

Pursuant to Article 45 paragraph 1. of the Law on the Government ('Official Gazette of the Republic of Serbia', no.55/05 and no.71/05 – amendment),

The Government adopts

The Strategy for the Development of Vocational Education and Training in the Republic of Serbia

1. Introduction

The Strategy for the Development of Vocational Education and Training in the Republic of Serbia (hereinafter the Strategy) provides a complete picture of further vocational education and training development. The suggestions contained within this document are based on the modernization and improvement of vocational education and training already started, initiated and realized by the Government and the Ministry of Education and Sports in the following areas: legislation, institutional development, human resources development, gathering information from the labour market, the modernization of curriculum (pilots), the organization of teaching process, the modernization of school management. This implies that the future EU projects, supporting the modernization and reform in vocational education and training, will support these recommendations, in accordance with this document.

The Strategy is based on the reform objectives defined in the strategic documents adopted by the Government. *The National Strategy of Serbia for EU Accession, The Poverty Reduction Strategy Paper for Serbia, The National Employment Strategy, The National Action Plan for Children, as well as other development documents in preparation or those under public discussion, as in the case of the National Strategy for Economy Development In Serbia, for the period 2006-2012. In the process of designing this Strategy all programmes and strategic documents were observed. These documents have been the basis of VET reform processes since 2001. as well as the results of the big international projects in this field realized by the Ministry of Education and Sports from 2001 until 2006.*

2. The Socio-Economic Context and Development of Vocational Education and Training in the Republic of Serbia

Current developments in market economies show that education and the development of capacities in human resources have the highest priority in the national strategies and the strategies of political, economic and technological progress. In Serbia, the processes of reconstruction and transformation of education, especially vocational, are preconditions for the sustainable social and economic development. Investments in education for the 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 the most European countries is the effort to establish a flexible system of initial and continuing vocational education and training, with the aim of responding to the changing needs of labour market. At the same time, the task of vocational education and training is the provision of the general knowledge and values for students and adults, needed for their future personal, professional and career development. Consequently, the modernisation and reform of vocational education and training is a complex and long-lasting process.

In the case of the Republic of Serbia, one of the tasks of the already commenced modernization and reform processes is the adjustment of vocational education and training to the needs of market economy, protection and preservation of the environment. This reform is a gradual and long process which can be neither implemented by the Ministry of Education and Sports alone, nor by secondary schools (teachers, principals, the associations of schools). It requires active participation of all the stakeholders who place their demands to

the vocational education system – employers, companies, trade unions, employment services, the Serbian Chamber of Commerce, Serbian Association of Employers, parents, students and also public administration, municipalities, the Ministry of Economy, the Ministry of Labour, Employment and Social Policy and other relevant ministries, in accordance with the Law on Socio-Economic Council (Official Gazette of the Republic of Serbia, no. 125/04). It is necessary to reach joint agreement/consensus regarding the directions of further modernization and reform of vocational education and training. Such an agreement requires:

- Establishment of direct cooperation of the Ministry of Education and Sports, the Ministry of Labour, Employment and Social Policy, the Ministry of Economy and other relevant Ministries in the process of further development of vocational education and training;
- The adjustment and adoption of legislation regarding vocational education and training (as a result of joint efforts of the Ministry of Education and Sports, the Ministry of Economy, the Ministry of Labour, Employment and Social Policy, the Ministry of Finance and other key social partners, employers and their representatives);
- Institutional and organisational development for the delivery of vocational education and training including the links between formal and non-formal vocational education and training;
- Learning in the conditions and in the way which is in accordance with the real needs and abilities of learners, as well as with the needs and demands of the local communities;
- Increased financial investments in the improvement and development of the existing system of vocational education and training financing;
- Solving the problem of accreditation and certification by the joint efforts of the relevant ministries, especially the Ministry of Education and Sports and the Ministry of Labour, Employment and Social Policy;
- Respecting the concept of sustainable development of the whole society.

In accordance with the needs and requirements of labour market, the needs of society, the aims and tasks of the whole vocational education and training system, the strategic documents in the field of education (in accordance with sustainable development), but also with the individual wishes and abilities of students and trainees – ***the further reform process of vocational education and training in the Republic of Serbia should include:***

- Development of systems of standards for institutions, teachers and educational programmes;
- Development of the national qualification framework and vocational education and training standards;
- Further modernisation of contents, organisation and methods of teaching process, teachers' performance and school in general;
- Further improvement of outcome-based modular curricula. Introduction of new curricula; different organisational models and the re-definition of forms, ways and contents of professional practice in companies/enterprises based on the partnership agreements between the schools and socio-economic partners;
- Development of an appropriate balance between general and vocational education, theory and practice;¹
- Definition of educational profiles and occupations in order to adjust them to economic reality and the principles of sustainable development;
- Development of accreditation and certification systems including:
 - Education and training institutions,
 - Programmes which are supposed to create balance between knowledge and skills acquired in non-formal education;
 - Ways of recognition in certification system;

¹ Possible models of a ratio between general and vocational education are proposed in the pilot curricula of secondary VET

- Rationalisation of the secondary school network, in accordance with the needs of economy, labour market, local communities, requirements of social and economic development and employment policy and in accordance with the preferences and abilities of students;
- Enlargement of capacity of three-year vocational schools as a direct response to the needs of economy;
- Institutionalisation of continuing and active social dialog in the spheres of vocational education development and employment;
- Modernization and development of professional practice and practical teaching in secondary schools and educational institutions, as well as in companies/enterprises;
- Quality assurance of vocational education, based on the constant monitoring and evaluation of learning results and teachers' performance, schools and educational institutions;
- Development of transparent, functional and fair systems for assessment and evaluation of students' achievements;
- Securing better horizontal and vertical mobility of students within vocational education as well as the mobility towards further education;
- Creating conditions for continuing vocation-specific professional development of teachers and professional development in general (the new role of teachers, their continuing professional development), introduction of new teaching methods (group work, interactive learning, projects, problem solving etc.);
- Innovating equipment and teaching materials;
- Increasing independence and the rights and responsibilities of vocational schools in new conditions, linking with the local self-government, the needs of local economy, finding new ways of financing;
- Professional improvement and training of the principals in order to enable them for the new work conditions;
- Establishment and development of vocational education management system.

3. Vision and Mission of Vocational Education and Training

3.1 Vision and mission

In order to provide the conditions and perspective for the successful development of the human resources necessary for faster socio-economic development and the establishment of knowledge-based economy and society, the vision for further development of vocational education and training in the Republic of Serbia is as follows:

Vocational education in the 21st century becomes one of the key factors for sustainable economic and social development, as well as the factor for the improvement of modern social and economic relations. In the developed and efficient system of social partnership where all the relevant stakeholders act jointly, vocational education and training will produce experts who will participate successfully in competition at the national and international level, in all the fields of economy.

Precondition is not only the participation of all the social actors, but also the creation of efficient and effective system of social partnership at all levels in which all the relevant institutions and authorities participate.

In order to play the role imposed by the new socio-economic context, with respect to the principles of sustainable development, the **MISSION** of vocational education and training implies the following:

- Vocational education has to be **attractive and accessible** to all and to enable active approach to production and services - to students, adults, people with special needs, those who do not have appropriate qualifications, the unemployed and those who want to return actively to the labour market;
- Vocational education has to **respond** to the current and future labour market needs;
- Vocational education has to be **widely determined**- to provide basis for lifelong learning and continuing training and to prepare young people for active participation in society;
- Vocational education has to be **flexible**, especially when it comes to the needs of local self-government, learning styles and the desires of individuals. Vocational education and training should also provide mobility within the system, as well as flexible “entry” and “departure” from the system;
- Vocational education has to be **effective** - to enable all the participants to reach the desired qualification levels and to offer them possibility for further education;
- Vocational education has to be based on **cooperation and partnership** and has to include all the relevant partners in the development, management, implementation and control;
- Vocational education has to be **an integral part** of the qualifications system - each level has to be the preparation for the next level and to provide passage from education to practice and back;
- Vocational education has to be **rational** - to use optimally the resources available in order to provide all types of education and training for obtaining qualifications;
- Vocational education has to be **functional** - to be simple in terms of organisational structure and in terms of allocation of responsibilities for its implementation;
- Vocational education has to be **directed towards the achievement of sustainable development**.

3.2 The Objective and Tasks of Vocational Education and Training

Vocational education and training should provide the possibility of full social participation to each individual, of improved quality of life, personal choice, employment, possibility of continuing professional development and possibility of quality living in healthy environment. That means that the main objective of vocational education and training is **to provide possibilities for youth and adults to gain knowledge, skills and attitudes (competencies) needed for work and employment, further education and learning, with regard to the principles of sustainable development of the whole society.**

Specific tasks of vocational education and training are:

- Gaining occupations and qualifications, i.e. relevant competences, skills and knowledge necessary for employment in a particular occupational field;
- Acquisition of initial and continuing vocational education and training;
- Development of abilities, talents and potentials, as well as self-realisation and further education.

3.3 Principles for the Development of Vocational Education and Training

The modernisation and development of vocational education and training are based on the application of several basic principles:

3.3.1 Partnership:

Vocational education and training is based on partnership; it is a common responsibility of various actors:

- Social partners: the Government, employers and trade unions;
- Other interest groups, chambers of commerce, professional associations, high-school institutions, science-research organisations, associations, vocational education and training institutions and the associations of vocational education and training institutions, students' parents and
- Students and individuals.

Partnership is manifested:

- At all the levels of social organisation (national, local);
- In different domains of organisation and implementation of education and training (the policy, planning and organisation of educational process, the development of plans and programmes, implementation and control);
- In the management of schools, i.e. educational institutions;
- In the realisation of different roles, rights and responsibilities of some partners (the investors, organisers, users and promoters of education).

3.3.2 Decentralisation

Application of the principle of decentralisation in education is reflected in:

- Management of educational system and school and other organisations providing professional training;
- Design of programmes and modules;
- Establishment of school network;
- Design and implementation of enrolment policy;
- Process of monitoring and evaluation.

3.3.3 Equity

Vocational education and training should be available to all who fulfil the entry criteria for certain types of programmes and levels of education and training, regardless of sex, age, nationality, religion and race, political or other opinion, culture, state of property, mental or physical disability, etc.). This implies the rights and the actual possibility for acquiring vocational education and training in the way and in conditions which are in accordance with the needs, desires and abilities of learners and in accordance with the social possibilities and the needs of local self-government.

3.3.4 Openness and flexibility

Vocational education and training is a communication channel and an open system for the distribution of knowledge, skills, competences and qualifications², in which there are real opportunities for:

- entrance, exit, return, according to the needs of individuals and the labour market;
- vertical and horizontal mobility;
- connection to or integration with the forms and training programmes in companies/enterprises and at the labour market³

3.3.5 Programme variety

Vocational education and training institutions develop and implement programmes and modules of different types, in accordance with the defined standards, i.e. initial vocational education and training programmes, as well as the training and programmes for professional improvement and knowledge refreshment, adjusted and intended for various target groups (the youth, the adults, the employed, the unemployed, people with special needs). This provides the opportunity for using not only educational strategy in satisfying needs, setting and accomplishing individual development social tasks, but to use the learning strategy as well.

3.3.6 Institutional variety

School is the basic, but not the only institutional form of vocational education and training. It is necessary to provide:

- Various types of institutional organisation, i.e. different legal status of educational institutions (schools, institutes, centres etc);
- Possibility for all those who fulfil the legal requirements to provide vocational education and training;
- In accordance with the defined vocational education and training outcomes, possibility of going at one's own pace and of having individual way of the development of competences, gaining knowledge and skills, which is one of the key steps towards the democratization of education and towards quality education and learning.

3.3.7 Higher level of professionalism of teachers and associates

Continuous professional improvement of teachers and instructors (coordinators of practical teaching/professional practice) in the vocational fields is necessary. It is a pre-requirement for the modernisation of vocational education and training. Teachers must have the opportunity for constant upgrading of their professional competencies and maintaining social recognition and related compensation.

3.3.8 Focus on outcomes

Organisation of education, teaching and learning in vocational education and training is based on the idea of outcomes, i.e. precise and clear definition of what students and adults know, can and are able to do upon completion of education and training or a certain

² Achievement in education, experience gained through training and qualifications of an individual.

³ Official data on achievement implying successful completion of education or training or satisfactory results of a test or exam

programme, as well as on clear organizational, didactical and methodological articulation of the ways for achieving outcomes. Focus on outcomes supports institutional diversity and diversity of curricula. Outcomes should be the same regardless of place and time of education or training and students' age. Outcomes should differ in terms of possibilities and ways of achievement. Assessing the outcomes enables external recognition and a better estimation of students' competences.

3.3.9 Sustainable development

Organization of education, teaching and learning in vocational education and training should be in accordance with the concept of sustainable development.

4. Social and Labour Market Needs and Requirements

The change of economic policy of the Republic of Serbia requires different structuring and organisation of vocational education and training because the competitiveness of economy at the global labour market requires a high level of professionalism and competence of the labour force which need to be promoted and developed by the general national economic policy. That is why the Government measures for the support of economic development and the increase of employability are directed towards the improvement of the labour force competences, towards the creation of new jobs, development of entrepreneurship, and the promotion of flexibility at the labour market, provision of social security and social participation of all groups. Population with competences necessary for successful participation in the society and the educated and adaptable labour force ready to accept the new technologies, ready for mobility through regions, industries and occupations are preconditions for the socio-economic transformation of the Republic of Serbia and its EU integration and an adequate response to the challenges of technological development and global economy.

The strategic aims of the Government for the period 2004 – 2006 - *the improvement of the macroeconomic results of the country, the development of a modern market economy, considerable advance towards EU* - can be achieved only if a modernised and reformed vocational education and training is recognised, at all levels, as a precondition for sustainable social and economic development. The main strategic directions for the joint action of all the participants in vocational education and training will ensure the following:

- Compatibility with the European standards;
- Possibility of acquiring qualifications in vocational education for everyone;
- Establishment of new relation between theoretical and vocational education and the new relation among schools and companies/enterprises;
- Application of the principle of lifelong learning;
- Application of the principle of sustainable development.

In order to respond successfully to the needs of economy, labour market and local self-governments, it is necessary that vocational education and training:

- Establish systematic networking and cooperation among all social partners (employers, trade unions and the Government) and stakeholders (chamber of commerce, professional associations, associations of vocational schools);

- Agree on joint responsibility of social partners for the identification of needs, programming and implementation and monitoring of vocational education and training;
- Ensure that the labour market needs influence vocational education and training development in certain professions, occupational fields and profiles;
- Involve social partners in defining and structuring educational profiles, assessing the outcomes of profiles (external commissions for the final exam and Vocational Matura, craftsman and specialist exams, certification);
- Systematically arrange relations between the Ministry of Education and Sports and the Ministry of Labour, Employment and Social Policy (especially in the areas of adult education, employment, certification and accreditation, lifelong learning, continuing education, introduction of new profiles);
- Further institutional development of vocational education and training at the national level (the establishment of a national body/Vocational Education and Training Council).

4.1 Competences and Key Skills

Economic competitiveness at the global labour market and achievement of sustainable development of the society require high level of labour force adaptability. The consequence is an increased demand for workers with a wider range of skills, who are able to work individually and to adjust easily and quickly to the changes in the world of work. Consequently, the concept of competence has been changed - instead of the traditional concept of skill, employers additionally insist on and require wider competences, especially communication skills, abilities in problem solving, team work and self-discipline. The complexity of labour market and the increased demands result in the labour market passing contradictory information, seeking individuals who are highly adaptive with a wide range of skills, but who also have specific technical skills not only for certain routine functions but also for solving specific technical problems.

Vocational education and training must respond to such demands and enable acquiring the competences, for youth and adults, necessary for getting employment; at the same time, vocational education and training should provide chance for further education. The key knowledge, skills and competences leading to employment include:

- Intellectual and sensorimotor abilities;
- Social and interpersonal skills and knowledge (communication, team work, decision making, taking responsibility);
- Business and entrepreneurial skills and knowledge (entrepreneurship skills, creativity and innovativeness, self-employment);
- Multiple technical skills and knowledge;
- The awareness of the need for environmental protection and for achieving sustainable development.

In this context, vocational education and training should:

- Provide a broad general basis for the realization of personal plans and desires related to further education and alternative occupations;
- Find ways and forms of responding to different requirements and needs;
- Find balance between the acquisition of a wide range of life skills and the skills needed for employment and work;
- Provide good quality of living in healthy environment.

Current supply and demand ratio at the labour market in the Republic of Serbia is linked with the issue of the competences and skills of the youth and adults who drop out of vocational

education and training. It also defines specific requirements of further reform of vocational education and training. This requires:

- Ensuring flexible vertical and horizontally mobility in the system of formal and non-formal vocational education and training;
- Reform of examination system;
- Establishing equality between qualifications obtained in formal and non-formal education, i.e. through different educational programmes which are not a part of the regular school system with the qualifications obtained within the formal system of education;
- Establishing certification and accreditation systems in formal and non-formal vocational education and training.

4.2 Occupational Standards

Occupation is a set of jobs and work tasks which are by content and type organisationally and technologically so similar or mutually connected that can be carried out by one individual with appropriate knowledge, skills and competences.

Job is a set of work tasks performed by an individual.

One of the priority issues for the further reform of vocational education and training in the Republic of Serbia is establishment of the national nomenclature of occupations which will include profiles in vocational education and training.

The current Nomenclature of occupations was adopted during the Socialist Federal Republic of Yugoslavia. In 1998 (in the period of the Federal Republic of Yugoslavia) this classification was established by the Decision on the unique codes for the data in the records concerning the field of employment. The period in which this classification was established was completely different in terms of social and economic conditions and the employment process was limited and defined by different relations at labour market and regulations. This also used to influence the character and forms of professional mobility of labour force. Nowadays, the development of labour market requires the professional and territorial mobility of labour force and the constant change of occupations or certain jobs within occupation (five to seven changes during the years of employment). This requires a new definition of occupations and their merging into broader ones, in accordance with the current jobs and tasks to be carried out by an individual within a certain occupation. Since changing or making this classification is a long and complex process in which all stakeholders, state institutions (schools, faculties, the National Employment Service etc.) and interested ministries participate, the process of occupational standards development should start. This process should include the development of a certain number of pilot occupational standards with the previous agreement on the number and the choice of occupations. Priorities may be determined on the basis of the following criteria:

- Traditional occupations;
- Possibility for comparison with other countries;
- A high level of demand on the labour market and high employment rates with a minimum possible time spent in the unemployment record book;
- Large student coverage, monitored for a number of years;
- Easy employment from the aspect of the development perspectives of a sector;
- Interest of employers;
- Participation of expert teams from the world of work in the development of occupational standards;
- Orientation towards sustainable development.

Occupational standards must reflect the current economic and technical changes which results in changed requirements for skills which students should gain in the process of

education and training. There are several key elements in the definition of occupational standards:

- Occupational standards are the measure of accomplishment which an individual should achieve in order to be able to perform a certain job;
- Occupational standard contains: the name and code of occupation, the level of demand, occupational competences and the description of occupational standard; the field of work; key activities; knowledge; skills (basic practical knowledge; vocational theoretical knowledge; general knowledge);
- Occupational standard is the basis for the development of curricula and programme modules;
- Occupational standards are the basis for defining what is expected from an individual in the process of work.

Occupational standards have to be based on:

- Job requirements;
- Wider job description and work tasks;
- Flexibility of teaching and learning (modules);
- Labour market needs analysis;
- Concept of sustainable development.

Occupational standards which are to be developed should contain:

- Introduction containing the description of occupational standard with reference to the target group it is developed for;
- The level of competence (3 levels are proposed);
- The name and description of occupation, classification CODE, the name of educational programme, the duration of training;
- The abilities and knowledge needed for certain occupation;
- The list of tools, equipment, machines and materials for certain occupation;
- Future development trends in that occupation.

5. Response of Vocational Education and Training to Social and Labour Market Needs

5.1. Educational profiles

Educational profiles determine which vocational requirements have to be fulfilled. They define the necessary general education, vocational knowledge, skills and competences which lead to employment. Apart from the broad educational profiles preparing for a range of similar occupations, there are other, narrower profiles, oriented towards specific occupations and jobs. Decisions about the duration of education for specific occupations and profiles are based on the concrete labour market requirements. This means that the starting point in defining a new educational profile or redefining an old one, should be the needs of employers, especially regarding the skills and competences necessary for the employment and work in that occupation. Educational profile must also contain the segment concerning the evaluation and assessment of student's achievement. Each educational profile should also respect the principles of environmental protection and sustainable development. In this way, it becomes a complete specification of the qualification which students and adults get upon completion of vocational education.

The harmonization of supply and demand at the labour market in the Republic of Serbia requires further development of the systems for defining and innovating educational profiles, in order to adjust them to the needs of economy and economic development in the Republic of Serbia. All the relevant social partners and interest groups must participate in this process. Therefore, it is necessary to:

- Define and make an agreement among the Ministry of Education and Sports, the Ministry of Labour, Employment and Social Policy, the Serbian Chamber of Commerce and the Association of Employers of Serbia on the prescription of procedure, proposals and determining new profiles;
- Establish unique system of procedures for introduction of new profiles which ensures their validity and sustainability. This process implies: the development of methodology for proposing new educational profiles, as well as defining key competences and their integration into the formal and non-formal system of vocational education and training;
- Redefine the structure of the existing educational profiles, especially the knowledge, skills and competences, acquired by students upon completion of three or four year educational programmes;
- Redefine the existing fields of work based on the needs and information from the labour market. This activity represents one of crucial activities carried out jointly by social partners and the representatives of relevant state institutions.

5.2. Educational standards

The aim of introducing standards in educational system is to have each individual, process or a part of a system satisfy the determined level or the stipulated requirements (knowledge, skills, competences, facilities, equipment and qualifications in vocational education and training).

Generally, there are two types of educational standards which are equally important in the implementation of vocational education and training:

- The standards of achievement (results), and
- Evaluating the quality of education.

Standards of achievement are defined by the outcomes and checked against the assessment criteria which are in accordance with the expectations and needs of social partners. Standard requires that students and the adults meet the requirements related to the educational profile and occupation. 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. In this case, social partners can expect that all the students with the same qualifications have reached broadly comparable standards of performance. Standardisation also provides the basis for international comparability of qualifications. An educational standard must also define what a student should accomplish regarding the general education. This is defined at the national level as a part of standards stipulating what a student will have achieved upon completion of education.

- In order to establish the national quality assurance system and to enable the schools for monitoring and continuous improvement of the quality of educational process it is necessary to *evaluate the quality* of education and training. The process of evaluation of the quality of education refers to:
 - Inputs,
 - Process,
 - Outputs.

Input indicators include: the qualifications and experience of school staff, the quality of equipment and conditions in which the teaching process takes place. *Process indicators* include: the quality of school management, the internal quality evaluation and monitoring systems, the level and extent of partnerships with local enterprises. *Output indicators* include: the percentage of students who successfully finished educational programmes and the percentage progressing into relevant employment or further education. The indicators are also the monitoring the students after graduation and the skilled trainees after they find employment, as well as the evaluation results of their knowledge, skills and competences demonstrated at work.

Educational standards in the Republic of Serbia will be regulated by special regulations and will contain the requirements defined and set by social partners, professional associations, educational institutions, trade unions and associations of employers.

Vocational education and training standards should provide, among other things, clear and efficient response to the fast technical and technological changes, as well as to the changes in the sphere of organisation of work and organisational culture which exist or will be existing soon, and to recognise and describe clearly and precisely the future labour market needs, closely related to the development of future educational programmes and entire education. The standards should also take into account the objectives of sustainable development.

5.3. Qualifications in Vocational Education and Training

Established system of qualifications makes the process of vocational education and training implementation easier, enables the modernisation of programmes, and enables functioning of quality assurance system. At the same time, it also contributes to the efficiency of the system, to easier and faster employment of those who have finished vocational education and their professional mobility.

The starting point of the system of vocational education and training qualifications is provided by social partners who define occupational requirements. These occupational requirements include both the basic skills necessary for certain occupation and specific professional skills. The requirements of social partners are modulated according to the educational policy and are transferred into the system.

Establishing and defining different levels of qualifications in vocational education and training and the relationship among these levels will help define:

- New educational routes for students and adults, regardless of whether they want to work after the secondary education or to move on to further education;
- Better skills and professional preparedness for employment;
- Better mobility in the field of education but also employment;
- Achievement of sustainable development of society.

National Qualifications Framework is a system which encompasses all the qualifications obtained in formal and non-formal education and training. In this way, the national framework covers all the educational levels (from secondary to high education), initial, but also continuing education and training. The Framework consists of qualification levels and the defined learning outcomes at each level. In order to define and develop the National Qualifications Framework in the Republic of Serbia, it is necessary that the key partners in this process –the Ministry of Education and Sports, the Ministry of Labour, Employment and Social Policy, Serbian Chamber of Commerce and the National Employment Service - agree on the major principles, goals, tasks, levels and content of qualifications. It is especially important to:

- Establish a specialised body or organisation responsible for managing the national qualification framework development;

- Adapt the qualifications classification system and define qualification levels compatible with European Qualifications Framework
- Define rules and procedures for the creation of qualifications;
- Define rules and procedures for assessment and certification;
- Define rules and procedures for the accreditation of institutions providing training and non-formal education.

5.4. Vocational education and training curricula

The curriculum in vocational education and training in the Republic of Serbia is defined as the structural basis for the organisation and implementation of education and training, as well as for achieving the intended learning outcomes. The curriculum defines:

- objectives, outcomes and contents of education and training,
- processes and activities necessary for their achievement and implementation (organisational forms, strategies, models and methods of teaching and learning),
- ways of assessment and criteria for the assessment of achievement.

The diversification of curricula, content and teaching methods in the Republic of Serbia enables the introduction of various forms of curricula, according to the needs of labour market, local self-government and schools.

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 provide:

- Satisfactory balance among general and vocational education, vocational theoretical education and professional practice and practical teaching;
- Vertical and horizontal mobility within a curriculum and within the one or more fields of work;
- Introduction of modular⁴ learning principle;
- Links with higher education and mobility towards higher education.

All the processes and activities in education and training in this kind of strategic projection are aimed at achieving objectives and outcomes of education and have to be adjusted, well balanced and diverse in order to meet social needs, needs of local self-government and individuals. In accordance with these principles, the main task of vocational education and training programmes in the Republic of Serbia is to provide knowledge, skills and attitudes (competences) for students and adults. Vocational education and training curriculum should enable:

- personal development of those who participate in educational process,
- quality improvement of the levels of competence of an individual for performing job;
- meeting the needs of work process concerning professional attitudes (competencies gained);
- promoting employment and lifelong learning.

Reform documents related to the development of vocational education and training in the Republic of Serbia (the period 2001-2006) envisage that vocational education and training curricula should be realised through subjects, modules, practical teaching and professional practice, with different duration throughout the school year. Modules are specific, separate segments or learning packages that lead to achievement of defined learning outcomes.

⁴ Module is a set of functionally connected knowledge, skills and attitudes (competences) necessary for performing a certain task.

Modules may be independent or parts of broader curricular, i.e. organisational units. They are designed on the basis of complementary principles, diverse educational demands and defined thematic tasks. The structure of modules also enables gaining knowledge, skills and attitudes (competences) interdisciplinary, i.e. it enables cross-subject linking.

Modules can cover several different disciplines, each discipline having its own clearly defined goals and tasks. In accordance with their flexible structure there are no strict lines between the disciplines so that they enable amalgamation, correlation and creation of unique modular educational packages.

Modularisation offers multiple benefits for the improvement and development of vocational education and training, especially for the modernization of curricula. These benefits are:

- Greater flexibility in planning and organizing educational process;
- Greater efficiency and cost-effectiveness of educational process;
- Better response to the the labour market needs;
- Improved vertical and horizontal mobility,
- More efficient response to individual needs and capacities of students and adult learners,
- Possibilities for students and adult learners to choose their own learning path, their own way of obtaining work competencies and qualifications;
- Easier re-entry to vocational education for the purpose of finishing school or obtaining additional qualifications.

Outcomes are clearly and unambiguously defined knowledge, skills and attitudes (competences) acquired upon completion of a specific programme, i.e. upon completion of educational and learning process. As such they are the basis for the planning, organisation and implementation of vocational education and the evaluation of achievement throughout the education and learning process. The outcomes are defined before the start of educational process and are known to teachers and students. In this way the following is enabled:

- Teachers and students have a clear idea about the objectives and tasks of learning;
- Social partners know which competences are acquired upon completion of certain educational programmes in vocational schools and other educational institutions.

5.5. Adult Education⁵

The significant social, economic, technical-technological and demographic changes which the Republic of Serbia is facing, impose the need to create an open and flexible adult education system which combines all levels, forms and ways of learning from primary to university, initial and continuing, formal and non-formal education and opens the possibility for lifelong learning, human resources development and successful integration of the Republic of Serbia into European cultural and economic structures. The strategy is based on the premise that adult education is:

1. Manifestation of lifelong learning and an integral part of the entire system of education;
2. Strong factor in economic development, higher productivity and economy competitiveness and the improvement of employment and employability;

⁵ Concept of adult education was developed in the reform documents related to the development of vocational education and training in the Republic of Serbia, in the period 2001-2006, especially in the document "The Strategy for the Development of Adult Education in the Republic of Serbia".

3. Corrective of the regular educational system (providing a second chance for acquiring relevant knowledge and skills);
4. Innovative mechanism in the system of education and learning (reacting promptly to the economy and labour market needs, technological changes, open for introducing and testing new profiles, programmes, skills, competences and flexible and open to the new ways and forms of teaching and learning);
5. Basic way to support personal development and the possibilities of individuals to:
 - Be employed;
 - Generate more income;
 - Gain independence;
 - Remain healthy and active;
 - Perform better jobs;
 - Strengthen the family and encourage independence of its members;
 - Contribute to the improvement of the quality of environment;
 - Contribute to the sustainable development of the society

Basic activities in this area will include the joint efforts of the key participants in vocational education and training and will be aimed at:

- Increasing participation of adults in educational and learning programmes and projects;
- Establishing a wide network of various institutions and organisations for adult education;
- Supporting development and approval of programmes, projects and other activities related to education and learning of the adults and which are also relevant for social and economic development, for improved employability of working population (labour market programmes and continuing education programmes; stimulating participants for education and training in deficit occupational profiles, etc.)

5.6 Implementation of Vocational Education and Training

5.6.1 Vocational schools network

Further development and improvement of the network of vocational schools and other educational institutions is going to be based on the principles of diversification and flexibility, which will directly imply upgrading of the network on the basis of **national, regional⁶ (economic) and local criteria for establishing the network of secondary vocational schools and educational institutions.**

Definition of the national, regional (economic) and local criteria for establishing network of vocational schools and educational institutions will be based on the overall economic characteristics of sustainable development of the state, economic areas and local communities, as well as on the geographical, demographical and cultural features of a region and local communities. These three-level criteria will also serve as indicators for status and financial positioning of secondary vocational schools and educational institutions:

1. Schools established applying the **national criteria** are unique and considered to be of special national interest. The national criteria define all the necessary elements and preconditions which schools have to fulfil in order to be in this category (for e.g. dormitories, special forms of pedagogical and practical activities, special artistic schools, etc.). The national criteria will cover up to 10 % of the whole school network.

⁶ The term regional does not refer to the element of territory organisation; it refers to neighbouring economic areas.

2. Schools established on the basis of **regional (economic) criteria** are big, urban schools and schools founded in economic regions which cover wider territory (independent from administrative structure of the regions). These schools are the direct response to the needs of economy in a certain region and represent a significant economic resource of the area. They manage to do this by linking the regional Chambers of Commerce, regional labour market services, employers and professional institutions. The basic mission of these schools is to educate and train students in areas of demand for secondary VET, craftsmen but also post-secondary educated technicians. These schools will also play an important role in the implementation of adult education and retraining and additional training for the unemployed. In their internal organisation and structure these schools should respond to the demands of the economy and the labour market, especially when it comes to skills for complex production processes and specialisations. Regional criteria will cover up to 40% of the school network.
3. The schools established in accordance with **local criteria** would be flexible schools with small classes, with capacity for fast change of profiles and field of work and for easier adjustment of curricula according to the new demands coming from the world of work. These schools would have strong connections with social partners and the local community, the developed wider/additional activity and the necessary conditions for professional practice. Local criteria should respect economic, cultural and demographic characteristics of local areas. These criteria will cover up to 50% of the total school network.

All above mentioned criteria need to be fair, precise, visible, clear, comprehensive and financially justified. The criteria should recognise the current state of play and possibilities, but also the demands for further development of vocational education and training. The monitoring of the quality and success achieved by schools will be the basis for permanent assessment of the schools' status and placing it into a relevant category of criteria. Enrolment policy at the national level will be defined in accordance with such a structure of network. In this sense, it is necessary to meet the following requirements:

- Opening of secondary vocational schools to adult education;
- Enhancing the development of craftsman profiles and establishing special centres for vocational education in cooperation with Serbian Chamber of Commerce and other social partners;
- Opening of secondary vocational schools for the implementation of various programmes, for combination of general and vocational education, in accordance with the needs of community and capacity of school for the delivery of such programmes;
- Introduction of the concepts of environmental protection and sustainable development in vocational education and training.

5.6.2 Teaching materials and equipment

Further VET reform requires the modernisation of teaching equipment and materials in vocational schools. Cooperation of vocational schools with all the social partners – employers, companies, small and medium enterprises, state institutions, professional associations - should include the following:

- Signing formal contracts on cooperation among schools, employers and enterprises, which regulate issues of mutual interest, especially implementation of practical teaching and professional practice and the use of modern

equipment in companies for the purpose of education. These contracts define the rights, responsibilities and obligations of all the parties - schools, employers, companies, professional organisations and others;

- Organisation and implementation of joint projects and activities of vocational schools, enterprises and employers;
- Strengthening the local and regional initiative in the field of encouraging provision of modern equipment in vocational schools;
- Establishing a smaller number of well-equipped school centres, within the framework of the existing vocational schools, providing resources to a number of students from the various parts of the Republic of Serbia. These centres can also function as the developed centres for the professional improvement of adults, covering several adjacent *fields and including* the adults - both the employed and those seeking the job;
- Modernization and making school workshops functional again, as the basic resource for practice in schools.

5.6.3 The Role of Vocational School

The process of vocational education and training development and definition of a new vision and mission of vocational education and training require a changed role of vocational school:

- New responsibility of vocational school within the framework of development and modernization of vocational education and training. This means that school should define its role, functions and responsibilities for the successful implementation of educational process, quality assurance and its constant modernisation and improvement. This process is carried out in cooperation with the Ministry of Education and Sports and the Institute for Improvement of Education, especially the Vocational and Artistic Education and Training Centre;
- In the view of the labour market demands, vocational school is getting new and more flexible role when it comes to programmes. This means that it can offer a variety of programmes which are accredited or approved by the Ministry of Education and Sports. These programmes are designed for students and the adults and may differ in duration and qualifications they provide. In this way, the school establishes flexible relations with the labour market and responds to the labour market needs. At the same time, the school offers a chance for further education and professional development. Schools will get this flexible role in cooperation with the Ministry of Education and Sports, the Ministry of Labour, Employment and Social Policy, social partners, local self-government;
- Schools will have a new role concerning direct organisation of education in the school, especially in the area of human resources development, organisation of work and school management.

5.6.4 Practice in Vocational Education

Conducting practice in vocational schools and enterprises is one of the key elements of a quality preparation of students and trainees for employment and professional career.

Initial professional practice in vocational schools is needed and necessary in all occupational profiles and is essential for skills and achievements which form work competence of an individual. During professional practice in large, medium-sized and small enterprises, students and candidates for employment have the opportunity to have practice with real technologies in operation, under real conditions.

Only through huge investments in teachers' skills development, equipment and materials, can professional practice in companies/enterprises be replaced by professional practice in

schools or training institutions, though it would still be a mere simulation. On the other hand, company-based practice offers experience in a limited number of specific operations and one specific technology which can be limited in terms of the transferability of acquired skills. At the same time the company's objectives are productivity and provision of services.

Nowadays, the company-based practice is very limited in the Republic of Serbia. Further VET development is aiming at the establishment of a system providing both, school-based practice and company-based practice. In the further development of vocational education it is necessary to establish a system which will enable both school-based and company-based practice. All occupational profiles in vocational education and training should include both types of practice, which will be organised in different ways. When it comes to two-year and three-year profiles and the training courses for the unemployed, there will be more and more practice each year of learning. When it comes to four-year profiles, practice will be a part of teaching process, there will also be project activities and vacation. The way of financing practice will depend on the resources of companies/enterprises and other services which can offer various forms of compensation for the participants.

Having in mind the way in which the practice has been carried out, it is necessary to define its status, role and implementation in further development of vocational education and training in the Republic of Serbia. Therefore, it is necessary to:

- Make partnership contracts among all the actors involved in practice, in different fields of work, which define the rights, role and responsibilities of employers, social partners and vocational schools in terms of providing practice in schools, companies/enterprises;
- Define and establish specific system of financing for all forms of practice;
- Define the standards and principles for the implementation of practice which are relevant for schools and enterprises (teaching staff, equipment, the number of students, work ethics, systems of monitoring and assessment);
- Define the system of licensing/specific way of assessment of enterprises providing practice for students;
- Define the desired outcomes of practice and adjust curricula, the systems of assessment, monitoring and evaluation of students and the whole process of education;
- Establish a system of functioning for well equipped specialised educational centres which will enable provision of practice in certain areas and according to the needs of vocational schools, as well as their linking with companies /enterprises;
- Establish rules for the involvement of vocational schools in commercial activities and for monitoring of these activities.

5.7. Human Resources Development

Teacher training

Modernisation of the system of professional development of teachers implies the improvement of pedagogical skills and competences of teachers and associates, in order to prepare them adequately for the implementation of new curricula. Modernisation will simultaneously build up the system which will link the initial and permanent education. This will lead to a higher level of professionalism of teachers and enable continuous adjustment to the global and technological changes in the world of work. Given this, the initial strategy in this process should be directed towards:

- Renewal and modernisation of the system of professional development and training for the interns;
- Support to the current reform of vocational education and training;

- Achievement of a higher level of pedagogical skills and competences of teachers;
- Setting foundations for continuing education and lifelong learning;
- Introducing the concepts of environmental protection and sustainable development into professional development and training programmes.

The new concept of in-service teacher training is a part of the strategy for the development of vocational education and training. The goal is the development of functional competences, knowledge and skills of teachers, which will enable them for successful implementation of the new reformed curricula and for active and creative participation in the further development of vocational education and training and for personal professional development. Unlike the traditional model, the new concept should promote the culture of continuing changes and a systematic approach in determining the needs and possibilities for professional development. The basic principle of the new concept is planning and defining the programmes and ways of professional development, according to the recognised needs and capacities at the level of school, local self-government, professional associations (associations of teachers) or groups of professionally networked schools.

The concept is based on the four pillars:

- Improvement and development at the school level;
- Modern teaching and learning methods;
- New information technologies;
- Development of professional cooperation and partnership.

Improvement at the school level (professional development at the school level and school development programmes) has numerous advantages – from the rationalisation of spending to the development based on everyday pedagogic practice (the identification and resolution of pedagogic problems) and responding to the needs of students and the economy. For the successful implementation of this model, it is necessary to transform school libraries into school resource centres, as well as to support professional development of teachers and the application of modern teaching and learning methods.

Introduction of new pedagogical methods is impossible without linking the development programmes at the school level with the programmes for professional improvement in the field of pedagogy and psychology. Therefore, the adoption of these methods is the obligation of all teachers, the goal being the support of creative approach to planning and implementation of teaching and practice. A special feature of a professional development system set up in this way is the following obligation: the modern teaching and learning methods need to be simultaneously the content and method for pedagogical-psychological training of teachers. Innovation of work method should lead to an important change – *change of emphasis from teaching to learning*. It is actually the application of the 'constructive principle' in the teaching and learning process: instead of the delivery of knowledge, students should be trained to construct the knowledge. There should be the same requirements when it comes to teacher training; emphasis should be put on connecting professional experience and the new pedagogical ideas and solutions.

Information technologies (multimedia and Internet) represent a very important pillar for in-service teacher training as the field of providing functional literacy and a means of transmitting programmes, exchanging ideas and creative work. This means that teachers should acquire computer literacy and develop skills necessary for using information technologies in teaching, self-development, cooperation, planning and the exchange of ideas.

One of the important pillars on which the system should be based is also the exchange of ideas and *partnership* in solving pedagogical problems and in the design of school development programmes. Therefore, the system of in-service training of teachers, associates, other school staff and the Ministry of Education and Sports staff should lead towards the acquisition of specific skills and knowledge that are neither pedagogic nor vocation-specific. These skills and knowledge are related to management, identification of

needs, planning of development, communication, the use of information technologies, implementation of new programme solutions, efficiency analysis.

The system of professional improvement of teachers, associates and administrators in vocational education and training *should be open and dynamic, connected with all the relevant institutions* (universities, scientific institutions, educational administration) professional organisations, social partners and expert groups. Cooperation with social partners (the Government, employers and trade unions) in the organisation of teacher training should reflect on supply and demand of certain profiles and vocational levels.

In order to transform this concept of professional improvement of teachers and other school staff into programmes and concrete activities, it is necessary to:

- Adopt special legislation (or regulations) which would regulate the entire field of professional development of teachers and associates in vocational schools;
- Define the standards for knowledge and skills required from teachers, in accordance with their job;
- Establish criteria for the professional and social promotion of teachers, which would later become a part of the law or regulations;
- Define the profile of trainer and the role of the institutions such as faculties, the Institute for the Improvement of Education, the Ministry of Education and Sports, schools. In the initial set-up of the system it is very important to clearly define the obligations and responsibilities of the potential actors, as well as to set up the standards for prospective trainer;
- Define the character and form of training programme available and the ways of support to self-development of teachers;
- Prepare the principals, school inspectors, advisors and local partners for providing support to the implementation of the planned training activities;
- Define the mechanisms for monitoring, internal and external evaluation of the effectiveness of the professional development programmes.

6. Quality Assurance

The system of quality assurance and is based on the monitoring and evaluation of conditions, processes and outcomes in vocational education and training and the key method in this process is self-evaluation. The process of self-evaluation implies the evaluation of one's own practice and work, starting from the analysis of what has been done and in which way. This procedure is the best way to assure the quality of performance of a school. The aim of self-evaluation is the improvement of the quality of performance of schools. At the same time, it is a sign that the school is ready to take the responsibility for its own functioning and development. Self-evaluation is not the only type of evaluation, but it provides basis for other types of evaluation. It does not cause tension usually caused by external evaluation - the only way of monitoring and evaluation of educational institutions so far. Introduction of self-evaluation makes school equal with external evaluators which will carry out evaluation according to the same principles, procedures and mechanisms.

The application of quality assurance system enables the evaluation of current situation and the value levels of the defined indicators and determines the key areas of future development of vocational education and training. Based on the defined indicators, schools assess the quality of work, define future development plans and the actions for quality improvement.

The aim of the quality assurance system is the development and improvement of the quality of vocational education and training in the Republic of Serbia. Above all, this system:

- Provides answers and the necessary information to all stakeholders, social partners and the management of vocational education and training system;
- Provides examples of good practice;

- Provides feedback;
- Improves planning, development, monitoring, and evaluation of vocational education and training;
- Encourages standardisation and enables comparison at all stages;
- Helps all the stakeholders in the process of decision making;
- Provides the overall picture and a broad overview of all segments of vocational education and training.

Quality assurance system in the Republic of Serbia functions at the national and the school level:

- ***National level***

Quality criteria should be set up and defined at the national level, thus providing the basis for the harmonisation of all the activities related to the quality assurance system in education. The criteria include inputs, educational processes and outputs. They may be qualitative and quantitative in their character. Some of them require professional evaluation and feedback from students and social partners. In order to establish the national quality assurance system in vocational education and training, it is necessary to create comprehensive and reliable national data base.

- ***School level***

Quality assurance criteria and procedures defined at the national level can and should be applied at the school level as well. The advantage of this approach is that each school can evaluate its own performance by using the national norms. The aim of quality assurance at school level is continuous improvement and development of the process of education in vocational school. At the same time, school self-evaluation is the basis for direct planning in a school. The results of self-evaluation may be used to identify the priority areas in which changes are necessary in order to improve the quality.

Quality assurance system in vocational education and training needs to be realistic, accepted by all the relevant participants and stakeholders. The system has to be efficient, effective and transparent, public and accessible to all the interested parties, stakeholders in education, social partners and public. The initial process of setting up and developing the system requires the definition and development of the following elements:

- Areas of evaluation at the national level;
- Guidelines and procedures for school self-assessment;
- Conducting self-assessment by means of the set up indicators;
- The analysis of self-assessment procedure;
- Monitoring and evaluation procedure.

6.1. Assessment and Examinations

The main objective of assessment is the improvement of the learning process, while students' tasks enable:

- Students to get information on their success in achieving the defined objectives and outcomes and overcoming difficulties in the learning process;
- Teachers to get instructions on the way and extent of students' performance of activities planned, as well as information on how well the content of subjects/modules/practice has been prepared;

- Teachers to get information regarding the difficulties which students have in the process of acquiring the content of learning and to suggest the additional activities which would improve the teaching process;
- Teachers to receive information on how the students view and respond to the content and the structure of modules;
- Teachers to harmonize teaching process with the defined outcomes as a continuing process.

Assessment methodology in vocational education will be further developed and gradually introduced. Its key elements are:

- External assessment and introduction of evaluators from the world of work;
- Performance assessment;
- Integrated and interdisciplinary assessment;
- The assessment of students' and trainees' analytical abilities;
- The assessment of skills and the general work competences.

Examinations

Examination procedures in vocational education and training are based on the same principles, though the contents and formal results are different. The main objective is to assess knowledge, skills and abilities (competences) acquired by the students in VET.

The *final exam* should measure the acquired competences upon the completion of education for a specific profile.

Educational profile is not always equivalent with one occupation – it can cover a group of similar occupations. Therefore, acquiring the knowledge from the curriculum for one specific educational profile provides competences for one or more similar occupations. The list of competences, as well as the knowledge and skills which enable the competences, is an integral part of pilot curriculum for every educational profile. At the final exam students perform a certain number of tasks/assignments. Thus, the achievement of the *prescribed competences is checked*. The number of tasks/assignments is equal with the number of prescribed competences for specific educational profile.

The final exam is carried out at schools, plants and workshops (in schools or companies) under the working conditions for which students have been prepared during the education are secured. The final exam must not last longer than three days.

Vocational Matura/Final Exam serves for checking the level of the acquired knowledge and skills, as well as competences acquired upon completion of four-year education. It is structured in such a way that both theoretical and practical knowledge and skills are checked. A part of Matura exam is set up as a project so that the acquired competences can be assessed. The Vocational Matura can be partly or completely external. Vocational and Artistic Education and Training Centre should keep the database of examination tasks. All the tasks should be standardised. Upon the completion of the Vocational Matura students can opt for work or the continuation of education in relevant post secondary schools and faculties, in accordance with the defined terms of enrolment.

6.2. Monitoring of the Implementation of the New Curricula

The level of quality of a pilot curriculum can be assessed only after its implementation in school. For the successful implementation, it is necessary to monitor it constantly so that timely changes of all the elements could be made – changes of curriculum, timely organisation of teaching, teaching contents, teaching methods and teacher training.

In order to produce specialists in a certain profile through educational system, there are several pre-requirements:

- The existence of adequate curriculum;
- Schools' preparedness in terms of space and equipment for the implementation of curricula;
- The existence of qualified staff in schools;
- Adequate preparation of teachers and assistants for the implementation of new curricula;
- Defined system of monitoring and evaluation of the implementation of curriculum at the level of school and the Republic of Serbia.

Only after all the prerequisites of this process are fulfilled can a favourable result be expected.

Monitoring the implementation of curriculum is one of the most important links in this chain. To what extent the new curriculum enables acquisition of the required professional knowledge, especially skills and attitudes can only be identified in the final year, i.e. upon the completion of educational process for a certain profile. The deficiencies noticed in curriculum or in the process of its implementation can be removed during the pilot period, which is the most rational characteristic of piloting.

6.3 Accreditation and Certification

A well structured and transparent accreditation and certification system provides:

- Quality of education and the recognition of qualifications and certificates obtained;
- Valid information about the educational institutions/organisations and programmes/modules which lead to qualifications in vocational education;
- Mobility of labour force, faster employment and easy access to continuing education.

Accreditation in vocational education and training has a triple and unique meaning:

- The process of external evaluation of institutions/organizations and programmes/modules in accordance with the previously defined standards and procedures;
- The act of formal recognition (approval) of institution and/or programme by the authorised body, institution and organization;
- The warranty of product, service or activity.

Precondition for the development and establishment of accreditation system is institutionalisation of social partnership in vocational education and training (legal basis and social partners' agreement; establishment of Vocational Education and Training Council, Accreditation Centre and the commissions for standards in various fields of work).

The aim of **certification** policy in vocational education and training is the establishment of a unique and functional certification system - the processes, procedures, certification standards and certification types and diplomas. Certification system gives a clear picture of institutional framework and processes which enable the establishment of certification system:

- National certification framework - the system of certificates and diplomas, compatible with the national qualifications framework and the projected structure of the vocational education and training system;
- General framework for certification of qualifications and key competences (the principles, procedures, criteria);

- National standards (requirements) for certificates in some occupations, fields of work;
- Procedures and standards for internal assessment;
- Procedures and standards for external (final) assessment;
- Procedures and documents for issuing and registering certificates and diplomas.

7. Career Guidance and Counselling

Rapid changes at the labour market and related demand of skills set new challenges for graduates and job-seekers. In facing these challenges vocational schools and employment services are getting a new role and tasks in relation to students and trainees.

The system of career guidance in vocational education and training in the Republic of Serbia will be developed gradually. The main task of this system will be to help students and trainees to work and/or to continue education. The counselling system should provide guidance regarding: economic development and the labour market needs; demographic changes in the structure of population and their influence on labour market needs; implementation of the concept of lifelong learning as a means of continuing development of human resources and monitoring the needs of economy in the development process.

Career guidance and counselling in the process of vocational education and training should provide:

1. In-depth information on:

- Possibilities for the application of knowledge, skills and competences acquired within an occupational profile in the world of work;
- Trends at the labour market and employment perspectives;
- Possibilities and conditions for further education and training.

2. Skills:

- Personal presentation and application techniques;
- Learning techniques;
- Job-seeking techniques.

3. Individual work with students and adults includes:

- Professional assistance in developing the realistic view of one's own competences, personality traits and educational and work preferences;
- Recognition of the activities in which, in accordance with the labour market needs, one could achieve the best results;
- The development of individual career plans based on individual predispositions;
- Development of positive and flexible attitudes towards the possible changes of career plan and acceptance of challenges and risks;
- Information on the process and content necessary for making decisions related to career and education;
- Communication skills development;
- Development of problem-solving skills;
- Development of positive attitude towards lifelong learning;
- Development of awareness of the importance of work for social and self-actualisation.

Having in mind the role and function of career guidance and counselling, it is necessary that two ministries (the Ministry of Education and Sports and the Ministry of Labour, Employment and Social Policy) agree and precisely define the procedure for joint activities in this area and

to define – in a separate strategic document - the major principles for the development of career guidance and counselling. This document should also define the involvement of social partners, professional associations, associations of students and their parents, associations of students and former students, local self-governments and other relevant actors.

The implementation of the suggested strategy would imply involvement of a wide network of institutions, associations, faculties, the schools for adult education, etc.

8. Governance and Social Partnership

Traditional social partnership exists in the sphere of the national and local economic development and in relevant fields, such as employment, professional training and infrastructural policy. There are three key actors in social partnership, all having certain influence and responsibility and they need to establish balance between the rights and duties of each actor/sphere – labour force, socio-economic partners and the national and local authorities. In this context, vocational education and training is recognised as the key area for all of the social partners.

When it comes to vocational education and training, social partnership in the Republic of Serbia can be founded at the national and local level. The participants in social partnership are:

- The Ministry of Economy (economic strategic development), The Ministry of Labour, Employment and Social Policy (labour protection and employment) and The Ministry of Education and Sports (initial vocational education and training) all representing the global social interest;
- Associations of Employers representing the owners' and employers' interest;
- Representative trade unions, representing the employed.

Partnership at the local level should be in accordance with the structure recognised and established at the national level.

One of the key issues in the development of social partnership in vocational education and training is the definition of functions, roles and responsibilities of social partners.

The roles of social partners **in the development of vocational education and training** are:

- Identification of occupational requirements at the labour market (skills needed);
- The categorisation of skills (the unskilled, semi-skilled, skilled, technicians, designers);
- Establishment of occupational standards (jointly with the Ministry of Labour, Employment and Social Affairs, when needed);
- The development and improvement of quality of education and training in the financial perspective and in the perspective of roles and responsibilities of the partners;
- The recognition of qualifications and respective certificates;
- The organisation and implementation of training in enterprises for new generations of the employed and unemployed;
- The financing of vocational education and training.

Additionally, social partners have an important role in the development and monitoring of the implementation of vocational education and training when it comes to:

- Educational standards;
- Educational profiles (the orientation towards sectors in economy, educational profiles and levels of qualifications);
- Curricula (shared responsibility, content of education and training);
- Delivery of training (provision of trainers, qualification of trainers);
- Assessment (monitoring of learning attainment, qualification of trainers, quality of institutional services);
- Accreditation of trainers, programmes and institutions (definition of equipment, capacities, competences and extent of services);

- Financing (public indirect financing and direct financing).

Social partners have to take direct responsibility for the first group of the above mentioned issues and share responsibility with the state government for the second. Private entities and entrepreneurs should also have an appropriate role in the implementation of the last mentioned group of issues. In order to perform their functions, social partners need to share full responsibility for:

- Implementation of the Strategy for Development of Vocational Education and Training;
- Development of functions and tasks in vocational education and training;
- Implementation of vocational education and training;
- Monitoring of the quality of vocational education and training.

In accordance with that, it is necessary to establish an appropriate organisational framework:

Socio-Economic Council of the Republic of Serbia

This body enables inclusion of vocational education and training into the national socio-economic context. The members of the Council are the representatives of the Government, representative associations of employers and representative trade unions⁷.

National Body for Vocational Education and Training (Vocational Education and Training Council)

The role of the National Body for Vocational Education and Training is to design, monitor and harmonise the development of vocational education and training and to monitor and regulate the interests, needs and capacities of all social partners.

The specific tasks of this Body are to:

- Monitor the development of vocational education and training and adult education;
- Adopt national qualification framework;
- Adopt standards in vocational education and training – occupational standards, qualifications standards, vocational education and training standards, accreditation and certification standards;
- Adopt vocational education and training curricula;
- Monitor and propose quality assurance measures in vocational education and training;
- Adopt accreditation and certification strategy;
- Approve the content and the form of final exams, master-craftsman exam and vocational Matura;
- Propose the vocational schools network;
- Consider and propose founding of the Regional Centres for Continuing and Adult Education;
- Propose the directions for the development of the system for the professional improvement of teachers, associates and instructors in vocational education and training;
- Propose and approve various models of social partnership at the national and local level.
- Intermediates in introducing the concept of education for sustainable development.

Committees for the Identification of Sectorial Occupational Requirement (ISOR Committees)

⁷ “The Official Gazette of the Republic of Serbia”, No 125/04

The role of ISOR committees is identification of the labour market requirements; categorisation of skills, definition of occupational profiles, setting standards for vocational education (in cooperation with the Ministry of Labour, Employment and Social Policy, when needed), recognition of competences; certification; identification of training needs; analysis of the system of financing of vocational education and training.

National Body for Vocational Education and Training cooperating closely with the Ministry of Education and Sports

In accordance with this strategy, the existing **Centre for Vocational and Artistic Education and Training** within the Institute for the Improvement of Education should be strengthened and supported in order fulfil the executive tasks and activities in vocational education and training.

The main tasks of the Centre should be:

- Activities in the process of development of vocational education and training concept, in accordance with the needs of economic and technological development of the society;
- Management and coordination of the social dialogue and partnership at different levels of planning, development and implementation of vocational education;
- Networking of vocational schools, educational institutions and enterprises;
- Coordination in the process of development of the national qualification framework;
- The development of occupational and educational standards in vocational education and training;
- Monitoring and evaluation of vocational education and training curricula;
- Development and implementation of final exams and the vocational Matura;
- The cooperation and monitoring of master-craftsman exams in cooperation with Serbian Chamber of Commerce ;
- The professional development training of teachers, associates and trainers in vocational education and training;
- Providing support and coordination of the Regional Centres for Continuing and Adult Education, etc.

9. National Plan

In accordance with the vision and mission of vocational education and training in the Republic of Serbia, the goal of vocational education and training has been defined. It should provide the possibility for full social participation to every individual, as well as the possibility for improvement of the quality of environment and the life in general, personal choice, employment, the possibility for continuing professional development.

The process of the development of comprehensive strategy for the development of vocational education and training is in accordance with the development in the following spheres: employment, economy, social planning and the overall economic development of the country. This means that vocational education and training development must be integrated into the overall projection of the national economic development and must be a part of the overall national development plan of the country. Consequently, it is requested that the proposed strategy for the development of vocational education and training be one of the bases in the process of the implementation of the National Employment Strategy, as well as the National Strategy for Economic Development of the Republic of Serbia for the period 2006-2012. The proposed strategy should be the basis for the further projection of the needs

for certain profiles and curricula development, which would meet the changeable requirements of the labour market.

The proposed strategy for the development of vocational education and training must be integrated into the overall national strategy for the attraction of foreign investments and support the development of the Serbian economy and society. It needs to represent the mutual interest and to be the result of inter-sectorial and inter-ministerial agreement and cooperation, especially when it comes to the new investments.

10. Financing Vocational Education and Training

The development and improvement of the financing system for vocational education and training should be in accordance with the vocational education and training vision and mission. The modified system of financing should be driven by the labour market requirements and at the same time able to respond to the needs on the local level. Consequently, the system of financing should:

- Support cooperation of vocational schools with the labour market;
- Ensure access/enrolment of each individual and ensure equal status of each region in the state budget⁸.

One of the possible models for the upgrading of the system of financing of vocational education and training is the “dynamic model” of financing which would be based on the basic elements of the existing system of financing. The new model provides possibility to vocational schools of offering training programmes which can meet the requirements of the labour market and get additional funds thus. The two elements of this model are:

- Output-based funding: the output-based funding is based on the number and types of diplomas issued by the school (diplomas needed);
- Additional/wider activity and short flexible courses implemented within the co-financing scheme.

There are some pre-requirements for the implementation of this model:

- Vocational schools should be free to operate at the commercial market;
- In order to improve the efficient use of their budget, vocational schools should have the opportunity to make savings on the input-based element of the budget;
- Vocational schools must be obliged to provide quarterly financial statements;
- This model requires larger management capacity on the part of the Ministry of Education and Sports.

There are three key segments of the dynamic model of financing of vocational schools: 1. Input-based part (one part is provided from the state budget, in accordance with the relevant legislation); 2. Output-based part (the changeable part of financial means which depends on the results achieved at school – the number of students obtaining diploma, the number of students employed in the relevant field upon graduation from vocational school); 3. Additional/wider activity (profit gaining activity)

Vocational schools may also opt for co-financing so as to provide additional funds for the new development programmes and investments within the school.

The model is dynamic in the sense that the size of each component is flexible and depends on the way of implementation within a school. Each component can be adjusted in agreement with the Ministry of Education and Sports. The combination of “input”, “output”

⁸ The notion regional does not refer to territorial organisation unit. It refers to the neighbouring economic regions.

and additional/wider activity is integrated into so called co-financing system which is project orientated.

The aims of the co-financing scheme are:

- To be the instrument of the Government for promoting certain target activities of schools;
- To facilitate implementation of additional/wider activities;
- To attract funds from the private sector into the public sector;
- To improve the financial efficiency of vocational schools.

There can be different sources of financial means in the co-financing system:

- Ministries (The Ministry of Education and Sports, The Ministry of Labour, Employment and Social Policy, The Ministry of Economy, The Ministry of Agriculture) – for the promotion of specific activities in vocational schools. For example, identification of economic priorities in certain regions in order to facilitate (foreign) investments;
- Donations and similar funding;
- A regular inflow of money from the Ministry of Education and Sports. For example, financial means remaining due to the annual decrease of the number of students (about 3% per year).

The dynamic model is a combined system consisting of input-based financing, output-based financing and co-financing. The advantages of this model are:

- Co-financing scheme offers new possibilities to the vocational schools willing to upgrade their programmes. School can decide to use funds for procurement of equipment or for upgrading the infrastructure or for teacher training from one of the funds;
- The schools offering occupational profiles demanded by the labour market are financed from a part of the budget (based on the results achieved, i.e. the number of students employed after graduation). In this way, the invested funds are returned to schools in the course of time;
- Co-financing scheme is an important element of the dynamic model. It is also an innovative aspect of any new financing mechanism. Pilot co-financing scheme in the Republic of Serbia is necessary in order to (1) ensure understanding of the processes of income generation and rational spending of income and (2) make the schools aware of the appropriateness and advantages of the co-financing system;
- It provides strong incentive to vocational schools to open to the labour market and introduce demand-driven vocational programmes;
- It is a fair system because the input-based part of the budget guarantees vocational schools the basic and stable funding and schools have various possibilities for generating extra income. For example, in regions where the labour market does not function, vocational schools can opt for additional activities based on co-financing. In other regions, where the labour market functions well, the schools can opt for output-based funding.
- This system motivates schools to be financially efficient. Schools can cooperate in order to make greater savings.

Implementation

The co-financing scheme is an important incentive for vocational schools, but it also requires political agreement and readiness to make the public school system an instrument of economic policy. Otherwise, the ministries will not be willing to participate in the co-financing system. Since the proposed scheme has a lot of new elements, the schools will need some

time to incorporate the new elements in the daily practice and start its implementation. Support from the Ministry of Finance and the Ministry of Education and Sports is necessary in this process. Implementation of the model requires a careful, “step by step” approach which will be in accordance with the other elements of modernisation of vocational education and training. Careful piloting is also necessary.

11. ACTION PLAN

The Government will adopt the Action Plan for the implementation of this Strategy by April 30th 2007.

12. FINAL PART

This Strategy will be published in the “Official Gazette of the Republic of Serbia”.

No:
In Vrsac,
December 28th, 2006

GOVERNMENT

President,
Vojislav Kostunica