Vocational Education and Training, Initial Report, October 2009
89. Phillip Brown, David Ashton and Hugh Lauder (2010): Skills are not enough: the globalisation of knowledge and the future UK economy, Praxis, UK Commission for employment and skills, No. 4 / March 2010
90. Recommendation of the European Parliament and of the Council on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training, 18 June 2009
91. SSO, Annual Report, Skopje 2004/05/06/07
92. SSO, Business Entities, Skopje, 12.03.2010
93. SSO, Labour market, Active population in the Republic of Macedonia, Results from the Labour Force Survey, III trimester 2012
94. SSO, Labour market, Labour Force Survey 2011, Skopje, 2012
95. SSO, Labour market, Situation 12/2012
96. SSO, MAKStat Base: Working age population according to economic activity, gender and educational attainment, Situation from 04.12.2012
97. SSO, News release, 2012
98. SSO, News release: 28.04.2009
99. SSO, News release: Population and social statistics, 2.4.11.04/68

100. SSO, News release: Students enrolled in higher vocational schools and faculties in the Republic of Macedonia in the academic year 2008/2009 (first study cycle), Skopje, 24.02.2010
101. SSO, PC-AXIS documents for the requested area: Population estimations, Population in the Republic of Macedonia on 30.06. by specific age group, gender, municipality as per administrative division of the territory from 1996, by year. Accessible at: http://makstat.stat.gov.mk/pxweb2007bazi/Database/Statistika_po_oblasti/Naselenie/Proceni_na_naselenie/Proceni_na_naselenie.asp
102. SSO, Population, accessible at: <http://www.stat.gov.mk/OblastOpsto.aspx?id=2> od 17.06.2012
103. SSO, Primary and secondary schools at the beginning of the school year (for 2008, 2009 and 2010)
104. SSO, Primary and secondary schools at the beginning of the school year 2009/2010
105. SSO, Primary and secondary schools at the beginning of the school year 2008/2009, July 2010
106. SSO, Primary and secondary schools at the beginning of the school year 2011/2012, News release 2.4.12.04/718
107. SSO, Primary and secondary schools at the beginning of the school year 2009/2010
108. SSO, Primary and secondary schools at the beginning of the school year 2010/2011
109. SSO, Primary and secondary schools at the end of the school year 2007/08, Skopje, July 2009
110. SSO, Primary and secondary schools at the end of the school year 2008/2009
111. SSO, Primary and secondary schools at the end of the school year 2009/10, Skopje, July 2011
112. SSO, Women and Men in the Republic of Macedonia, 2012;
113. State Examination Centre of the Republic of Macedonia, Data on the State Matura in 2009
114. The Bordeaux Communiqué on enhanced European cooperation in vocational education and training, Communiqué of the European Ministers for vocational education and training, the European social partners and the European Commission, meeting in Bordeaux on 26 November 2008 to review the priorities and strategies of the Copenhagen process
115. The Bruges Communiqué on enhanced European Cooperation in Vocational Education and Training for the period 2011-2020, Communiqué of the European Ministers for Vocational Education and Training, the European Social Partners and the European Commission, meeting in Bruges on 7 December 2010 to review the strategic approach and priorities of the Copenhagen process for 2011-2020
116. The Maastricht Communiqué, on the Future Priorities of Enhanced European Cooperation in Vocational Education and Training (VET), 14 December 2004, accessible at: (http://ec.europa.eu/education/lifelong-learning-policy/doc/vocational/maastricht_en.pdf);
117. The Conference Board, Corporate Voices for Working Families, the Partnership for 21st Century Skills, and the Society for Human Resource Management (2006): Are They

Really Ready To Work? Employers' Perspectives on the Basic Knowledge and Applied Skills of New Entrants to the 21st Century U.S. Workforce, survey, ISBN No. 0-8237-0888-8

118. The Council of the European Union (2009): Notices from European Union Institutions and Bodies, Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'), Official Journal of the European Union (2009/C 119/02)
119. The Torino Process, accessible at:
http://www.etf.europa.eu/Web.nsf/pages/Torino_Process_EN
120. UNDP (2000), Millennium Development Goals (MDG) - United Nations Millennium Declaration, Millennium Summit in New York, 6-8 September
121. UNDP, Report of the Republic of Macedonia on the Millennium Development Goals, Skopje, 2005;
122. UNESCO (1990): World Conference on Education for All - Meeting Basic Learning Needs, Jomtien, Thailand, 5-9 March
123. UNESCO (2012): Transforming Technical and Vocational Education and Training Building skills for work and life, United Nations Educational, Scientific and Cultural Organisation, Paris 2012
124. Velkovski, Zoran (2005): Lacrimae mundi, BDE, Skopje, 2005
125. ZELS, Glasilo, July 2012

ACTION PLAN

STRATEGY FOR VOCATIONAL EDUCATION AND TRAINING IN A LIFELONG LEARNING CONTEXT

2013 - 20

ACTION PLAN

A: VET in the function of strengthening social cohesion and social inclusion

Outcome Indicators:

- Number of early school leavers decreased to 10%
- Number of persons with low skills levels and from other at risk groups who are in the process of learning and acquire skills increased
- Inclusive nature of VET schools strengthened
- Procedure for VNFIL for persons in need of certification of acquired skills developed and tested

Goal	Target Groups	Measure	Activities	Output Indicators	Responsible Institution	Time frame
A1: Strengthening monitoring of secondary VET early leavers	early school leavers	1. Introducing a system for monitoring VET students	<ul style="list-style-type: none"> - Develop indicators for monitoring - Develop a software solution - Develop Rulebook on tracking - Amend/supplement the Law on VET and Law on SE in regard to tracking 	<ul style="list-style-type: none"> - # of established indicators - software developed - Rulebook developed and operational - # of amended/supplemented laws 	VET Centre ESARM SSO VET schools	2013 2014 2013 2014
		2. Establishment of school-based mechanisms and practices for detection of students under risk of leaving school early	<ul style="list-style-type: none"> - Develop manual - Train school support services - Train VET teachers 	<ul style="list-style-type: none"> - manual developed - # of trained support service members - # of trained teachers 	VET Centre BDE VET schools	2013 2014 2014
A2: Strengthening career guidance services in VET schools	students at risk of early leaving	1. Allocation/hiring of staff and their training	<ul style="list-style-type: none"> - Develop Programme for guidance support to parents and students at risk of early leaving - Train pedagogues and psychologists from VET schools 	<ul style="list-style-type: none"> - Programme developed - # of trained pedagogues and psychologists 	MoES, VET Centre, BDE Pedagogical Service, VET schools, USAID	2013 2014
A3: Preventing early leaving	students at risk of early leaving	1. Linking of social welfare to obligation for completion of compulsory education	<ul style="list-style-type: none"> - Amend the Law on VET, Law on SE and the Laws regulating social welfare 	<ul style="list-style-type: none"> - # of amended/supplemented laws 	MoES MoLSP	2014
	socially vulnerable students	2. Providing scholarships to students from socially vulnerable groups	<ul style="list-style-type: none"> - Establish criteria for awarding and keeping scholarships - Publish Open call - Select candidates 	<ul style="list-style-type: none"> - criteria established - open call published - # of selected candidates 	MoES MoLSP	2013 2014 2014
		3. Introducing educational mediators as additional assistance in primary education to ensure Roma students stay at school and graduate, and transition into secondary education	<ul style="list-style-type: none"> - Introduce mentoring system for supporting Roma students - Develop manual for mentoring - Establish criteria for meeting conditions for mentor - Publish Open call - Select candidates for mentors - Develop instruments and mechanisms for M&E 	<ul style="list-style-type: none"> - mentoring system introduced and operational - manual developed - criteria established and operational - open call published - # of selected candidates - instruments and mechanisms developed 	MoES, BDE MoF, MoLSP Directorate for Communities, NGOs	2013 2013 2013 2014 2014 2013

		4. Introducing educational mediators as additional assistance in secondary VET to ensure Roma students stay at school and graduate, and transition into higher education	<ul style="list-style-type: none"> - Introduce mentoring system for supporting Roma students - Develop manual for mentoring - Establish criteria for meeting conditions for mentor - Publish Open call - Select candidates for mentors - Develop instruments and mechanisms for M&E 	<ul style="list-style-type: none"> - mentoring system introduced and operational - manual developed - criteria established and operational - open call published - # of selected candidates - instruments and mechanisms developed 	MoES, VET Centre BDE, MoF MoLSP Directorate for Communities, NGOs	2013 2013 2013 2014 2014 2013
A4: Supporting students with SEN	students with SEN	1. Training of VET teachers for working with students with SEN in mainstream VET schools	<ul style="list-style-type: none"> - Develop teacher training programme for development and implementation of individual learning programmes - Establish training dynamics/plan - Train 100 teachers annually 	<ul style="list-style-type: none"> - training programme developed - training dynamics/plan established - 100 teachers trained annually 	VET Centre BDE University	2013 2013 2014
		2. Introduction of syllabi & curricula for technical qualifications for special schools for students with SEN	<ul style="list-style-type: none"> - Develop syllabi and curricula for technical qualifications for students with SEN 	<ul style="list-style-type: none"> - Syllabi and curricula for technical qualifications developed 	MoES, BDE VET Centre VET schools	2014 - 20
		3. Improvement of physical infrastructure in mainstream VET schools for students with SEN	<ul style="list-style-type: none"> - Conduct Analysis of necessary physical infrastructure in VET schools - Improve necessary physical on the basis of results from the analysis 	<ul style="list-style-type: none"> - Analysis conducted - Infrastructure improved 	MoES, BDE VET Centre local government	2014 2015-6
A5: Strengthening interethnic integration and cohesion in VET	students and teachers from different ethnic groups	1. Implementation of joint curricular and extracurricular activities in VET schools aimed at strengthening inter-ethnic integration and cohesion, including practical training (practical teaching, vocational practice and summer internships)	<ul style="list-style-type: none"> - Develop Programme for curricular and extracurricular activities - Publish Open call for supporting projects on intercultural dialogue - Selection of projects - Evaluation of effects 	<ul style="list-style-type: none"> - Programme developed - open call published - # of selected projects - # of participating VET schools - # of participating students - participant satisfaction level - intercultural dialogue improved 	VET Centre BDE MoES SEI	2014 2014 2014 2015-6
A6: Strengthening the employability of the workforce	youth adults	1. Training of youth and adults without qualifications at ISCED 3 level and higher	<ul style="list-style-type: none"> - Conduct Analysis of the real educational needs of persons without qualifications on national and regional level - Establish desirable low level qualifications and/or skill sets - Develop "ISCED 3" Project - Develop programmes - Accredited programmes - Select training providers - Publish Open call for training - Deliver training 	<ul style="list-style-type: none"> - Analysis conducted - Desirable low level qualifications and/or skill sets agreed and established - Project developed - # of selected training providers - Open call published - # of persons having acquired a qualification 	VET Centre AEC MoES ESARM MoLSP companies	2014 2014 2014 2014 2014 2014 -20
		2. Delivery of short, dynamic and flexible courses for acquiring skills that respond to the needs of the labour market for youth and adults with qualifications	<ul style="list-style-type: none"> - Develop Rulebook on skills upgrade for students with completed secondary VET - Develop programmes for skills upgrade - Accredited programmes - Deliver training 	<ul style="list-style-type: none"> - Rulebook developed - # of programmes developed - # of programmes accredited - # of courses organised - # of learners having acquired skills 	VET Centre AEC, MoES ESARM MoLSP companies	2014 2014 2015 2016 -20
A7: Establishing a system for validation of non-formal	VET Centre, AEC, institutions partaking in VNFIL	1. Review on possibilities for establishing a system for validation of non-formal and informal learning (VNFIL)	<ul style="list-style-type: none"> - Conduct Study (SWOT) analysing the possibilities for establishing a system for validation of non-formal and informal learning (VNFIL) 	<ul style="list-style-type: none"> - Study conducted - recommendations for system for VNFIL identified 	VET Centre AEC MoES	2014-5
			-	-		

and informal learning (VNFIL)	Persons with competences acquired through NFIL	2. Development of procedures, mechanisms and programmes for VNFIL within the NQF, following competence/learning outcome based curricula and appropriate assessment procedures	<ul style="list-style-type: none"> - Develop Rulebook on procedures and mechanisms for VNFIL - Identify competent institutions - Form commissions 	<ul style="list-style-type: none"> - Rulebook developed - procedures and mechanisms established - competent institutions identified - # of commissions formed 	VET Centre AEC MoES MoLSP	2016-8 2016-8 2016-8
		3. Implementation of the system for VNFIL	<ul style="list-style-type: none"> - Piloting of the system for VNFIL in 1 occupational area (following the interest identified in the Study) 	<ul style="list-style-type: none"> - system for VNFIL piloted - # of persons whose NFIL has been validated 	VET Centre AEC, ESARM	2018-20

B: Attractive vocational education and training

Outcome Indicators

- Students are capable of making informed decisions on their future career and learning
- Students at all levels have better opportunities to reach their potential and meet their needs through flexible curricula programmes and learning pathways
- Number of students considering secondary VET attractive and increased enrolment
- Local economy meets better its demand for workers
- Comprehensive post-secondary and higher VET introduced on system level
- Increased interest and enrolment in post-secondary education and training
- Key competences for LLL integrated in study programmes for initial teacher training and secondary VET curricula
- Key competences for LLL acquired and appropriately assessed in secondary VET

Goal	Target Groups	Measure	Activities	Output Indicators (output)	Responsible Institution	Time frame
B1: Raising public awareness on the attractiveness and opportunities offered by VET	VET students	1. Establishing optimal student workload in secondary VET	<ul style="list-style-type: none"> - Revision of syllabi and curricula in secondary VET and harmonisation of student workload in secondary VET students with that in general secondary education, creating a common standard of workload 	<ul style="list-style-type: none"> - syllabi and curricula in secondary VET revised - workload of students in secondary general and VET equal and optimal 	VET Centre BDE	2014
	VET students	2. Revision of State Matura to take into account the specificities of secondary VET	<ul style="list-style-type: none"> - Conduct Analysis of the relevance of the State Matura Concept for VET students - Establish commission for amendments/changes in the State Matura Concept - Amend/supplement pertinent legislation 	<ul style="list-style-type: none"> - Analysis conducted - commission established and operational - # of laws reviewed and amended/supplemented 	MoES VET Centre BDE SEC	2013 2013 2013
	VET students	3. Revision of the possibility for enrolment into university education with School Matura or Final Exam	<ul style="list-style-type: none"> - Conduct Analysis of the effects from the possibility for enrolment into university education with School Matura or Final Exam - Undertake measures in line with the results of the Analysis 	<ul style="list-style-type: none"> - Analysis conducted - # of laws and rulebooks reviewed and emended/supplemented - solutions/recommendations identified and implemented 	MoES universities	2013 2013
	students, parents, employers, broader public	4. Raising public awareness on importance and attractiveness of VET	<ul style="list-style-type: none"> - Develop Campaign programme - Organise/carry out campaign 	<ul style="list-style-type: none"> - Programme developed - campaign realised - perceptions improved 	MoES, MoLSP VET Centre ESARM companies Chambers	2013 2014

	VET students VET teachers	5. Modernisation of equipment and laboratories in VET schools	<ul style="list-style-type: none"> - Conduct Analysis of needs of VET schools - Procure didactic equipment - Equip laboratories for practical teaching in VET schools 	<ul style="list-style-type: none"> - Analysis conducted - # of VET schools receiving new didactic equipment - # of new laboratories - amount of funds invested per year 	MoES VET schools municipalities companies	2013-20 (on-going)
	professors university students VET schools companies	6. Increasing attractiveness of research and innovation through agreements for systematic and structured collaboration between university laboratories, new laboratories in VET schools and industry research centres	<ul style="list-style-type: none"> - Sign Cooperation Protocols - Publish Open call for innovative projects - Sector support by the Government of the RM for development of joint innovation and research projects - Select applications - Support of Government of the RM to the selected projects 	<ul style="list-style-type: none"> - # of Protocols - open call published - # of applications submitted - # of applications accepted and finances - stakeholder satisfaction level increased 	VET Centre Universities VET schools companies MoE, MoF Chambers	2013 2014 2014 2014 2014-5
	VET students	7. Organisation of regional/national innovation competitions for VET by occupational area	<ul style="list-style-type: none"> - Publish Open call for proposals - Initially assess received proposals - Provide training for contestants - Organise competitions - Provide awards for winners 	<ul style="list-style-type: none"> - Open call published - # of received proposals - # of accepted proposals - # of contestants - training organised - # of competitions organised - # of prizes awarded 	VET Centre VET schools business community	2014-20 (on-going)
	VET clients	8. Establishment of a system for tracking processes (progression of students and work of VET schools) and outcomes (destinations of graduates)	<ul style="list-style-type: none"> - Establish tracking indicators - Develop Rulebook on tracking - Develop software solution - Sign Protocols for transfer of information in line with the Law on Data Protection - Develop Integrated base of quantitative and qualitative data on VET, higher education and the labour market 	<ul style="list-style-type: none"> - # of established indicators - Rulebook developed - software developed - # of signed Protocols - Integrated data base developed and operational - quantitative and qualitative data available and accessible 	MoES VET Centre MoLSP	2016-8
B2: Building diverse and flexible pathways for learning and professional guidance in the context of lifelong learning	advisers from the VET Centre, BDE and AEC, VET providers teachers companies	1. Development and implementation of methodology for revision of curricula following the principles of <u>outcome/ competence based learning</u> and <u>modularisation</u> with the aim of their harmonisation with European trends for implementation of ECVET	<ul style="list-style-type: none"> - Develop methodology syllabus and curriculum development based on competences/learning outcomes and modularisation - Train advisers from VET Centre, BDE and AEC, VET providers, teachers, companies - Develop new syllabi and programmes - Accreditation of the new syllabi and programmes 	<ul style="list-style-type: none"> - Methodology developed - # of trained advisers, training providers, teachers, companies - # of new accredited syllabi and curricula 	VET Centre BDE AEC Chambers	2014-6 2014-5 2014-20 2014-20
	advisers from the VET Centre, BDE and AEC, VET providers teachers companies	2. Completion of the process of development of standards of occupations and curricula for 2-y., 3-y. and 4-y. VET	<ul style="list-style-type: none"> - Complete standards of occupations for 2-y. VET - Complete standards of occupations for 3-y. VET - Develop standards of occupations for 4-y. VET - Complete curricula for 2-y. VET - Complete curricula for 3-y. VET - Develop curricula for 4-y. VET 	<ul style="list-style-type: none"> - standards of occupations for 2-y. VET completed - standards of occupations for 3-y. VET completed - standards of occupations for 4-y. VET developed - curricula for 2-y. VET completed - curricula for 3-y. VET completed - curricula for 4-y. VET developed 	VET Centre MoES Business community BDE	2013-4 2013-4 2014-5 2013-4 2013-4 2014-5
	VET students	3. Review of the network of career centres in VET schools	<ul style="list-style-type: none"> - Conduct Analysis of the work of career centres existing in VET schools 	<ul style="list-style-type: none"> - Analysis conducted - insight in work of centres available 	MoES VET Centre	2014
	VET students	4. Opening of new career centres in	<ul style="list-style-type: none"> - Establishment of 51 career centres in VET 	<ul style="list-style-type: none"> - 51 career centres established and 	MoES, VET	2013-5

		VET schools	schools	operational	Centre, BDE USAID	
	VET students	5. Provision of career guidance to VET students and information on career opportunities	<ul style="list-style-type: none"> - Training of delegated/appointed teachers for work in the centres - Allocation of remuneration for the persons responsible for the operation of the career centres in the VET schools 	<ul style="list-style-type: none"> - # of trained teachers - funds secured/allocated - # of teachers engaged - user satisfaction level 	MoES, VET Centre, BDE municipalities	2014 2014
	primary school students	6. Establishment of mechanisms for provision of information and career guidance to primary school students, acquainting them with career possibilities	<ul style="list-style-type: none"> - Develop Manual for career guidance - Develop instruments for career guidance - Train persons delegated for career guidance 	<ul style="list-style-type: none"> - Manual developed - instruments developed - # of trained persons 	MoES BDE VET Centre	2013-4 2014 2014-5
	VET students	7. Introduction of <i>Apprenticeship</i> as a model for practical training in secondary VET	<ul style="list-style-type: none"> - Conduct Study to analyse possibilities for introducing Apprenticeship in secondary VET - Develop Rulebook on apprenticeship - Establish commissions for amendments and supplements to the legislation on employment, VET, qualifications, etc. 	<ul style="list-style-type: none"> - Study conducted - insight into possibilities available - Rulebook developed - # of established commissions - # of amendments and supplements to the Laws - model accepted/adopted 	VET Centre social partners, esp. crafts chambers	2014 2014 2014
	persons without qualifications	8. Introduction of <i>Apprenticeship</i> as a model combining training and practical work as a practice leading to a recognised qualification in line with current ALM, skills training and other forms of non-formal training	<ul style="list-style-type: none"> - Conduct Study to analyse possibilities for introducing the Apprenticeship model - Develop Rulebook on apprenticeship - Establish commissions for amendments and supplements to the legislation on employment, VET, qualifications, etc. 	<ul style="list-style-type: none"> - Study conducted - insight into possibilities available - Rulebook developed - # of established commissions - # of amendments and supplements to the Laws - model accepted/adopted 	MoES MoLSP VET Centre ESARM AEC, VET providers	2014 2014 2014
	unemployed and employed graduates, other groups at risk	9. Revision of laws, bylaws, procedures and programmes for post-secondary education in accordance with the Concept for Post-secondary Education and the NQF (level 5 of the EQF or higher)	<ul style="list-style-type: none"> - Develop Rulebook on levels and qualifications in post-secondary education - Establish commission (1) for amendments and supplements to the Laws on VET and HE - Establish commission (2) for amendments and supplements to by-laws regulating licencing and accreditation of training providers - Develop programmes for post-secondary education - Licence institutions and accredit programmes for post-secondary education 	<ul style="list-style-type: none"> - Rulebook developed - commission (1) established - # of amendments and supplements to the laws - commission (2) established - # amendments and supplements to the by-laws - # of developed programmes - # of licenced institutions - # of accredited programmes 	MoES VET Centre MoLSP MoE companies civil society	2014 2014 2015 2015
	teachers trainers managers students	10. Enhancing mobility of VET teachers, trainers and students through international cooperation, learning and work in partner VET schools and companies, including practical training (practical teaching, vocational practice and summer internships abroad)	<ul style="list-style-type: none"> - Develop school applications for opportunities offered by the NAEPM - Develop applications for accessible EU structural funds 	<ul style="list-style-type: none"> - # of developed applications - # of accepted applications - # of developed applications for EU structural funds - # of accepted applications for EU structural funds 	NAEPM VET schools MoES VET Centre BDE	2013-20 (on-going)
	teachers trainers	11. Establishment of the National Europass Centre	<ul style="list-style-type: none"> - Amend/supplement relevant existing laws to ensure legal framework for the operation of 	<ul style="list-style-type: none"> - # of amendments/supplements to existing laws 	MoES NAEPM	2013-4

	managers students		the Centre - Select location for the Centre - Employ staff at the Centre - Develop Rulebook for the work of the Centre - Implement Europass documents on a national level	- National Europass Centre open - # of employed persons - Rulebook developed - Europass documents accessible to the public also in printed form		2013-4 2013-4 2014 2014-20
	teachers trainers managers students	12. Establishment of National Eurydice Office within the NAEPM	- Amend/supplement relevant existing laws to ensure legal framework for the operation of the Office - Develop Rulebook for the work of the Office - Employ additional staff at the NAEPM - Develop instruments and mechanisms for collecting, creating and disseminating relevant statistical education-related data - Collect data - Carry out comparative analyses and thematic reports	- # of amendments/supplements to existing laws - National Eurydice Office open - 2 persons with relevant qualifications employed - # of instruments and mechanisms developed - # of comparative analyses and thematic reports carried out	MoES NAEPM	2013-4 2013-4 2014 2014 2014-20 2015-20
B3: Developing key competences for lifelong learning – visa for the future	future secondary VET teachers	1. Revision of study programmes for initial education of VET teachers to integrate key competences for LLL	- Adopt Regulation for mandatory integration of key competences for LLL in the study programmes for initial education of VET teachers - Revise study programmes - Accredited study programmes	- Regulation adopted - # of revised study programmes - # of accredited study programmes	MoES HEAEB universities	2013 2014-5 2014-5
	advisers from VET Centre, BDE, AEC, teachers experts	2. Revision of secondary VET curricula to include key competences for LLL and career management skills	- Adopt Regulation for mandatory integration of key competences for LLL and career management skills in secondary VET - Revise secondary VET curricula	- Regulation adopted - # of revised curricula for secondary VET	MoES VET Centre BDE, AEC	2013 2014-5
	VET teachers	3. Training of VET teachers in development of key competences for LLL and career management skills in curricular and extracurricular activities	- Develop training programme - Select trainers - Train at least 100 VET teachers annually - Carry out analysis and evaluation of effects	- Programme developed - # of selected trainers - # of trained teachers - insight into effects provided	VET Centre BDE	2014 2014 2014-8 2018
	VET teachers and students	4. Introduction/strengthening of entrepreneurial learning that enhances self-confidence, critical thinking, creativity, economic and financial literacy, knowledge of the world of labour, communication skills, etc.	- implement activities planned for in the Strategy for entrepreneurial learning in VET schools	- activities implemented pursuant to set dynamics/plan - improved entrepreneurial skills/knowledge	MoES VET Centre BDE	2014-20

C: Quality and relevance – guarantee for competitiveness

Outcome Indicators:

- Quality in VET regularly monitored and improved with stakeholder participation
- Quality of teaching and learning improved
- Availability of information on labour market needs and quality and relevance of teaching and learning improved
- Quality of practical skills acquired by VET students improved
- Mismatch between skills needs and educational supply decreased
- Cooperation between the business sector and VET providers improved
- Employer satisfaction with relevance of skills and competences of graduates increased

Goal	Target Groups	Measure	Activities	Output Indicators (output)	Responsible Institution	Time frame
C1: Quality Assurance	VET schools municipalities companies	1. Defining a system and framework for quality assurance in VET, which integrates internal and external mechanisms and involves stakeholders, in line with EQAVET	<ul style="list-style-type: none"> - Carry out broad consultation with stakeholders on system for OK in VET - Develop and adopt a Rulebook on introducing a system for OK on VET level 	<ul style="list-style-type: none"> - broad consultation carried out - Rulebook developed and adopted - system defined 	MoES VET Centre SEI, SEC Chambers	2014 2014
	VET schools	2. Redefining indicators and procedures for quality assurance in VET, in line with EQF, EQARF and NQF	<ul style="list-style-type: none"> - development and adoption of new general indicators for monitoring quality adapted to the specificities of VET 	<ul style="list-style-type: none"> - # of adopted general indicators 	VET Centre SEI, BDE MoES	2013
	VET schools, companies where vocational practice and summer internships	3. Developing instrument and mechanism for monitoring and control of the delivery of practical training	<ul style="list-style-type: none"> - develop and adopt Rulebook on monitoring the delivery of practical training - Training of SEI inspectors for monitoring practical training 	<ul style="list-style-type: none"> - Rulebook developed and adopted - # of trained inspectors 	VET Centre SEI	2014 2014
	VET teachers	4. Establishment of system for professional and career development of teachers and trainers in secondary VET	<ul style="list-style-type: none"> - Develop Rulebook on career advancement defining competences at different levels (initial, apprentice, career advancement stages) of teachers and trainers in secondary VET - Amend/supplement Law on VET - Establishing remuneration system 	<ul style="list-style-type: none"> - Rulebook developed - # of provisions in Law on VET amended/supplemented - remuneration system established 	MoES VET Centre BDE	2013 2013-4 2013-4
	SEI inspectors	5. Didactical training of SEI inspectors	<ul style="list-style-type: none"> - Deliver 4 cycles on pedagogical-didactical and andragogical training of SEI inspectors 	<ul style="list-style-type: none"> - 4 cycles of training carried out - # of training events - # of trained inspectors 	SEI, VET Centre, BDE university	2013-5
	students aged 15	6. On-going participation of RM in international assessments of quality of education (PISA)	<ul style="list-style-type: none"> - Participation in PISA 	<ul style="list-style-type: none"> - improved results in PISA 	MoES VET Centre SEC, BDE	2013-20
	employed	7. Strengthening the technological competences of the employed in all strategic sectors defined in the Strategy for promotion of export 2011	<ul style="list-style-type: none"> - Organise in-depth and detailed technical training in all strategic sectors defined in the Strategy for promotion of export 2011 	<ul style="list-style-type: none"> - # of organised training events - # of learners trained - improved competences of the employed - level of satisfaction of learners/stakeholders 	MoES MoLSP MoE	2013-20

C2: New skills through new pedagogy	future secondary VET teachers	1. Strengthening andragogical competences of teachers in secondary VET	<ul style="list-style-type: none"> - Develop Rulebook on andragogical qualification - Develop Programme for andragogical qualification of secondary VET teachers who work with adults learners - Licence institutions and accredit programmes for andragogical qualification - Publish Open call for andragogical qualification - Deliver training 	<ul style="list-style-type: none"> - Rulebook developed - Programme developed - # of licenced institutions - # of accredited programmes - Open call published - # of applying and of accepted candidates - # of training events - # of trained teachers 	MoES universities HEAEB	2013 2013 2014 2014 2014-20
	VET teachers	2. Enhancement of innovativeness and entrepreneurial spirit through training of VET teachers on learning through research	<ul style="list-style-type: none"> - Develop training programme - Develop Manual for enhancing innovativeness and entrepreneurial spirit in VET teaching - Train 100 VET teachers annually 	<ul style="list-style-type: none"> - Programme developed - Manual developed - # of training events - # of trained teachers - innovativeness and entrepreneurial spirit in teaching enhanced 	VET Centre BDE	2013 2013 2013-20
	VET teachers	3. Strengthening the competences of VET teachers for development and application of new models for developing student competences through teaching and learning adapted to their lifestyles	<ul style="list-style-type: none"> - Develop training programme - Develop Manual for application of new models of teaching and learning in VET - Train 100 VET teachers annually 	<ul style="list-style-type: none"> - Programme developed - Manual developed - # of training events - # of trained teachers - improved application of new models of teaching and learning 	VET Centre BDE	2014 2014 2014-20
	VET teachers and students	4. Modernisation of assessment in secondary VET	<ul style="list-style-type: none"> - Introduce assessment based on competences/learning outcomes in by-laws regulating assessment in secondary VET - Develop Rulebook on assessment based on competences/learning outcomes in secondary VET - Train of 100 VET teachers annually 	<ul style="list-style-type: none"> - by-laws revised/amended - Rulebook developed - # of training events - # of trained teachers - improved assessment of competences 	VET Centre BDE SEC SEI MoES	2013 2013 2014-20
	VET teachers and students	5. Improving the quality of VET textbooks and teaching/learning resources that encourage development/ acquisition of competences	<ul style="list-style-type: none"> - Develop methodology for writing textbooks for vocational subjects - Publish Open call for textbooks - Select submitted manuscripts - Print new textbooks 	<ul style="list-style-type: none"> - Guidebook revised - Open call published - # of received manuscripts - # of new textbooks 	MoES VET Centre BDE Pedagogical Service	2014 2014 2014 2014-5
	VET teachers and trainers, companies	6. Strengthening the quality of trainers and teachers delivering practical teaching in secondary VET	<ul style="list-style-type: none"> - Publish Open call for companies that can train trainers and teachers for practical teaching - Sign cooperation agreements between MoES and companies - Select teachers - Train 50 VET teachers and trainers 	<ul style="list-style-type: none"> - Open call published - # of company applications - # of signed agreements - # of training events - # of trained teachers and trainers 	MoES VET Centre Chambers companies	2014-5 2014-5 2014-5 2014-5
	unemployed and employed graduates, other groups at risk	7. Developing distance learning in VET	<ul style="list-style-type: none"> - Develop Rulebook on distance learning in VET - Develop programmes for distance learning for adults (secondary, post-secondary and higher VET) - Amend/supplement laws regulating VET and HE 	<ul style="list-style-type: none"> - Rulebook developed - # of developed programmes - # of amended/supplemented laws 	MoES VET Centre AEC universities	2016-20 2016-20 2016-20
V3: VET relevant for the	VET clients and institutions	1. Introducing National Qualifications Framework in VET	<ul style="list-style-type: none"> - Complete the process for development of NQF 	<ul style="list-style-type: none"> - NQF completed and adopted 	MoES, VET Centre,	2013

labour market					BDE, SEC, AEC, ESARM MoLSP companies	
	VET providers	2. Harmonising current syllabi and curricula and study programmes in VET with the adopted NQF	<ul style="list-style-type: none"> - Develop Guidebook for harmonising syllabi and curricula and study programmes with the NQF - Revision of syllabi and curricula and study programmes in accordance with NQF - Accreditation of new syllabi and curricula and study programmes 	<ul style="list-style-type: none"> - Guidebook developed - # of developed syllabi and curricula programmes - # of developed study programmes - # of accredited syllabi and programmes - # of accredited study programmes 	MoES VET Centre BDE universities VET schools	2014 2015-8 2015-8
	business sector	3. Developing a new methodology for conducting the annual analysis of the labour market and improving the relevance of the required profiles, knowledge and skills	<ul style="list-style-type: none"> - Develop indicators for analysis of the labour market - Develop Rulebook on Analysis of the labour market - Develop instruments for Analysis of the labour market - Carry out the Analysis - Disseminate results 	<ul style="list-style-type: none"> - # of indicators developed - Rulebook developed - # of instruments developed - Analysis carried out - data and information collected and available 	MoLSP VET Centre ESARM MoES Chambers companies	2014 2014 2014 2014 2014
	VET Centre ESARM	4. Strengthening of capacities of VET Centre and ESARM for anticipation of needed skills	<ul style="list-style-type: none"> - Participate in Component I (Foresight) of the Frame Project of ETF - Train VET Centre and ESARM staff in anticipation of needed skills 	<ul style="list-style-type: none"> - Foresight exercise carried out - # of training events - # of trained staff 	VET Centre ESARM	2013 2014-5
	VET clients	5. Establishment of system collaboration between ESARM, VET Centre and higher education for continuing monitoring of skills needs and availability/ dissemination of information on labour market needs and employability / abilities for further education of graduates	<ul style="list-style-type: none"> - Develop mechanisms for regular easy access to information on knowledge and skills needed at the labour market - Develop mechanisms for regular easy access to information on transition of graduates to the labour market and further education 	<ul style="list-style-type: none"> - mechanisms developed - information on knowledge and skills needed on the labour market easily accessible - information on transition of graduates to the labour market and further education easily accessible 	MoES VET Centre ESARM universities	2014-5 2014-5
	VET Centre VET schools companies	6. Strengthening the relevance of secondary VET syllabi and curricula	<ul style="list-style-type: none"> - Develop Concept technical secondary VET - Prepare Methodology for Development of syllabi and curricula, embedding mechanisms for greater compatibility with those followed in the European Union - Revise existing syllabi and curricula and harmonising them with the needs of the labour market for new profiles and skills - Develop new syllabi and curricula for new profiles needed at the labour market - Accredite the new syllabi and curricula 	<ul style="list-style-type: none"> - Concept developed - Methodology developed - compatibility with EU curricula increased - # of revised syllabi and curricula - # of developed and accredited new syllabi and curricula 	VET Centre BDE ESARM Chambers	2013-14 2014 2014-20 (on-going) 2014-20 2014-20
	VET schools companies local government	7. Strengthening the relevance and functionality of the network of secondary VET schools with operational plan for gradual adjustment to the needs of the local economy and development plans	<ul style="list-style-type: none"> - Develop Study on the relevance and functionality of the VET school network - Develop Operational plan for gradual adjustment of the network to the needs of the local economy and development plans - Adjustment of the network 	<ul style="list-style-type: none"> - Study developed - Operational plan developed - # of VET schools where adjustments are made - level of satisfaction of local companies and government 	MoES MoLSP MoE VET Centre municipalities	2013 2014 2016-20

				- level of satisfaction of students		
	VET students companies	8. Improving the quality and relevance of practical teaching and training of students in secondary VET	<ul style="list-style-type: none"> - Conduct Analysis on necessary resources to establish a voucher-based training fund - Establish training fund alternatively <ul style="list-style-type: none"> - Conduct Analysis on opportunities for introducing levy-grant scheme model for practical training - Form levy-grant scheme fund for training 	<ul style="list-style-type: none"> - Analysis conducted - training fund established alternatively <ul style="list-style-type: none"> - Analysis conducted - levy-grant scheme for training established - resources for practical training increased - amount of funds allocated annually - # of companies participating 	MoES MoLSP	2013 2014 2013 2014
	VET schools students in 4-y. VET	9. Strengthening practical teaching and training in technical VET	<ul style="list-style-type: none"> - Amend the Concept and syllabi for VET to increase the time allotted to practical training in technical VET to 30% 	<ul style="list-style-type: none"> - Concept and syllabi amended - time allotted to practical training in technical VET increased to 30% 	MoES VET Centre BDE	2013
	VET schools students in 4-y. VET	10. Strengthening the participation of companies in practical teaching and training of students	<ul style="list-style-type: none"> - Amend Law on VET to create opportunities for companies to participate in the formulation of the student's grade in practical teaching 	<ul style="list-style-type: none"> - Law on VET amended - companies participate in the formulation of the student's grade in practical teaching 	MoES VET Centre	2013

D: Good governance, resources, capacities and accountability in the future VET system

Outcome Indicators:

- Professional bodies responsible for VET and adult education improve their performance
- Coordination and cooperation in VET improved
- Social dialogues strengthened
- Planning and reporting in VET improved
- Resources and management of VET schools improved
- Role of local government in VET strengthened
- Monitoring of implementation of VET Strategy ensured

Goal	Target Groups	Measure	Activities	Output Indicators (output)	Responsible Institution	Time frame
D1: Improving the efficiency of the national VET governance and support framework	VET clients	1. Harmonisation of the VET terminology with the EU terminology	- Develop terminological glossary	- terminological glossary developed	VET Centre BDE, AEC MoES	2013-4
	VET providers VET clients	2. Strengthening of the legislative support to VET and elimination of overlaps in competences of institutions and professional bodies and speeding up procedures for changes in educational profiles	- Amend/supplement the Law on VET - Amend/supplement the Law on SE - Amend/supplement the Law on BDE - Amend/supplement the Law on SEI - Speed up procedures for changes in educational profiles	- Law on VET amended/supplemented - Law on SE amended/supplemented - Law on BDE amended/supplemented - Law on SEI amended/supplemented - procedures for changes in educational profiles improved	MoES MoLSP VET Centre BDE	2013 2013 2013 2013
	VET Centre	3. Strengthening material and human resources of the VET Centre	- Improve the physical infrastructure of the VET Centre - Increase the number of staff in line with the adopted Strategy for development of the VET Centre - Establish a separate budget line for the VET Centre	- infrastructure improved - # of new employments - separate budget line established	VET Centre	2013-8 2013-5 2013
	AEC	4. Strengthening of material and human resources of the AEC	- Improve the physical infrastructure of the AEC - Increase the number of staff in the AEC (with goal oriented job descriptions)	- infrastructure improved - # of new employments	AEC	2013-8 2013-5
	VET Council AE Council	5. Improving the strategic advisory function in VET	- Merge the VET Council and the Adult Education Council - Amend/supplement the Laws on VET and AE - Allocate material and financial resources for the work of the Council	- new structure established - Laws on VET and AE amended and supplemented - material and financial resources secured - amount of allocated resources per year	MoES VET Centre AEC	2013 2013 2014
	VET providers VET clients	6. Raising the awareness of VET clients and service providers on the work of the VET Centre and the	- Organise VET festival - Develop marketing materials - Organise regional meetings between VET	- festival organised - # of marketing materials - # of regional meetings	VET Centre AEC	2014 2014 2014-8

		AEC	Centre and AEC and local authorities and VET providers	- # of participants at the meetings		
	MoES MoLSP	7. Improving the capacities of competent institutions for their own capacity assessment and development planning	- Participate in Component II (Institutional Capacity Assessment) of the Frame Project of ETF	- carried out - results taken into account in the process of planning of IPA II	MoES, MoE, MoLSP, VET Centre, AEC, BDE, ESARM	2013
D2: Strengthening social dialogue	VET schools stakeholders	1. Introducing European Peer Review Model for quality assurance in secondary VET	- Develop and adopt Rulebook on implementation of the EPR model - Develop and adapt manuals and resource materials - Pilot the EPR model in 6 VET schools - Evaluate the pilot - Apply the EPR model in all VET schools	- Rulebook developed and adopted - manuals and resource materials developed/adapted - # of pilot VET schools - # of EPR evaluations carried out - findings and lessons learned available - EPR institutionalised/scaled	VET Centre SEC MoES Chambers municipalities	2015 2015 2016-8 2016-8 2016-8
	VET providers business sector	2. Establishing Council for Qualifications	- Develop Rulebook for the work of the Council - Establish the Council - Develop Programme for work of the Council	- Rulebook developed - Council established - Programme developed	MoES, MoE MoLSP, VET Centre, AEC, BDE, universities	2014 2014 2014
	VET Centre VET providers, business sector local government	3. Establishing Occupational Councils	- Develop Rulebook for the work of the Councils - Delegate representatives of stakeholders for each occupation - Establish 14 Councils (for each occupational area) - Work of Councils	- Rulebook developed - # of delegated representatives - # of established and operational Councils - # of meetings per council per year - information on occupation-related skills needs available - companies participate in syllabi/curricula development	MoES National Council VET Centre	2014 2014 2014 2014-20
	unemployed and employed graduates, other groups at risk	4. Establishing Municipal Centres for Human Resource Development Planning	- Prepare Study on Municipal Centres - Create pilot centres in 3 municipalities	- Study prepared, findings available - 3 pilot centres created - # of activities carried out - # of beneficiaries served - HRD at local level improved	MoES MoLSP ZELS VET Centre	2013 2014
	VET schools chambers	5. Improved collaboration and participation of companies in management of VET schools	- Amend/supplement Law on SE and Law on VET to give the representative of local companies in the School Board the right to vote	- Laws on SE and VET amended/supplemented - companies have right to vote on the School Board	MoES VET Centre Chambers VET schools	2013
	managers of public and private VET providers, VET Centre, AEC	1. Strengthening the capacities of management in VET	- Develop training programme - Train managers of VET providers on outcome-based planning - Monitor change - Introduce new module Relations with the business community and local government into the Programme for preparation and exam for secondary school director	- Programme developed - # of training events - # of trained managers - improved change monitoring - Programme and examination for director revised and improved	MoES VET Centre SEI BDE	2013 2014 ongoing 2014

governance and support	VET students	2. Providing opportunity to VET schools to allocate the time provided for in the syllabus for practical teaching/training according to the needs of the occupational area	- Amend/supplement Law on VET	- Law on VET amended/supplemented - VET schools plan their practical teaching/training individually	MoES VET Centre companies	2013
	ZELS local government	3. Strengthening the role of local government in VET	- Prepare Study on situation and potentials for strengthening the role of local government in VET	- Study prepared - possibilities/potentials established - role of local government strengthened	MoES MoLSP ZELS	2013-4
	ZELS local government	4. Increasing the funding from the local government in VET	- Revise laws and by-laws to enable greater involvement of local government in management and funding of local VET	- laws/by-laws revised - local government participates in management and funding of VET	MoES, ZELS MoF, Ministry of Local Self- government	2013
	VET schools companies	5. Strengthening the financial support of the business sector to secondary VET	- Develop mechanisms for participation of the business sector in funding secondary VET on local level	- mechanisms developed - business sector participates in funding secondary VET schools	MoES VET Centre Chambers	2016-8
D4: Efficient and effective implementing of the VET Strategy and Action Plan	stakeholders	1. Establishing Council for Implementation of the VET Strategy	- Develop Programme for work of the Council with clear role, competences and responsibilities, and mechanisms for accountability for its implementation - Establish the Council at the Cabinet of the President of the Government of the RM	- Programme for work of Council developed - Council established and operational - Strategy and AP implemented according to the agreed dynamics/plan	MoES, MoLSP Cabinet of the President of the Government of the RM	2013 2013
	stakeholders	2. Organising donor conference for coordination and support to the implementation of the VET Strategy and Action Plan	- Develop Programme - Secure spatial and material conditions - Copying/distribution of Strategy and AP - Informing and inviting stakeholders (international institutions, embassies, foundations, etc.) - Organisation of the donor conference	- Donor conference prepared - # of donors participating - financial support to the VET Strategy secured	Strategy Council MoES MoLSP	2013

