

**POLICY AND STRATEGY  
FOR THE DEVELOPMENT  
OF VOCATIONAL EDUCATION  
AND TRAINING IN SERBIA**

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# 1. Introduction

*Consistent with the terms of reference for the vocational education and training (VET) Reform Programme, one component of the programme is dedicated to overall policy and strategy development (resulting in the production of a green paper for VET Policy and Strategy). The Concept for Vocational Education, put forward for public discussion at the beginning of the year, initiated this process. Since the Concept for Vocational Education established a general framework and a starting point for the overall modernisation of vocational education, the present programme activities represent the continuation of this process and provide the necessary conditions for an overall strategic document for the improvement of VET in Serbia. This document: "Development of Policy and Strategy for VET" represents this logical continuation of the "Concept for Secondary Vocational Education in Serbia", formally accepted by the government, and this provides basic guidelines for the further development of VET in Serbia. The recommendations included represent the outcome of extensive national and local consultations, while also building on the modernisation measures already undertaken by government and assisted by the EU VET Reform Programme in Serbia. These include legislation, new institutions at national level, human resource development for the full range of actors in the system, labour market information, the experimental development of curricula and curricular organisation, as well as organisational and management innovations.*

## 2. The socio-economic context for VET: the current situation

Current developments in market economies show that development of capacities in human resources has the highest priority in national strategies. Ongoing socio-economic changes, accelerated scientific and technological development (especially the expansion of modern technologies), require a highly skilled workforce capable of active participation in social processes and the use of new technologies. In Serbia, the process of reconstruction and the transformation of education is a precondition for the sustainable social and economic development of the country. Investments in education for provision of appropriate and pragmatically applicable human resources are a must for Serbia. Therefore, educational policy is not just the policy of creating human resources but a part of overall social development policy.

A common feature of the education reforms carried out in Europe is the effort to establish a flexible system of initial and continuous vocational education aimed at responding to the changing needs of the labour market. At the same time, vocational education and training has the task to provide students and adults with general knowledge and values (attitude) needed for their future personal, professional and career development. For that reason the process of modernisation and VET reforms is complex and of a long duration.

Regarding Serbia, the adjustment of VET to the needs of a market economy requires continuity of reform. Reform is a gradual process which cannot be implemented only by the Ministry of Education and Sports, nor only by secondary schools (teachers, principals, association of the schools). In contrast, successful reform requires active participation from all interested parties, who place their various demands on the vocational education system – employers, companies, trade unions, employment services, chambers of commerce, associations of employers, parents, students, and also public authorities, municipalities, Ministry of Economy, Ministry of Labour, Employment and Social Policy, and other line ministries. It is necessary to reach joint agreement/consensus regarding the directions, character and volume of VET reform.

Such an agreement has the following preconditions:

- Adjustment and adoption of legislation involving VET (as a joint process shared between the Ministry of Education and Sports, Ministry of Economy, Ministry of Labour, Employment and Social Policy, Ministry of Finance and through involvement of the key social partners, representatives of employers and employees);
- Institutional and organisational development for the delivery of vocational education including the links between formal and non-formal vocational education;
- Learning organised under conditions and in forms, which are in accordance with the real needs and abilities of learners, and locally in compliance with the needs and demands of all local communities;
- Increased financial investment in VET and the involvement of new funds into development of the VET sector
- A VET regulatory agreement between primarily, the Ministries of Education and Labour but also involving other ministries and the representatives of the economy.

From the viewpoint of formal vocational education – *the further reform process should include:*

- *Development of a “standards” system for institutions, teachers, and education programmes;*
- *Development of a national qualification framework and education and training standards;*
- *Further improvement of curricula with a modular approach based on learning outcome;*
- *Introduction of new programmes and courses, in a different organisational context and a re-definition of regulated professional practice in companies in partnership agreements between the schools and socio-economic partners;*
- *Creation of an appropriate balance between general and vocational education, theory and practice (based on the relationships proposed by the “Concept for VET”);*
- *Further definition of educational profiles in order to adjust them to the economic needs*
- *Development of systems for accreditation of education and training institutions, learning programmes, balance between knowledge and skills acquired in non-formal education system and agreements on ways of recognition in the form of certification;*
- *Rationalisation of the secondary school network in relation to the needs of the local communities, the economy and the labour market, national policies for social and economic development and the wishes and capacities of the students;*
- *Increase in the capacity of craft schools and schools responding to service industries in order to increase the relevance of training provision, and provide education and training that meets demands from students with practical abilities - and in this way also seeking a reduction of the drop-out rate experienced in the current system;*
- *Ownership and institutional homes for ongoing and permanent social dialogue;*
- *Improved practical dimension in the provision of VET by increasing school-based practice and stronger involvement of practice in enterprises;*
- *Further modernisation of contents, organisation and methods of teaching, and general services in the schools;*
- *Development of transparent, functional, and fair assessment and evaluation systems for student achievements;*
- *Provision of the conditions necessary for acquiring certification, diploma, and qualification systems adjusted to European norms;*
- *Quality assurance of vocational education based on agreed indicators and measures with permanent monitoring and evaluation of results of learning and the performance of teachers, schools and system administration;*
- *Securing better access to, and horizontal and vertical mobility for, the students within VET;*
- *Exchange of all relevant information related to labour market, business, possibilities for local development and use of information to develop increased relevance in VET provision and to assist the students in job search and choice of career;*
- *Creation of the conditions necessary for continuous vocational training and professional development of teachers (new role of the teacher, the introduction of new teaching methods, group work, interactive learning, project design, problem solving etc.);*

- *Innovations in equipment and teaching materials;*
- *Strengthening of the rights and responsibilities of vocational schools in response to their new working conditions including networking with the local community, responding to the needs of the local economy, and discovering new financial mechanisms;*
- *Management training - hence accreditation for qualifying school leaders for new working conditions.*

## 3. Vision and Mission of VET in Serbia

### 3.1 Vision and mission

In order to provide the conditions and prospects for the qualitative development of the human resources required, the **VISION** for the further development of VET in Serbia is given as:

*Vocational education in the 21st century is one of the key factors for economic and social development, as well as a major factor in the improvement of modern social and economic relations. The Serbian development of qualitative vocational education and training will create the workforce that will participate successfully in general international and domestic competition in all fields of the economy.*

A precondition is participation from all sides in society and for this purpose it is necessary to create an efficient and effective system of social partnership on all levels and with participation by all the relevant economic and social entities, institutions and public authorities.

In order to respond to these demands and fulfil its role, imposed by the new social-economic context, the **MISSION** of VET implies:

- Vocational education has to be **attractive and available** and has to offer an approach to those potentially active in production and service: young students, adults, people with special needs, unemployed and those who want to return to the active labour force;
- Vocational education has to be **responsive** to the needs of the labour market currently and in the future;
- Vocational education has to be **widely defined** - to directly prepare for work, to provide the base for continuous training and to prepare young people for active participation in society;
- Vocational education has to be **flexible in relation** to the needs of local communities, the learning style and desire of individuals and towards mobility inside the system as well as entry and departure from the system;
- Secondary vocational education has to be **effective** - to enable all the participants to reach the highest qualification levels and further education progression;
- Secondary vocational education has to be based on **cooperation and partnership** and has to include all relevant partners in development, governance, implementation and control;
- Vocational education has to be **an integrated part** of the total qualification structure, each level has to be the preparation for the next level and passages provided from VET to work and back;
- Vocational education has to be **rational** and efficient, to use optimally available resources/equipment in order to provide all types of education and training for skills and qualifications;
- Vocational education has to be **simple** regarding the organisational structure and division of responsibilities for its realisation.

## 3.2 The objectives of VET

The general objective of VET is to enable possibilities for young people and adults to gain **skills, knowledge and attitudes (work competences)** needed for employment and work, further learning and education. Specifically, VET should provide:

- The acquisition of occupational competences and qualifications, required for work in all particular occupational fields;
- VET on initial, advanced and continuous levels and special training to those needed;
- The participants with the ability to obtain the necessary pre-conditions for employment and economic independence, and offer recognition of those abilities.
- Development of abilities, talents, and the potential for self-fulfilment and further education
- Individuals with the possibility for full social participation; better quality of life, personal choice, employment and possibility for continuous professional development.

In other words, the main objective of vocational education and training is:

*To give to youth and adults the possibility to gain competences needed for work and employment, further education and studies.*

The tasks of vocational education and training are:

- To offer initial and continuous vocational education and training providing participants with competences and qualifications, necessary for employment and work in a relevant function;
- To offer opportunities for participants to develop abilities, talents, potentials for self-fulfilment and continued education.

## 3.3 Development principles for VET

The modernisation and development of VET is based on the application of several basic principles.

### 3.3.1 Partnership:

- VET is the mutual responsibility of different stakeholders, with clear definitions of how responsibilities are shared:
- The key stakeholders are: The state, the employers, and the employees,
- Other interest groups are : ministries, chamber of commerce, trade unions, high school institutions, scientific and research organisations, non-governmental organisations, institutions for secondary vocational education and their associations, student's parents and students and other individuals directly benefiting from the services.

### 3.3.2 Partnership is present:

- On all levels of social organisation (national, regional, local);
- In different domains of the organisation and implementation of education (policy, system planning and organisation, creation of plans and programmes, implementation and control);
- In the management of the schools and the educational and training institutions;
- In the realisation of the different rights and responsibilities of users and promoters of education.

### 3.3.3 Decentralisation

Application of the partnership principle in education implies decentralisation:

- of the system of governance;
- in the management of the education system and schools and other delivery organisations for VET;

- in forming the regulation of programmes and modules;
- in establishing the system of schools, in the definition and implementation of admission policies;
- in assessment, monitoring, evaluation and control of the system.

### ***3.3.4 Equity***

Vocational education should be available to the entire population (regardless of gender, age, nationality, religion and race) that fulfils the entry criteria for different types of programme and qualification levels. Access implies not only the right, but also the actual possibility for VET participation, which means that secondary vocational education is acquired: a) in accordance with the needs, wishes and the possibilities of those who learn<sup>1</sup>; b) in accordance with the social possibilities and the needs of regional and local communities.

### ***3.3.5 Openness and flexibility***

Vocational education is a communication channel and an open system for the distribution of competences and qualifications, in which there are real opportunities for:

- entrance, exit and repeated return, according to the needs of the individuals and/or the labour market;
- vertical and horizontal access and movement;
- connection to, or integration with, the forms and programmes of training in enterprises and related to the labour market

### ***3.3.6 Programme variety***

VET schools and institutions deliver programmes according to defined minimum standards, adjust general programmes to local needs, and match programmes and training modules of different types of VET to the demand from specific target groups (youth, adults, employed, unemployed, people with special needs).

### ***3.3.7 Organisational variety***

Schools are the basic unit of VET delivery, but not the only institutional form of VET. It is necessary to provide:

- Alternative organisational forms, with varying legal status;
- The recognition of different stakeholders, who fulfil the legal conditions for conducting vocational education and training;
- VET based on defined outcomes and the assessment of competences and thereby the creation of individual tempo and method in the learning process and the development of the final competences defined. This enables a democratic organisation of VET open to the opportunity of transferring full responsibility for self-learning to the individual.

### ***3.3.8 Professional work of teachers and associates***

Continuous vocational training of teachers, instructors, and coordinators of teaching/professional practice in the vocational fields is a direct condition for the modernisation of VET. Teachers must have the opportunity for constant upgrading of professional competences in order to maintain social recognition and to achieve compensation related to this recognition.

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<sup>1</sup> Organisation and delivery of education, training and teaching needs to be adjusted in response to the psychosocial characteristics of the students and in accordance with their life and everyday situation (recognition of family related and professional roles and responsibilities). This principle addresses the equality of conditions for education of the young and adults.

### 3.3.9 Outcomes

Education, teaching, and learning in VET are based on expected outcomes through definitions of what students know and can do and how they can follow the education and training process. Assessment of outcomes is carried out in a form, which enables external recognition and emphasises work-based competences.

The focus on outcomes supports the development of institutional and curriculum diversity. Outcomes should be the same regardless of time, place of education or training, and age category of the students. The measurement of competences is separated from the process of acquiring them. Assessing the outcome enables external recognition and a better estimation of student competences.

## 4. Social and Labour Market Needs and Requirements

The economic development policy of Serbia requires a different structuring and organisation of vocational education and training. Global labour market competitiveness requires high levels of qualification and competences, which need to be promoted by national economic and employment policies. Government support to economic development and increase in employment has to be directed to the improvement of the competences of the labour force – towards the creation of new jobs, entrepreneurship, and the promotion of labour market flexibility, the provision of social security and social participation for all groups.

The precondition for social and economic transformation in Serbia and its integration into EU is that the population possesses the social competences necessary for successful participation in a democratic society with a skilled and adaptable labour force prepared for and accepting new technologies and new ways of organising work processes, while also displaying readiness for mobility in occupation, in location and in job-placement.

This process means that Serbian Government priorities for the period 2004 – 2006 require:

- The improvement of the macroeconomic performance and achievements of the country;
- The creation of a modern market economy;
- The achievement of a meaningful approach to the EU.

These can only be achieved if a modernised and reformed vocational education and training (VET) at all levels is recognised as a precondition for social and economic development. *The basic goal, then, of the reform and further development of vocational education in Serbia relates to its contribution to technical-technological, socio-economic and individual development.*

An initial step in this process has been the conceptualisation of the development of vocational education and the modification of the entire educational system to community and individual needs and possibilities.

The central strategic direction for the joint action of all stakeholders in the vocational education process should enable VET to:

- Secure compatibility with converging European standards;
- Provide opportunities for everyone to acquire vocational qualifications;
- Create and secure new relations between schools and companies;
- Apply life-long learning principles.

In order for VET to successfully respond to the needs of the economy, labour market, and community, it is necessary to:

- Establish systematic networking among all social partners and stakeholders (employers, trade unions, chamber of commerce, various associations, state institutions and government bodies);
- Establish a joint responsibility among social partners for identification of needs, programming and the definition of the functioning, implementation, and control of VET;
- Secure that the demand from the labour market influences development, volume and location of provision of vocational education and training towards the required occupational profiles at appropriate levels;
- Involve social partners in the elaboration of the needs and demands of the labour market and in defining and structuring educational profiles, assessment of the outcomes (external committees for final examination, craftsman and specialised exams, certification);
- Systematically organise cooperation and joint activities between the Ministry of Education and Sports and Ministry of Labour, Social Care and Employment (especially in the areas of adult education, employment, certification and accreditation, and continuous education);
- Launch systematic mechanisms for further development of vocational education at the national level ( e.g. a policy body reflecting the joint nature of VET)

#### 4.1 Competences and Core Skills

Economic competitiveness in the global labour market requires high levels of adaptability. The consequence is an increased demand for workers with a better skill range, able to work both individually and in teams, who are adaptable and affirmative in the production process, and who possess polyvalent capacities. Consequently, the concept of 'competences' is changing: instead of a traditional perspective on skills based on technical abilities, employers additionally insist on and require more general key skills, especially communication skills, abilities in problem solving, a participative approach to work planning, self-discipline and quality awareness.

The complexity of the market and the increased demands for performance in the labour market makes contradictory demands on the workers by on the one hand requiring individuals to be highly adaptive with broad skills but on the other hand also expecting them to have highly specific technical skills not only for certain routine functions but for specific technical problem solving, too.

VET must respond to such demands, to enable the young and adults to acquire the necessary competences in order to get employment but at the same time, VET (especially initial VET) must also provide a broader general basis for the fulfilment of personal plans and related further education for alternative occupations as economies and demands change. VET must find ways to bridge the different types of demands and to balance the provision of broad skills for life and work as well as the provision of skills for immediate employment.

According to current understanding, key competences leading toward employment include:

- Intellectual and "senso-motoric" abilities;
- Social and interpersonal skills and knowledge (communication, team, decision-making, responsibility);
- Business and entrepreneurial skills and attitudes (entrepreneurship skills, creativity, innovativeness and risk-taking towards self-employment);
- Multiple technical skills and knowledge.

The lack of equilibrium between the supply and the demand on the labour market in Serbia raises the essential question of how to organise the responsiveness of the supply side and at the same time the specification of needs on the demand side.

*This requires:*

- *Establishing a vertically and horizontally flexible mobile system of formal and non-formal VET;*
- *Exam reform;*
- *Establishing equality between qualifications acquired via formal and non-formal routes.*
- *Establishing a certification and accreditation system embracing formal and non-formal; vocational education and training.*

## **4.2 Occupations and occupational Standards**

An **occupation** is a set of jobs and work assignments which are by their type and content organisationally and technologically similar or mutually connected and can be carried out by one individual with the appropriate competence.

A **job** is a set of tasks designed to be performed by one individual. To establish the complexity of the occupation it is necessary to analyse the job and work assignments within an occupation.

*One of the priority issues for the further reform of vocational education in Serbia is to establish a national classification of occupations that need to be covered by VET profiles. The current nomenclature was adopted during the time of the Social Federal Republic of Yugoslavia, when completely different social and economic conditions were in place. The employment in the previous centralised system with limited relations to market-based regulations had the character of permanency and professional mobility was almost not visible. By contrast, the professional and territorial mobility of labour is a characteristic of the market economy reflected in frequent changes of occupations (five to seven changes during the years of employment). Responsiveness to labour market demands requires a definition of occupation as a cluster of related jobs and tasks performed by any individual. The main reasons for starting the 'revision project 2002' (unique occupation nomenclature) and its adjustment to the international standard classification of occupations came from the need to change the practice of using different standards with an inadequate coverage of the occupations even within the existing nomenclature.*

If this process has a long duration, it could slow down activities in the educational areas linked with the nomenclature issue. Therefore it is necessary to develop and introduce a certain number of occupational standards (as pilots) with consensus on the number and choice of occupations. Priorities may be set on the basis of several criteria which will secure that the ongoing activity does not depend on the further development of nomenclature.

The proposed criteria for the selection of occupations which requires standards are:

- Traditional occupations;
- Possibility for comparison with other countries;
- A high demand level from the labour market and high employment rates with the shortest possible unemployment period;
- Large student coverage, monitored for a number of years;
- Rapid development of employment opportunities;
- The interest and support of the employers;
- The establishment of expert teams for the development of occupational standards.

Occupational standards must reflect the ongoing economic and technical development in the companies that result in changing skill demands for the labour force. There are several key elements involved in the definition of occupational standards:

- Occupational standards are a measure for the achievements which workers should realise in order to complete their tasks;

- An occupational standard is, in most cases, a document containing: the name and code of the occupation, the level of demand, occupational competences and description of standard of occupation; area of work; key activities; knowledge; skills (basic practical knowledge, vocational theoretical knowledge, general knowledge). The occupational standard is the basis for the design of curricula and modules;
- Occupational standards are the basis for defining expectations from the labour market to the process of work.

**Occupational standards** have to be developed:

- On the basis of occupational requirements;
- On the basis of the wider job description and work tasks;
- With a view to flexibility in the teaching and learning process;
- Taking into account the results of skills needs analysis.

Developed Occupational standards need to consist of:

- An Introduction, with a description of occupational standards and reference to the target groups for which it is developed;
- Levels of Competences (3 levels are proposed);
- The name of the occupation (title), description, classification code, title of educational programme, and duration of training;
- Abilities and knowledge necessary for work in the occupation;
- The list of tools, equipment, machines, and materials for the occupation;
- Future development trends in the occupation.

## 5. VET Response to Social and Labour Market Needs

### 5.1. Educational profiles

Educational profiles provide a means of encapsulating the occupational standards and core skills identified by the social partners in a specification of outcomes to be achieved in a vocational education programme. The educational profile, taken together with the curriculum definition and the assessment and examination arrangements, constitutes the specification for a vocational qualification. An educational profile sets out the occupational requirements to be mastered, as well as the necessary general education, life skills and general employment skills to be included. Some programmes will be based on broad educational profiles preparing for a range of possible occupations; others will be more specialised. Decisions about the appropriate degree of breadth or specialisation cannot be made in the abstract. They must be based on the concrete demands of the labour market. This means taking into account both the employers' views of the skills required on entry to employment and the need to protect young people from the danger of acquiring specific qualifications for which there are insufficient jobs. All VET programmes should include a broad vocational orientation and the development of core skills, as well as specific vocational skills. The educational profile must also contain an explanation of the arrangements for assessment of candidate performance. In this way, it becomes a complete specification for the competence comprised by the vocational qualification that is awarded to successful students.

The lack of equilibrium between the supply and the demand on the labour market in Serbia requires the elaboration and adoption of procedures for the development and approval of educational profiles. A plan could then be evolved for developing educational profiles for the different fields of work, based on priorities that reflect the most pressing economic needs as identified by the social partners.

*This requires:*

- *A definition and agreement among the Ministry of Education and Sports, the Ministry of Labour, Employment and Social Policy, and the socio-economic partners in the form of special regulations of the system and procedure for the definition of new profiles.*
- *These procedures would allow for a unique system for all profiles, their validity, efficiency and sustainability. Key competences for all educational profiles are integrated into the package.*
- *Redefinition of the structure for existing profiles and especially the competences acquired by students at the end of a three or four year educational programme.*
- *A review of current profiles and labour market information and skills needs analysis tools for labour market needs. This activity represents one of the crucial joint actions between the world of vocational education, the socio-economic partners, and the labour market authorities in redefining and regrouping existing fields of work.*

## **5.2. Educational standards**

There are broadly two types of educational standards, both of which are important in the supply of VET:

- Standards of achievement (results), and
- Measures of educational quality

Standards of achievement are established in the outcomes and assessment criteria developed for each VET programme. It is important that these standards are set in a way that corresponds to the expectations and needs of social partners. *The standard required of students must match the standard of performance required in the occupations concerned. It is also important that these standards are defined with sufficient precision to provide a reasonable guarantee that they can be applied consistently across the country. Social partners have the right to expect that students who gain the same qualification have attained broadly comparable standards of performance. This standardisation also provides the basis for international comparability of qualifications. An educational standard must also define general learning outcome expectations, which are defined by the state as a set of general expectations to the abilities of Serbian citizens after completed education.*

Measures of educational quality are necessary both so that there can be a national quality assurance system for VET and so that schools can monitor, and continually seek improvement in, the quality of their VET delivery. Measures of educational quality can relate to:

- Inputs
- Processes, and
- Outputs

While there is an understandable, and to some extent legitimate, tendency to focus on outputs, a balanced quality assurance system will combine all three. Input indicators include: the qualifications and experience of school staff and the sufficiency and quality of physical resources. Process indicators include: the quality of school management, the internal systems for evaluating quality, and the extent of partnerships with local enterprises. Output indicators include: the percentage of students successfully completing programmes and the percentage progressing into relevant employment or further education.

Educational standards in Serbia will be initiated by special legislation and regulations and will consist of responses to demands prepared and addressed by the state, the socio-economic partners and the users of the system. The goal of introducing standards into an educational system is the achieve-

ment of the objective that any individual, process, or part of the system should fulfil the established level or measure of required demand (Competences, facilities, equipment, vocational qualification ...)

Vocational education standards should enable clear and efficient responses from vocational education institutions to technical and technological innovations, as well as to changes in areas of work and organisational culture, and should recognise and describe labour market needs closely related with the creation of educational programmes and the broader framework of VET provision in a transparent and precise way.

### 5.3. VET Qualifications

An established system of qualifications drives VET, enables the modernisation of programmes, creates a quality assurance system, secures the efficiency and employment of those coming from VET, and assists their professional mobility on the labour market. A qualification system is a major player in securing that education responds to the demands of the labour market.

Vocational qualifications play an important role in all VET systems, in ensuring that VET is demand-led and incorporates sound principles of curriculum and assessment. Bringing vocational qualifications into a National Qualifications Framework can ensure that there is coherence and progression in the VET system and a sound basis for international comparability of qualifications.

The starting point for the design of vocational qualifications is the identification by the social partners of occupational requirements. These occupational requirements may include both specific occupational skills and work-related core skills. The demand side, as identified by social partners, must then be mediated by the state to take account of national educational policy and the practical implications of delivery in schools.

*Establishing and defining different levels of qualification and the relationship between these levels will help to define a VET structure that:*

- *Provides new educational routes for the significant number of students who want the option of entering higher education or a field of employment*
- *Provides practically-oriented routes for students whose main objective is to become qualified for employment, but who may wish to keep open progression into post-secondary or higher education*
- *Allows for mobility between general and vocational routes*

A National Qualifications Framework (NQF) is a system whereby all qualifications that conform to nationally agreed quality criteria and procedures are registered at one level in a hierarchy of levels reflecting increasing demands or complexity. The NQF will include all qualifications acquired through VET programmes in the formal and non-formal systems.

The Framework should consist of a series of levels and an agreed terminology for describing learning outcomes and qualifications. The levels in the Framework will be defined by descriptors which describe typical outcomes at each level.

In order to define and develop a National Qualifications Framework in Serbia, it is necessary that the key partners in this process – the Ministry of Education and Sports, Ministry of Labour, Employment and Social Policy, National Employment Service, and the socio-economic partners - agree on the major principles, goals, tasks, levels and contents of qualifications. Especially important is:

- Establishing a special body or institution responsible for managing the development of the national qualification framework;

- Adaptation of the classification system and agreement on the definition of qualification levels in a way that is compatible with the emerging European Qualifications Framework
- Adopting regulations and procedures for the creation of qualifications;
- Adopting regulations and procedures for assessment and certification;
- Adopting regulations and procedures for the accreditation of institutions delivering training and non-formal education.

## 5.4. Curricula

The curricula of secondary VET is the structural framework for the organisation and realisation of education as well as for gaining the intended learning outcomes. The curriculum defines:

- objectives, contents and outcomes of the education,
- processes and activities of student achievements and implementation of the teaching process (organisational forms, models and methods of teaching and learning),
- criteria and standards for assessment of achievements.

Diversification of curricula, contents, and teaching methods is one of the most complex issues of VET reforms, but it enables the introduction of various forms of curricula according to the needs of profiles and fields of work, as well as the local community and the school. This contributes to the motivation of the school staff. In this way it is possible to introduce new teaching methods, especially forms of active teaching and various combinations of theoretical teaching and professional practice.

In this process it is important to obtain:

- a satisfactory balance between general and vocational education, professional theoretical education, and professional practice;
- Vertical and horizontal mobility within a curriculum and within the frames of one or more fields of work;
- Introduction to the modular working principle, either in VET as a whole for all fields of work or in the framework of individual VET schools and educational institutions;
- Links with different forms of higher education and provision of opportunities for bridging the gap between VET and higher education.

All processes and activities in education, learning and teaching are aimed at achieving objectives and outcomes of education and must be adjusted, well balanced, but also diversified in order to meet broad social needs, needs of the local community and of individuals. According to these principles the basic tasks of the individual curriculum in secondary VET are oriented towards providing knowledge and skills to young students as well as adults. The curricula of secondary VET must enable:

- personal development of participants in the educational process,
- quality improvement of the level of knowledge, skills and attitudes (work competence) of an individual for performing jobs;
- establishment of the vocational attitudes and work competences demanded by a dynamic labour market;
- promotion of employment and life-long learning.

*The Concept of vocational education and training in Serbia emphasises* that VET curricula are going to be realised through subjects, modules, practical teaching and professional practice with different duration through the school year:

- Each occupation is defined as a cluster of modules<sup>2</sup> having Vocational Matura with external assessment as its final outcome;

<sup>2</sup> Definition of the MODULE is (in accordance with CONCEPT OF VET): a functionally linked unit of knowledge, skills and attitudes (work competences) that are necessary for a job/task.

- Modules are specific, separate segments of learning packages that lead to the achievement of defined outcomes. Modules may be independent or parts of broader programmes/ organisational units. They are designed on the basis of complementary principles, diverse educational demands and defined thematic tasks. Within their structure, modules provide knowledge and competences, and the development of relevant sets of skills and interdisciplinary/ cross-subject links;
- Modules can cover several different disciplines. Each discipline has its own clearly defined goals and tasks. According to their flexible structure there are no strict borders between these disciplines so that they enable interlinking, correlation and creation of unique modular educational packages.

Modularisation also offers benefits for the VET system:

- Greater flexibility in planning and organisation of the educational process,
- Greater efficiency and cost-effectiveness
- Better adjustment to the concrete needs of the labour market
- Improved vertical and horizontal mobility,
- Better responsiveness to individual learning needs and capabilities of students,
- Enhanced possibilities for the student to choose his/her own path, way of learning and gaining qualifications, and work competences,
- Easier entry and re-entry to vocational education

Outcomes clearly and unambiguously define competences acquired after finishing a specific programme, or teaching and learning process. As such they become the basis for the planning, organisation, and realisation of vocational education and the evaluation of achievements throughout the complete education and learning process. In outcome-based education, the outcomes themselves are defined prior to the education process. The advantages of outcome-based approaches are:

- Teachers and students are clear about the aims and objectives of learning,
- The social partners understand which competences are being developed in particular VET programmes.

## 5.5. Adult Education

The significant social, economic, technical, and demographic changes which Serbia is facing impose the need to create an open and flexible adult education system combining all levels, types and forms of learning from primary to university, initial and continuous, formal and non-formal education and opening the possibility for lifelong learning, upgrading of the human resource potential and successful integration into European cultural and economic structures. The policy and strategy for adult education and training and the identification of its immediate goals and tasks are based upon the premise that adult education is:

1. A manifestation of lifelong learning and an integral part of the entire education system;
2. A strong factor in economic development, higher productivity and economy competitiveness and the improvement of employment and employability;
3. A corrective of the regular educational system (providing a second opportunity for acquiring relevant knowledge) and
4. Innovative mechanisms in educational and learning systems (reacting promptly to the economy and labour market needs, technological innovations, and testing new profiles, programmes, skills, competences – flexible and open for new methods of teaching and learning);
5. A basic way to support personal development and the possibilities of individuals to:

- Be employed
- Generate more income;
- Acquire independence
- Remain healthy and active;
- Perform better jobs;
- Secure the family and encourage independence of their members

Basic activities in this area in the VET reform in Serbia will include joint actions by the key stakeholders in vocational education and training in:

- Increasing participation of the adult population in education, training and learning programmes and projects;
- Establishing a broad network among various institutions and organisations for adult education;
- Inspiring the production of programmes, projects, and other learning activities for the adults, relevant for social and economic development, as well as for improved employability of the working population (labour market programmes and continuing education and training programmes)

## 5.6 Delivery of VET

### 5.6.1 Secondary school network

The further development and improvement of the network of secondary VET schools and other education institutions is going to be based on diversification and flexibility, and the upgrading of the network will take place on the basis of **national, regional and local criteria for establishing the network of secondary school and educational institutions**. The criteria will be based on the general economic characteristics of state/regional and local community development, but also take into consideration geographic, demographic and cultural features. They will also serve as indicators for status and financial positioning of the specific secondary vocational schools and education institutions:

1. Schools applying **national criteria** are unique (in terms of curriculum implementation) in their serving special national political or economic interests for Serbia. National criteria will be applied to all necessary elements and preconditions which schools have to fulfil in order to enter into this category (for ex. dormitories, special forms of pedagogical and practical activities, special artistic schools, etc.). National criteria will cover up to 10 % of the network of VET schools.
2. Schools established on the basis of **regional criteria** are networks of schools established in natural economic regions (rather than in relation to the administrative structure of regions). These schools are in their combination strictly responding to the needs in the regional economy and represent significant resources for all-round human resource development in the region. The schools are operating on the basis of direct response to the needs defined by key stakeholders: socio-economic partners, regional employment services and municipality development plans. The basic mission of these schools is to train graduates in areas of demand of secondary VET education and training, technicians with post-secondary education, and craftsmen - but also in the longer term to play a major role in the delivery of CVT and retraining for unemployed. In their organisational structure, these schools will be able to respond with short notice to all demands of the economy, especially concerning skills for complex production processes and narrow specialisations. Regional criteria will cover up to 40% of the network of VET schools.
3. Schools established in accordance with **local criteria** serve more demographically, geographically, and culturally specific needs. They will be smaller flexible units with the ability to make fast changes to profiles and areas of work and easier adjustment of

curricula according to new demands coming from the broader labour market. These schools will have solid connections with local social partners and in the local community. They will also be networking with the regional schools and have the ability to draw on their specialised competences and infrastructure. Local criteria will cover until 50% of the network of VET schools.

All of the above mentioned criteria need to be fair, precise, visible, clear, universal and financially justified. The criteria should recognise the current state and possibilities of the school network but also the demands for further development of vocational education and training. The monitoring of the quality and success achieved by schools needs to become the basis for permanent assessment of the schools' status and its categorisation by specific criteria. An enrolment policy needs to be defined at the national level. In this regard it is necessary to recognise the following requirements:

- To open up secondary vocational schools to adult education;
- To secure the enhancement of craftsman and service profiles and the opening of special centres for such profiles in collaboration with the social partners;
- To facilitate the realisation by Secondary vocational schools of alternative programmes as a combination of general and vocational education, in compliance with community needs and the schools' ability to deliver special programmes etc.

### ***5.6.2 Teaching equipment and resources***

VET reform accelerates the demand for the modernisation of teaching equipment. Cooperation of the school with all the agents of social partnership – employers, companies, small and medium-sized enterprises, state institutions and professional associations involves:

- Establishing formal standards and systems of cooperation (contracts on cooperation, special and individual contracts) arranging joint issues of interest, especially professional practice, and the use of modern equipment in companies for educational and practice purposes. Contracts based on general regulations would define the responsibility, rights and obligations of all parties / schools, employers, companies, professional organisations and others.
- Organisation and implementation of joint projects and activities of vocational schools and enterprises, unions and employers;
- Developing local and regional initiatives in the area for contemporary equipment of VET schools.
- Establishing well-equipped training centres, delivering services and providing resources to a bigger number of schools and students from all parts of Serbia. These centres can also act as regional training centres for adults providing training services for all groups, also those already employed and those looking for employment.
- Improvement of school laboratories in VET schools with the help of funds from public and private investments and from donations.

### ***5.6.3 The role of the vocational school***

The vision and mission of the reform envisage a different role for vocational schools. Alongside their traditional and statutory duties the school should take on the following roles:

1. Defining the mission: VET reform implies the development of a basic school mission statement including quality assurance and especially the modernisation of the educational process, its quality assurance and permanent improvement. This process requires cooperation with the Ministry of Education and Sports and the Pedagogical Institute (and especially the National VET Centre).

2. In responding to demands expressed by the labour market at local and regional level, the school will have a new and more flexible role in its service provision. This means that it could offer a wider programme variety, including short courses, accredited and approved by the Ministry of Education and Sports. These programmes should be designed for students and adults and may have a variable duration and provide diversified qualifications. In this way a school can establish more flexible relations with the labour market in responding to the demand. Schools will achieve this flexible role in cooperation with the Ministry of Education and Sports, the Ministry of Labour, Employment and Social Policy, social partners and local government.
3. Schools will have a different organisational role, especially concerning human resource development, the organisation of the work process, governance and school management.

#### ***5.6.4 Practice in VET***

Organisation of practical training lessons in VET schools and enterprises represents one of the key elements in securing good quality in preparation of students for employment and a professional career.

Initial professional experience is needed in all occupations and is an essential element in the achievement of those skills and attitudes that constitute work competences. Professional practice is also a major route for recruitment of individuals. During professional practice in enterprises students and candidates for work get the possibility to experience technologies in operation under real conditions.

Only through huge investments in skills for teachers, equipment and materials, could the professional practice in companies be fully replaced by professional practice in schools and training institutions and even in those situations the practice provided would remain simulations only.

On the other hand company-based practice offers experience in a limited amount of specific routines and with one specific technology. This can limit the transferability of skills.

Currently, company-based practice is very limited in Serbian VET. This policy is aimed at the establishment of a system providing direct work competences - but also a system where a combination of school based practice and company practice provides skills to participants, which are general and transferable.

Serbian VET will develop a practice system which offers professional practice in a combination of school-based practice and company-based practice. The aim is that all VET profiles will include practice of both types but in applications that differ according to specific partnership agreements in the individual branches of the economy. Practice will be introduced gradually and its application will be organised in different ways, depending on the specifics of the vocational sector and profile involved.

In profiles of level 2 and 3 and in courses for unemployed, practice can be introduced through extension of the learning periods. In the related 4-year profiles, practice will be introduced through introduction of project periods and through the inclusion of current holiday periods.

The financial consequences of the introduction of practice will be resolved by opportunities for companies to use trainees in actual production and service and by offering a different kind of compensation to participants.

The development of company-based practice will be implemented through the following activities:

- Partnership agreements on pilot experiments and final implementation in specific branches defined in a specific regulatory document defining rights and responsibilities, roles and functions among all executive entities

- Specific financial applications
- Establishment of a system with defined uniform practice standards and related licensing to schools, institutions and companies participating in the system
- Definition of training outcomes from practice and adjustment of curricula including assessment, monitoring, and evaluation criteria
- The establishment of particularly well-equipped regional centres will support the implementation of practice and compensate for the lack of availability of specialised equipment at ordinary VET institutions and in companies
- Rules for involvement in commercial activities and security and insurance rules applied
- Planning, implementation and evaluation of experiments

## 5.7. Human Resource Development (Teacher training)

Modernisation of teacher training is needed to raise pedagogical and professional competences of teachers and associates in VET in order to prepare them adequately for the implementation of new programmes.

The modernisation will simultaneously address the development of initial teacher training as well as in-service training. The development process will result in *professionalized human resources and will enable continuous adjustment to global and technological modernisation*. In this way the new concept of continuous teacher training will be an integral part of the overall VET policy and strategy. The initial strategy will be directed towards:

- Renewal and modernisation of the teaching and training system for teacher trainees;
- Creation of a system of in-service training for teachers giving priority to support of the current reform of VET and establishing of the foundations for continuing VET

*The goal of the new concept is to develop teachers with functional competences enabling them to implement the new reformed programmes successfully and to actively and creatively participate in the further development and the improvement of the quality in VET.*

As opposed to traditional models, the *new concept should promote a culture of permanent change and a systematic approach to determining the needs and possibilities for professional development*. As a basic principle, this implies the introduction of planning and defining the programmes and types of training in accordance with the recognised needs and capacities at the level of schools, local communities, regions, professional associations (teacher associations) or groups of professionally networked schools.

A system defined by this concept will address the following needs of teachers:

- *Application of modern teaching and learning methods*
- *Upgrading and broadening of VET teachers' professional skills*
- *Abilities for participation in school based development activities in collaboration with local partners.*
- *Understanding of specific VET values, objectives, target groups and the needs for willingness in active participation in permanent reform*
- *Application of new information technologies and the related increased flexibility, efficiency and effectiveness*
- *Development of professional cooperation and partnerships*

*The introduction of new pedagogical methods* is impossible without networking between development programmes for pedagogic and psychological improvement at the school level. Therefore, the adoption of these methods is the responsibility of all teachers, where motivating creative approaches in teaching and practice planning and realisation is the goal. A special characteristic of the training system, set up in this way, is the obligation that modern teaching and learning

methods simultaneously constitute the content and method for pedagogical-psychological teacher training. Innovation in working methods should lead to that important innovation: *emphasising learning instead of teaching*. It is actually the application of the 'construction principle' in the teaching and learning process: instead of delivery of knowledge, students should be trained to build up knowledge, which implies the same requirements for teacher training. In teacher training, emphasis should be placed on vocational experience, and new pedagogical solutions and ideas.

*Information technologies* (multimedia and internet) are very important pillars for permanent teacher training and upgrading. This assumes that teachers are simultaneously acquiring computer literacy and the skills to apply information technologies in teaching, self-development, cooperation, planning and the exchange of ideas

*School-level training* (professional development at school level and school programmes for development) has numerous advantages – from rationalisation of spending to development based on everyday pedagogical practice (the identification and resolution of pedagogical problems) and the articulation of the response to the needs of students and the economy. For successful implementation of this model, it is necessary to organise the transformation of school libraries into school resource centres, as a special way of supporting professional teacher training with the application of modern teaching and learning methods.

The exchange of ideas and *partnership* in resolving pedagogical problems, as well as the design of school development and student training programmes is another pillar on which the system should be founded. Therefore, a permanent system for training teachers, associates and managers should lead toward the acquisition of specific skills and knowledge that are not narrow and too specific. The latter represent knowledge and skills related to management, the identification of needs, planning, development, communications, use of IT technologies, the implementation of new programme solutions, efficiency analysis etc.

The professional *system* of training for teachers, associates and administrators in VET should be open and dynamic, networked with all relevant institutions (universities, scientific institutions, educational administration), professional organisations, social partners, and expert groups. Cooperation with local partners (local community and local/regional economy) in the organisation of teacher training should be reflected through programme supply and demand for certain profiles and vocational levels.

In order for this concept for training of teachers and other resources to be transformed into programmes and concrete activities it is necessary to:

- Adopt special legislation (or regulations) reforming the entire area of vocational education and the professional development of teachers and associates in vocational schools;
- Define the standards for knowledge and skills required from teachers, related to the importance of the work they need to perform in the schools;
- Establish the criteria for the professional and social promotion of teachers, which would later become part of the legislation or regulations;
- Define trainers' profiles and the role of the institutions such as faculties, the Pedagogical Institute, the Ministry of Education and Sports, schools etc. It is very important that in the initial setup of the system, the obligations and responsibilities of the actors should be clearly defined as well as standards established;
- Establish the character and the form of training programme offers and the ways of supporting the self-development of the teachers;
- Prepare the principals, school inspectors, advisors and local partners for support to the implementation of the planned training activities;
- Define the monitoring mechanisms and internal and external evaluations for the efficiency of the training programme applied.

## 6. Quality Assurance

A quality assurance system is founded on evaluation, monitoring and evaluation of conditions, processes and outcomes in VET, and the method for system groundwork is self-evaluation. Application of these tools and techniques enables assessment of the current situation, provides evaluation scales for established indicators and defining key areas in vocational education. Relying on indicators, schools could assess the quality of the work and develop special documents (development plans) with all evaluated components and an action plan which defines stakeholders, deadlines and the quality improvement implementation process.

The main aim of a quality assurance system in Serbia is to improve and upgrade the quality of vocational education at all levels. Primarily it:

- Provides responses on significant questions to the stakeholders, social partners and those in charge of the VET system;
- Reveals examples of good practice;
- Secures feedback;
- Improves planning, development, monitoring and assessment;
- Encourages standardisation and enables comparison at all stages;
- Assists decision making functions for all the interest groups;
- Provides the overall picture and a coherent overview on all segments of VET;

A quality assurance system in Serbia must operate both at national and school level:

### *National level*

There should be agreed national guidelines to serve as the foundation for the harmonisation of all activities concerned with educational quality assurance. These guidelines should set out quality criteria for all main educational inputs, processes and outputs. The guidelines will also offer guidance on the procedures to be used to gather evidence in respect of all criteria. Some criteria will be qualitative and will require evaluation procedures needing professional judgement and feedback from students and social partners. Examples of such criteria are the quality of teaching, learning resources, and professional development. Other criteria will depend on quantitative data, e.g. examination results and data on post-programme progression of students. The development of a comprehensive and reliable national database is therefore an important aspect of the creation of a national quality assurance system.

### *School level*

The criteria and procedures designed for use at national level can and should also serve at school level. The advantage of this approach is that it enables individual schools to benchmark their performance using national norms. The aim of quality assurance at school level is to seek continual improvement in the quality of provision. School self-evaluation may be usefully linked with school development planning. The process of self-evaluation may identify areas where improvement is most needed and which should therefore be priorities for action in the school development plan. Subsequent to the implementation of the plan, self-evaluation procedures may be used to determine the extent to which developmental objectives have been achieved and improvements brought about.

Quality assurance systems in VET need to be established on a realistic basis accepted by all internal and external stakeholders. The system has to be efficient, effective and transparent, public and accessible to all interested parties, stakeholders in education, social partners and the broad public.

- The initial process of the setting up and system development requires the definition and elaboration of the following elements:
- Identification of responsibilities of the evaluation process on national level
- Guidelines and procedures for school self assessment,
- Conduct of self assessment by established indicators,
- Analysis of tools for self assessment,
- A reporting and information system for the evaluation and monitoring approach.

## 6.1. Assessment and Examinations

An important goal of student assessment in VET in Serbia is to improve the learning process and to enable:

- Students to get information on their success in achieving the defined outcomes and overcoming difficulties in the learning process;
- Teachers to get feedback on how well students cope with planned activities;
- Identification of difficulties that students experience in dealing with education and training content and suggesting additional activities for the improvement of teaching quality;
- Teachers to receive information and feedback on the students' point of view;
- Opportunities for feed-back to the applied curricula and conditions for a permanent development process.

Assessment methodologies in VET will be further developed and gradually the following forms will be brought into focus:

- External assessment and introduction of assessors from the industry
- Performance assessment
- Integrated assessment and interdisciplinary assessment
- Assessment of analytical abilities
- Assessment of skills and the general work-oriented competences

### *Examinations*

Examination procedures in any VET education are based on the same principles though the contents and formal results are varying. The main aim is to assess knowledge, skills and capabilities (competences) acquired by students in VET.

Final exams should measure the acquired occupational competences upon completion of education for a specific profile.

An educational profile is not just the equal of one occupation but can cover a group of similar occupations. Therefore acquiring knowledge of the curricula for one specific profile provides competences for one or more similar occupations. The list of competences, as well as the knowledge and skills that constitute these competences, is an integral part of piloting curricula for every educational profile. In a final exam, a student performs a certain number of tasks that measure *regulated competences* equal to the number of regulated competences for that specific educational profile.

The final exam is carried out in schools, plants and workshops (in schools or within craft enterprises) where the working conditions for which a student has been prepared during education are secured. The final exam should not last longer than three days.

*The Professional Matura* measures the level of knowledge and skills acquired, as well as professional competences upon completion of a four-year education. It is designed to check both theoretical and practical knowledge and skills. The Matura is set up as a project so that both general

and professional competences can be assessed. The Professional Matura can be partly or completely external. The National VET centre should maintain a database of examination tasks. All tasks should be standardised. Upon completion of the Professional Matura, students can opt for work or a continuation of education in relevant post-secondary schools and faculties in accordance with defined enrolment conditions.

## 6.2. Monitoring and evaluation

Only after their implementation, the quality level of the newly piloted curricula can be assessed. For the implementation to be successful, it is necessary to continuously monitor the process so that timely changes can be made within all elements – curriculum, teaching timetable, contents, teaching methods and training of the teachers.

In order to create specialists for a certain profile through the educational system, several assumptions have to be fulfilled:

- The existence of appropriate curricula;
- Schools prepared for the implementation of curricula (with regard to space and equipment available);
- The existence of qualified staff in schools;
- Adequate preparation of teachers and assistants for the application of new curricula;
- A defined system of monitoring and evaluation at school and national level.

Only after all the prerequisites of this process are fulfilled can a favourable result be expected. Monitoring curriculum delivery is one of the most important links in this chain. To what extent new curricula provide for the acquisition of the required professional knowledge, especially skills and capabilities, can be identified in the final years, i.e. upon completion of the educational process for a certain profile.

## 6.3 Accreditation and Certification

A well-structured and transparent accreditation and certification system provides:

- Transparent quality of education and recognition of qualifications and certificates;
- Valid information about the institutions/organisations and programmes/modules of education and training that lead to vocational qualifications and competences;
- Possibility for mobility of the labour force, faster employment, and easy access to continuous education.

Accreditation in VET and adult education has a triple meaning:

- The process of external verification and evaluation of quality of the institutions and educational programmes/modules consistent with defined standards or criteria;
- The act of formal authorisation of the supply institution and/or programme from the side of the globally recognised accreditation authority/government office;
- The indicator of the quality of the product and service, or the activities

A certification system in education is one of the ways to recognise the current unregulated education and training system and to link competences achieved through non-formal education and learning to valid public papers or certificates of vocational qualifications irrespective of the process of learning. Qualifications gained through a certificate system are based on endorsed occupational and educational standards. In this way, competences can achieve their recognition in various working environments and in the national labour market.

*The starting point for the establishment of a national certification system is the conceptualisation of the structure of education and practice and the development of the appropriate programmes/modules in VET, as well as the accreditation processes and procedures.*

The establishment of the certification system will provide:

- The framework of certificates and diplomas, compatible with a national qualifications frame and the projected structure of the vocational education and training system;
- The general framework for the certification of competences (principles, procedures, criteria);
- National standards(demands) for certificates in some professions, areas of work and competences;
- Procedures and standards for internal assessment;
- Procedures and standards of the external (final) assessment;
- Procedures and documents for issuing and registering certificates and diploma.

## 7. Career Guidance and Counselling

The rapid change in the labour market and the related change in skills needed are providing increasing challenges for graduates and job-seekers. These, consequently, need to be assisted by VET schools as well as employment services in order to be able to meet the new challenges encountered.

Gradually, a system of guidance in VET will be developed to follow and assist students from initial introduction to work and further education possibilities for primary school pupils to assistance for job placement and job sustainability for graduates who have left VET education.

The guidance will provide VET students improved orientation about: *the economy and development needs, labour market needs, demographical changes in the population structure and its influence on demands, the implementation of the Life Long Learning concept in the function of permanent Human Resource development.*

Career guidance throughout VET will enable:

### **In-depth information on:**

- Possibilities for the application of knowledge, skills and competences, acquired within an educational profile, in the labour market;
- Trends in the labour market and employment development;
- Possibilities and conditions for further education and training.

### **Skills on:**

- Personal presentation and application techniques
- Study techniques
- Job seeking techniques

### **B. Individual work with students and adults will deliver:**

- Assistance in developing realistic self-assessment of own competences, personal features, and educational and working preferences;
- Recognition of the activity in which, according to labour market demands, one could achieve the best results;

- Development of individual career plans based on individual characteristics and market opportunities;
- The creation of formal and flexible attitudes towards possible changes of career plan and the acceptance of challenges and risks;
- Information on the content and processes necessary for making decisions related to career and education progression;
- Development of understanding for and positive attitudes towards lifelong learning;
- Development of awareness of the importance of action for personal and social self-actualisation.

With regard to the role and function of career guidance and counselling, the two ministries in charge (Ministry of Education and Sports and Ministry of Labour, Employment and Social Policy) should agree and identify the procedures for coordinated services in this area and with a specific strategic document define the major development principles of career guidance and counselling in order to present a concrete development plan. This document will also define the participation of social partners, professional associations, students' and parents' associations, alumni organisations, municipal associations, and other relevant bodies.

## 8. Governance and social partnership

Generally, social partnership is evolving in areas where the state and the economy need to govern and act jointly in order to achieve policy objectives. Traditionally, partnerships are found in areas such as: national and local economic development policies with the related fields - employment, skills, and infrastructure policies. Forms of organisation and partnerships need to be developed between enterprises, between workers, and among socio-economic partners and with the national and local authorities for the development, implementation, and control of vocational education.

In the case of Serbia a partnership in the development of VET can be based on social partnership nationally and locally – a social partnership currently represented by (1) The Ministry of Economy (economic strategic development) The Ministry of Labour (Labour protection and employment) and The Ministry of Education (Initial VET in schools) all representing a global society interest. (2) Employers' Associations representing the owner and management interest (the buyers) and (3) the two largest trade unions representing the interests of the workers and staff (the sellers). Local policies should be managed by the respective local representatives of these bodies. The key policies concerned are: national policies for VET, the definition of VET functions and decisions and their technical implementation, the monitoring of the implementation of VET, and the control of quality.

The function of socio-economic partners (employers and workers associations) in a general VET system should be as follows:

### **Identify and decide the demands for VET:**

- The identification of occupational requirements in the market (skills needed);
- The categorisation of skills ( unskilled, semi-skilled, skilled, technicians, designers);
- The identification of occupational profiles;
- The setting of occupational standards (jointly with Ministry of Labour, Employment and Social Policy, when required);
- The quality of education and training in the financial perspective and in the perspective of roles (training responsibilities) of the partners;
- The recognition of competences and related certificates;
- The identification of the demand for generally organised training activities;
- The organisation and implementation of training in enterprises for new generations of workers;
- The financing of VET.

Additionally, the socio-economic partners have a part to play in the development and control of:

## **Implementation of VET**

- Education standards (the level and extent of public services);
- Education profiles (the orientation towards clusters in the economy, occupational profiles and levels of qualifications);
- Education curricula (shared responsibility, content of education and training);
- Delivery of training (provision of trainers, qualification of trainers);
- Assessment (control of learning attainment, trainer qualifications, quality of institutional services);
- Accreditation of trainers, programmes and institutions (definition of equipment, capacities, competences and extent of services);
- Financing (distribution of financing, share between public indirect financing and direct user financing);
- Resource allocation and priorities.

Related to the above issues, the socio-economic partners must, in the developed VET system, assume direct responsibility for the first group of items listed and share responsibility with public bodies and their civil servants for the second.

In order to carry out their functions, the socio-economic partners must have shared responsibilities in the related governance of:

1. Adoption of national policies for VET
2. Development of VET functions
3. Implementation of VET
4. Control of VET quality

For this purpose the following organisational framework will be needed:

### **National Body for coordination of VET with related initiatives**

A National policy body is needed for the inclusion of VET policies into a broader national socio-economic context; currently, the National Socio-Economic Council can carry out this function.

This tripartite body includes representatives from the three key interest parties in Serbian VET: Government (MoES, Ministry of Labour, Employment and Social Policy) and recognised partners from the two sides of the economy, currently Union of Employers and 2 Trade Unions

### **National Policy Body for VET**

The role of the National Body for VET is to design, monitor, and harmonise the development and improvement of VET at national level, and at the same time, to monitor and regulate the interests, needs and capacities of all social partners in the development of the formal and non-formal systems. The concrete tasks of the National Body for Vocational Education are to:

- Decide and monitor VET strategy and policy development;
- Adopt a national qualification framework;
- Determine standards – occupational standards, qualification standards, vocational education standards;
- Approve vocational education curricula in both the formal and non-formal sectors and the programmes of vocational education and training;
- Monitor and secure quality in VET;
- Propose an accreditation and certification system;
- Approve the content and the form of the final exams, craftsman exam and vocational Matura;
- Analyse and propose the vocational school network;

- Propose and determine directions for establishing the various models of social partnership at national, regional and local level.

### **Technical economic branch Committees (ISOR committees)**

ISOR committees have the responsibility to convey authoritative inputs to the National VET Body, from the specific branches related to the economy. Their responsibilities are: identification of occupational requirements in the market (skills needed), categorisation of skills, identification of occupational profiles, setting occupational standards (jointly with Ministry of Labour, Employment and Social Policy, when required), quality of VET provision, and related financial indicators. In the perspective of roles (training responsibilities) of the partners, recognise competences and related certificates, identify the demand for generally organised training activities, organise and advise on the regulation of training in enterprises for new generations of workers, and provide analyses related to the financing of VET.

### **Professional VET unit with close relations to MoES**

In accordance with this strategy, the existing Centre for Vocational and Artistic Education within the Pedagogical Institute should be strengthened and given the support needed to empower it to fulfil the executive tasks and activities required to complete the following tasks:

- Technical tasks necessary for the implementation of the concept for vocational education in compliance with the need of economic and technological development;
- The management and coordination of the social dialogue and partnership at different levels of planning, development and implementation of vocational education;
- The networking of vocational schools with companies and enterprises;
- The coordination of the national qualification framework;
- Coordination between occupational and educational standards;
- Monitoring and evaluation of vocational education programmes;
- Development and realisation of regulations for final exams and the vocational Matura;
- The cooperation and monitoring of craftsman exams jointly with socio-economic partners;
- The professional training of teachers, associates and trainers in vocational education;
- The provision of support to and coordination of regional adult training centres etc.

## **9. National Planning**

VET goals have been defined in the previous section on vision and mission – i.e. to provide every individual with the possibility for full social participation, improvement in quality of life, personal choice, employment, and the possibility for continuing professional development. However, a Serbian VET policy cannot stand alone but must be implemented in coordination with related national policies (employment policy, regional development policies, and investment policies) which all ideally should be comprised by: a national development strategy.

Policy development in VET requires its integration into the overall national development policy as one of the key elements of such a plan. It should play its part in defining national employment strategy in line with inter-ministerial strategies and integrated within the overall national strategy for the attraction of foreign investments and support for the development of the Serbian economy. Hence, the present VET policy will remain flexible according to coordination with other national policies. This issue is not so much conceptual as it is a question about actual priorities for concrete development and for the related national financial abilities.

Therefore the implementation plan for this policy will remain flexible and a subject for annual modifications.

## 10. Financing Vocational Education and Training

The development and improvement of the financing system for VET should complement the vision and mission for vocational education and the basic principles for its further development as outlined in the preceding sections of this Strategy.

Consequently the finance system should:

- Support vocational schools in cooperating with the labour market;
- Secure access for each individual and provide each region equitably with funds from the state budget.

This Strategy recommends the upgrading of the funding and financing mechanism of the VET system in Serbia by means of a 'dynamic' funding model. The proposed approach includes two elements to motivate VET schools to offer market driven training programmes and additional commercial activities. The two elements are:

- *Output-based funding*: the output-based funding is based on the number and kinds of diplomas issued by the school. Demand-driven diplomas will be better financed by the state budget.
- *Additional activities and short flexible courses*: to be promoted by the co-financing scheme.

In the policy/strategy context the functioning of this model has four prerequisites:

1. A VET school would be free to operate in the commercial market;
2. To improve the efficient use of their budgets, VET schools should have the opportunity to make savings on the input-based element of their budget, i.e. state and local funding dependent on the volume of students enrolled;
3. VET schools would be required to keep records and make 3-months financial statements;
4. The model should provide enhanced steering capacity from the Ministry of Education and Sports.

With the *Dynamic model*, the school budget is composed of three elements: (1) an input-based part, (2) an output-based part, and (3) commercial production. The VET school may also opt for co-financing to fund new developments and investments within the school. The model is dynamic for the following two reasons. First, the size of each component is flexible and depends on the performance of the school. Second, over the years the relative weight of each component can be adjusted by the decision makers within the Ministry of Education and Sports.

Alongside the combined input-based, output-based, and commercial elements, a co-financing scheme is integrated into the system which is project orientated.

In principle, the co-financing scheme can be used for financing investments and the retraining of teachers. The aims of the co-financing scheme are:

- to function as an instrument for the government to promote certain targeted activities of schools;
- to activate schools towards having additional activities;
- to attract private money into the public system;
- to improve the financial efficiency of VET schools

Different resources can contribute to the co-financing fund:

- Ministries (education, labour, industry, agriculture) which want to promote certain targeted activities of the VET schools. For example to meet economic priorities for certain regions or to facilitate (foreign) investments in targeted regions;

- Donor funding;
- A regular inflow of money from the Ministry of Education and Sports. This could be financed from the annual decreasing inflow of students (about 3% per year) into the VET system.

*The essential feature of the co-financing fund is that it will supplement the commercial income of the school with an agreed addition, being calculated as a fixed percentage of the commercial income generated by the school (with a possible maximum contribution amount imposed). Additionally it provides a funding mechanism for those schools that are operating in an environment where revenue from commercial activities is difficult or impossible to generate.*

The overall advantages of an integrated 'dynamic model' are:

- The co-financing scheme (and co-fund) opens opportunities for those VET schools that are willing to upgrade their programmes. If a school complies with the condition of co-financing they can opt for a one-off budget for purchasing equipment, upgrading the related infrastructure and teacher training etc.
- The output-based part of the funding model rewards schools which are offering diplomas demanded by the labour market (employees and unemployed). Year by year a school will get extra payments to finance recurrent costs related to the investments.
- The co-financing scheme is an important element of the dynamic funding model. It is also an innovative aspect of any new funding mechanism. The proposed co-financing scheme is very much related to the Serbian situation. Therefore, piloting is needed, in order to obtain: (1) an understanding of the income generating and efficiency capabilities of VET schools, and (2) the level of attractiveness of the co-financing scheme for VET schools.
- It provides strong incentives for VET schools to move to the labour market and to introduce demand-driven vocational programmes;
- It is a fair system because the input-based part of the budget guarantees VET schools a basic and stable funding and schools would have different possibilities to generate extra income. For example in regions where the labour market is not functioning, VET schools can opt for additional activities to qualify for co-funding. In other regions where the labour market is functioning quite well, schools can opt for output-based funding.
- The system would motivate schools towards more financial efficiency. Initially, savings from the input-based funding can be used for opting for co-funding. Neighbouring schools can cooperate to achieve greater savings.

### *Implementation*

The co-financing fund as such is an important incentive for VET schools. The establishment of the fund requires political agreement, and political willingness to use the public school system as an instrument of economic policy. If not, ministries will not be willing to finance the fund.

For implementation, the proposed system has some completely new elements. Therefore, school will need time to incorporate the new elements in the daily practice of running a school. Technical support from experts of the Ministries of Finance and Education would be indispensable.

*Implementation of the model, then, requires a careful step by step approach aligned with the other elements of the modernisation of VET. The recommended model has been designed to support the priorities put forward by the core group and working groups but it needs careful piloting.*