

# STATE OF AFFAIRS IN RUSSIAN VOCATIONAL EDUCATION AND TRAINING. THE RUSSIAN FRAMEWORK FOR ECVET IMPLEMENTATION



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# **List of Acronyms**

- ECTS = European credit transfer system ECVET = European Credit Transfer System for Vocational Education and Training EKSD = Unified Skills Guide for Positions of Managers, Specialists and Non-manual Workers ETKS = Uniform Wage-Rates and Skills Handbook ESG = standards and guidelines for quality assurance in the European Higher Education Area FGOS = Federal State Educational Standard NACE = Statistical classification of economic activities in the European Community NQF = National Qualification Framework NQS = National Qualification System OECD = Organisation for Economic Co-operation and Development OKZ = All-Russian classifier of occupations OKVED 2 = All-Russian classifier of economic activities RF = Russian Federation
- VET = Vocational Education and Training

# **1. Russian VET Context**

## 1.1. Overview of the education system in RF

## Legislation

The education system in the Russian Federation (RF) is regulated mainly by the Constitution of the RF (1993), the Federal Law of 29.12.2012 No. 273-FZ "On Education in the Russian Federation", and the State Program "Development of Education for years 2013-2020".

Other regulatory acts in the system of education are:

- Decree of the President of the Russian Federation # 597 of May 7, 2012, On Measures to Implement the National Social Policy;
- Decree of the President of the Russian Federation # 599 of May 7, 2012, On Measures to Implement the National Social Policy in Education and Science;
- Strategy for Innovative Development of the Russian Federation for the Period up to 2020 (Directive of the Government of the Russian Federation # 2227-p of December 8, 2011),
- Strategy for Workforce Training and Skills Development in the Russian Federation for the Period up to 2020, the Federal State Target Programme of Education Development for 2016-2020 (approved by RF government on May 23, 2015, № 497),
- Concept of the long-term socio-economic development of the Russian Federation for the period up to 2020 (section 4 on education development).

## **Fundamental Principles and National Policies**

The Federal Law "On Education in the Russian Federation" of 2012 regulates the structure, principles and operation of the Russian education system, with VET as one of its component.

Education in Russia, in accordance with the Law on Education, is considered as the uniform purposeful process of education and training, which is the socially significant benefit, and is performed in the interest of a person, family, society and the state. Education also represents a set of acquired knowledge, abilities, skills, values, experience and competences of a certain volume and complexity, for intellectual, spiritual, moral, creative, physical and professional development of a person, and also for satisfaction of his/her learning requirements and interests. The key governing principles of the education system are the universal access, quality and personal development.

The education system in the Russian Federation includes the following components:

1) Federal state education standards (hereinafter - FGOS), federal state requirements, educational standards, educational programs of various types, levels and directions;

2) Organisations engaged in educational activities, teachers, students and parents (legal representatives) of underage students;

3) Federal state bodies and government departments in the subjects of the Russian Federation that exercise public administration in the sphere of education, and local self-government bodies that carry out management in the sphere of education; consultative, advisory and other bodies;

4) Organisations that provide educational support and assessment of the quality of education;

5) Associations of legal entities or employers, public associations carrying out activities in the sphere of education.

In accordance with the Para 2 Article 5 of the Law on Education in the Russian Federation, all Russian citizens are entitled to education irrespective of their gender, race, ethnicity, language, origin, residence, religion, convictions, membership in public organisations, age, health, social, material and employment status, and previous conviction.

Among its key development targets, the Government Program "Development of Education for years 2013-2020" identifies creation of the conditions for every Russian citizen to access professional and vocational education and training (including higher education).

There are no "dead ends" for learning paths that preclude access to the next level of education in the RF.

### **Overall structure (levels and types of education)**

Education in the Russian Federation is divided into the following types and levels:

- General education
- Professional education
- Supplementary education
- Vocational training

The following levels and types of education are established in the Russian Federation:

- General Education
  - Preschool Education
  - Primary General Education
  - o Basic General Education
  - Secondary General Education
- Professional Education
  - Vocational Education and Training
  - Higher Education (first cycle) Bachelor's Degree;
  - Higher Education (second cycle) Specialist's Degree, Master's Degree
  - Higher Education (third cycle) Doctorate Degree.
- Supplementary Education
  - Supplementary Education for Children and Adults
  - **o** Supplementary Vocational Education
- Vocational Training

### Types of educational organisations

The educational organisations in the Russian Federation are divided into types pursuant to implemented study programs.

- 1) Preschool education organisation. The main objective of its activity is implementation of study programs of preschool education, supervision and care of children.
- 2) General education organisation. The main objective is implementation of study programs of the primary general, basic general and/or secondary general education.
- 3) VET organisation (provider). The main objective is implementation of VET study programs.
- 4) Higher Education Institution. The main objective is implementation of HE study programs and research.
- 5) Supplementary education organisation. The main objective is implementation of supplementary study programs for the general education level.
- 6) Supplementary VET organisation. The main objective is implementation of supplementary VET study programs.

All Russian VET Institutions are of two types:

- 1) Technical School is the specialised secondary education institution implementing the main VET study programs of secondary vocational education and training of the basic level;
- 2) College is the specialized secondary education institution implementing the main VET study programs of secondary vocational education and training of the basic and advanced level.

All Russian higher education institutions fall under the following categories:

- Public Federal universities and National Research Universities
- Core Public Regional Universities
- Branches of the Public Federal and National Research Universities
- other Public Universities

• Private Institutions

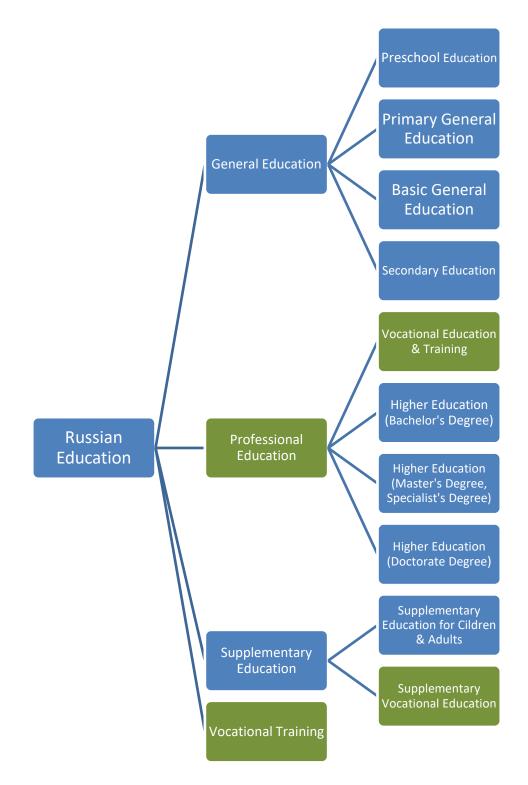


Figure 1. Structure of Russian Education

#### **Responsible National Bodies and Overall Management**

The governance of the education system is executed at three levels: federal, regional and municipal.

**The Parliament** (the Federal Assembly) of the RF is in charge of adopting federal legislation in the field of education and amendments thereof; setting levels of education; conclusion and ratification of international agreements regulating education; participation in the development and implementation of the state policy in the above areas; approval of the procedures for adopting federal/state education standards, the procedures of employer participation in development and implementation of the state policy in the field of professional education, etc.

**The Ministry of Education and Science** - the key federal authority - is responsible for setting education standards and for policy-making, including the financial policy and the legal regulation of Russian education system. The Ministry has the right to submit to the RF Government legislative initiatives and draft laws. It also supervises implementation of education legislation; in addition, it is in charge of licensing and accreditation of the higher education institutions and their branches. The Ministry controls almost the entire budget (on average, every state higher education institution gets up to 70-80% of its funding from the state budget).

The education policy is implemented by **regional education administrations** that have significant autonomy and can adopt their own regulations, whereas **regional parliaments** can adopt regional education legislation mostly for the general and vocational education.

Within the structure of the Ministry, the **Federal Inspection/Supervision Service** in the sphere of Education and Science and the **Federal Service for Intellectual Property, Patents and Trade Marks** have been established. The Federal Inspection controls the implementation of legislation in the sphere of education, performs quality control in education as well as licensing and accreditation of higher education establishments and research organisations. It is responsible for recognition of degrees and qualifications in higher education.

Public higher education institutions are affiliated to and fall under the jurisdiction of 24 Federal ministries that are the founders of state higher education institutions. These are: the Ministry of Education and Science (337 HEIs), the Ministry of Agriculture (58 HEIs), the Ministry of Health (52 HEIs), the Ministry of Culture (45 HEIs).

At the institutional level, the head of a higher education institution is the rector who is elected usually for five year term and has a number of deputy/vice-rectors responsible for specific activities and operational issues. In special cases rectors of some universities in Russia are appointed directly by the Ministry of Education and Science. Issues related to development of a higher education institution are executed by the Academic Council that is also elected for five years. The Academic Council comprises the rector (as the chairperson), vice-rectors and may also include deans, faculty and student representatives.

The structure of higher education institutions is made up of faculties that comprise smaller academic units called institutes, departments or chairs/units.

The regulation of vocational education and training is described further in the paragraph 2.

### **Available Funding**

Financing of the education system is carried out at the expense of federal and/or local budgets, and private investments.

Financial provision at the expense of the federal budget is performed in accordance with the Budget Code of the RF. Its general size is defined on the basis of a technique approved by the Government of the RF proceeding from:

- 1) the number of municipal districts and city districts in the territory of a subject of the Russian Federation;
- 2) the number of the educational organisations and their branches.

Funds for implementation of delegated authorities have special-purpose character and cannot be used on other purposes.

The financial provision of educational organisations of the territorial subjects of the RF is carried out from the budget funds of the territorial subjects of the RF for preschool, general, and VET education having the state/subject accreditation. Financing also covers expenses on compensation to teachers, acquisition of textbooks, education guidance and tutorials.

Public authorities of the territorial subjects of the RF have the right to guarantee financial provision of actions for catering services of learners in municipal educational organisations and those of students in private general education organisations, and also provision of the state support of additional education of children in municipal educational organisations.

#### **Alignment with European Education System**

#### Bologna process

Since 2003, Russia has been pursuing a consistent policy of participation of the Russian higher education in implementation of the basic principles of Bologna Process.

Fulfilling the international obligations, Russia represents the necessary information to international bodies on coordination of Bologna Process, and supports the actions directed to analysis of Russian and international experience for choosing optimal solutions. For last years, the country has provided 5 National reports on implementation of main objectives of higher education system development in the Russian Federation in accordance with the Bologna declaration.

The country profile of the National report of the Russian Federation for the Ministerial Conference (Yerevan, May, 2015) contains analysis for the period 2011-2014.

# Recognition of diplomas and degrees, as well as separate modules and courses, including issuance of the diploma supplement of European sample by Russian universities

Recognition of a degree (qualification) and the passed periods of training is regulated by the Russian Federal law on Education and some other legislative and regulating documents.

The qualifications giving access to higher education of all three levels, obtained in some foreign countries, are equated to the national ones, and are taken into account when applying for admission to a program of the appropriate level of higher education in Russia.

Russian FGBNU "Glavexpertcentr" has the status of National Information Centre of ENIC-NARIC Networks.

Decisions on recognition of completed courses and/or completed periods of training are usually made at the level of faculties and departments. Educational organisations and their structural divisions (faculties, institutes) have the authority to recognise periods of study, disciplines and modules that have been mastered in other educational organisations, including foreign ones. At the same time, the recognition procedure itself, based on the results of training and the amount of work spent by students (credit units), is insufficiently provided methodically and organisationally.

The European Diploma Supplement is partially used at universities. The Russian Federation does not adopt a unified form of this document, and Russian universities issue the Euro Supplement in the form approved by local regulatory enactments.

#### Copenhagen process

The Russian Federation is not a participant of the Copenhagen process on formal grounds. At the same time, in the field of vocational education Russia cooperates with the UN in a format of UNESCO/UNEVOC, with the European Training Foundation, the World Bank and with a number of foreign countries, on a bilateral basis that provides access to analytical materials and results of researches of OECD, SEDEFOP and the World Bank. Development of vocational education and training in Russia, as well as at member countries of the Copenhagen process has similar priorities.

## Torino process

The Russian Federation has participated in the Torino process since 2010.

Four reports, including the Torino report of the Moscow Department of Education, have been already prepared. The last one, that is the 4th report, was prepared in 2016 on the basis of data of RosStat, analytical reports and reports of the Institute of Education of Higher School of Economics (National Research University), statistical data of the Ministry of Education and Science of the Russian Federation, Ministry of Labour of Russia and other federal executive bodies. For the first time it included 4 regional reports: St. Petersburg, Leningrad and Orenburg regions, and Republic of Mari El.

In the Report it was noted that among the most significant changes that occurred during 2015-2016 and that aimed at improving the internal effectiveness of the system of vocational education and training are:

- Legislative design of the system of independent assessment of qualifications in Russia;

- Approval of the professional standard "Teacher of vocational training, vocational education and supplementary vocational education";

- Development and monitoring of the training quality in VET by the Ministry of Education and Science of Russia;

- Conducting an experiment in the pilot regions to introduce employment monitoring of graduates of VET organisations using the information of the Pension Fund of the Russian Federation.

- Development by the Department of State Policy in VET of the Ministry of Education and Science of Russia of the Draft Concept of Personnel Provision for the System of Secondary Vocational Education for the Period up to 2020;

- Implementation of effective contract models in VET system;

- Development of workplace training forms, regional models of practice-oriented vocational education;

- Competitive selection of subjects of the Russian Federation in order to create interregional competence centres by the Ministry of Education and Science of Russia;

- Establishment of a Base Centre for Professional Training, Retraining and Advanced Training of Workers by the Ministry of Labour of Russia;

- Creation of federal educational and methodological VET associations;

- An experiment to introduce a demonstration exam as a new type of test for college graduates.

### **Riga Conclusions 2015**

The Riga Conclusions 2015 are of significant interest for Russian specialists and representatives of ministries and departments in determining the role of vocational education and training in the context of the growth and jobs agenda and the Strategic Framework for European cooperation in education and training (ET 2020). The Russian Federation is closely following at reaching agreement among the participating countries, EU level social partners and the European Commission on a new set of medium-term deliverables for the period 2015 – 2020 in the context of the Bruges Communiqué adopted in 2010 as part of the overall Copenhagen process launched in 2002.

### **Quality Assurance**

Russian legislation does not provide for the possibility of selection of a foreign agency for compulsory licensing and accreditation that is done by higher education institutions. If a network form for implementation of study programs (international joint programs and double diploma programs) is used, the decisions of foreign agencies in the sphere of quality assurance regarding these programs in Russia are not recognized by the state bodies.

Nevertheless, the interest of higher education institutions in international recognition of their programs quality grows steadily. The independent evaluation practice of the quality of the activity of an educational organisation, as well as the professional and public accreditation of educational

programs, including foreign expert participation, is actively developed. Despite the fact that the Russian legislation does not contain requirements to membership of the national quality assurance agencies in the European Association for Quality Assurance in Higher Education (ENQA), or inclusion in the European Register of Quality Assurance Agencies (EQAR), the Russian Accreditation Agency in the sphere of education, the National Centre for social and professional accreditation (Natsakkredtcentr) and the Agency for quality Assurance and career development (AKKORK) are members of the European Association for quality Assurance in Higher Education ENQA.

According to the research, conducted by the Association of classical Russian universities (ACUR) in 2014, 46% of all higher education institutions cooperated with international organisations and/or quality assurance networks, including the European Quality Management Foundation (EFQM), the European Council for Business Education (ECBE), the European Network for Accreditation of Engineering Education (ENAEE), the Accreditation Board for Engineering and Technology (ABET), the European Association for Architectural Education (EAAE), the Accreditation Council for Business Schools and Programs (ACBSP), and others.

### Training payment, financial support and the right to transfer funds

Under the Article 43 of the Russian Constitution, Russian citizens have the right to receive free secondary vocational education and training (VET) and higher professional education (HE) if they are working towards their degree/diploma for the first time.

Foreigners and stateless persons have the right to receive higher education at the expense of budgetary appropriations in accordance with international treaties of the Russian Federation, federal laws or the quota for the foreign citizens and stateless persons established by the Government of the Russian Federation, as well as at the expense of individuals and legal entities in accordance with agreements for provision of paid educational services.

Foreign citizens and stateless persons who are compatriots living abroad have the right to receive higher education on an equal footing with the citizens of the Russian Federation if they comply with the requirements provided for in the Article 17 of the Federal Law No. 99 of May 24, 1999 "On State Policy of the Russian Federation in Respect of compatriots abroad".

The following measures of social support and stimulation are provided to learners: scholarships, material assistance and other monetary payments; provision of an educational loan in accordance with the established procedure is also available. By the Decree of the President of the Russian Federation No. 967 of December 28, 2013 "On Measures to Strengthen the Human Resource Potential of the Russian Federation", the following measures of social support for Russian citizens who have independently enrolled in leading foreign universities for full-time higher education study programs are provided: material incentives (scholarships, financial assistance and other payments); travel support; provision of accommodation; provision of educational loans. The Federal Law on Education also provides for sending Russian students to foreign universities including provision of special scholarships for studying abroad.

#### **Employment support**

There are support services in Russian educational organisations for students: methodological support services (curatorship, tutors), career counselling and job placement services, psychological counselling services. In a number of higher education organisations there are special study programs developed in cooperation with employers.

At the same time the career of graduates is monitored irregularly and a unified national monitoring of the career of graduates of VET and HE is not conducted.

#### Lifelong learning

At present the concept of lifelong learning is not fully formed in the Russian Federation, there is a confusion between the concepts "lifelong learning" and "continu education and training". According to the objectives of the Bologna Process, universities are called upon to play a more significant role in

the society, focusing their efforts not only on what is called secondary vocational education in Russian education, but also by extending their influence on the local community, working with different categories of the population.

HEIs carry out advanced training programs and informal courses for all those who wish to be financed by enterprises, businesses, or by students themselves.

The current legislative framework does not create conditions for formation of flexible educational trajectories as it is understood in the framework of the Bologna Process, where learning in any context (formal, informal, etc.) can be assessed and accounted for at any time as a partial qualification when changing the field of study or when transiting from one program to another, as well as when returning to the education system from the labour market. In this regard, the National Council for Professional Qualifications under the President of the Russian Federation pays special attention to recognition of competences and qualifications, including partial qualifications and the qualifications received abroad.

The process of combining professional and educational qualifications and formation of the Russian National Qualifications Framework corresponding to the European Framework of Qualifications for lifelong learning is in the state of launching (see paragraph 2).

#### Internationalization and mobility

In Russia, there is no official strategy for internationalization of higher education, but the need for internationalization of educational activities is fixed by a number of normative documents.

In particular, in clause 1 of Article 105 of the Federal Law on Education, the goals of international cooperation in higher education are defined:

1) Empowering citizens of the Russian Federation, foreign citizens and stateless persons to gain access to education;

2) Coordination of interaction of the Russian Federation with foreign states and international organisations on development of education;

3) Improvement of international and domestic mechanisms for development of education.

Clause 3 of Article 105 of the Federal Law on Education defines specific measures for international cooperation in the field of higher education:

- Cooperation between Russian and foreign educational organisations,

- International academic mobility of students, teachers, researchers and other employees of the education system,

- Attracting foreign citizens to study in Russian educational organisations,

- Ensuring mutual recognition of education, or qualification, or both,

- Participation in accordance with international treaties of the Russian Federation in the activities of various international organisations in the field of education.

The subparagraph "c" of point 1 of the Decree of the President of the Russian Federation of May 7, 2012 No. 599 "On measures for the implementation of state policy in the field of education and science" defines the task of ensuring achievement of a number of indicators in the field of internationalization of higher education, including entry of at least five Russian universities in the first hundred of the world's leading universities according to the world university rankings by 2020.

Russian HEIs develop strategies for internationalization, but such strategies are often of general nature at the level of goals, activities and responsibility for the activities. For many universities the incentive to develop joint educational programs was participation in the programs Tempus, Erasmus Mundus and Erasmus+. Joint educational programs with foreign higher education institutions are implemented by Russian universities in the framework of the following forms of cooperation: multilateral consortia, bilateral cooperation with foreign universities, ERASMUS partnership program, etc.

At present, Russia has developed a Concept for the Export of Educational services of the Russian Federation for the period 2011-2020. Russia is a very attractive country for international students and takes the 6<sup>th</sup> place among the most popular destinations for foreigners<sup>1</sup>.

#### Network study programs

Network study programs are a relatively recent innovation approved by the Russian Law on Education where it was introduced in 2012.

This form of study programs provides an opportunity for students to master the educational program using the resources of several organisations that carry out educational activities, including foreign ones, as well as using the assets of research and other organisations that have the resources necessary to provide and conduct training, practices and other types of activities. At present, the network form of implementing study programs is developed quite dynamically, including the form of joint programs with foreign partners. It should be noted that due to absence of normative definitions of such concepts as "joint educational program" and "double diploma program", Russian universities often interpret these concepts arbitrarily, especially given the fact that the indicator of availability of joint programs in educational organisations was included in the key parameters determining the effectiveness of educational organisation activities.

#### ECTS and FGOS 3++

Transition to the European credit transfer system was carried out in accordance with the orders of the Ministry of Education and Science of July 29, 2005 N 215, June 30, 2006 N 173 and from June 13, 2007 N 172 "On Innovation Activities of Higher Education Institutions for Transition to the credit system ".

At present, Russian universities have accumulated considerable experience in use of ECTS.

In 2011, a legislative transition of the most programs of continuous five-year training of specialists for Bachelor's (4 years - 240 credit units) and Master's training programs (2 years - 120 credit units) was carried out in Russia. In addition, the Russian Federation introduced new federal state educational standards of higher education, requiring mandatory application of "credit units" to calculate the complexity of educational programs and their elements, and, since 2011, 100% of institutions (organisations) of higher education have been applying the credit system. The Federal Law on Education introduced the concept of "credit unit," but its definition is not related to "learning outcomes" and does not meet the definition given in the ECTS Users' Guide. The notion of a credit unit approximated to the ECTS was given by the Order of the Ministry of Education and Science of Russia No. 1367 of December 19, 2013 that approved the procedure for organizing and implementing educational activities for higher education study programs.

The federal state educational standards for higher education, based on competencies and ECTS, facilitated the compliance of Russian study programs with the programs of European universities. Recently, the autonomy of universities in the development and implementation of study programs has been significantly expanded, requirements for the general competencies of graduates for all programs of the same level have been introduced, and conditions for designing modular programs in the ECTS format have been created.

The Federal Law on Education has transformed the programs for research and pedagogical staff in graduate schools from the category of "post-higher education" programs to the category of "the third level of higher education." The postgraduate programs have been developed and implemented by educational and research organisations since 2014.

The principal possibility to design modular programs in the ECTS format is created by FGOS 3+.

The modern standard FGOS 3++ introduces new concepts into educational programs:

- Universal competences,

<sup>&</sup>lt;sup>1</sup><u>https://en.wikipedia.org/wiki/International\_student</u>

- Occupational standards,
- General labour functions,
- Contact hours instead of classroom hours,

- Quality assurance based on internal quality assurance systems, state accreditation, public accreditation and international accreditation/

### **1.2 Overview of the VET Context**

#### **Overall policy**

Modernization of the secondary vocational education and training, conditioned by the processes of its internationalization, is enshrined in the provisions of the Federal Law on Education in the Russian Federation, as well as in the Concept of the Federal Target Program for Development of Education for 2013-2020. One of the priorities of VET system modernization is competitiveness of programs in domestic and foreign education markets, orientation to the best foreign practices.

These documents indicate the need to develop and approve a set of measures aimed at improving the system of secondary and post-secondary vocational education. As one of target indicators, implementation of training by 2020 for the 50 most demanded and promising vocations and specialties in accordance with the best foreign standards and advanced technologies in 50% of VET providers is indicated<sup>2</sup>. Creating conditions for VET development is one of the main tasks of the country. The program documents of the RF Government and the Ministry of Education and Science of the RF determine the most relevant areas:

- development of state-public organisational and economic mechanisms for managing the system of vocational education and training;

- updating the content of VET on the basis of occupational standards with direct participation of employers' associations;

- creation of an independent evaluation system for the quality of vocational education, including assessment and certification of graduates' qualifications;

- development of a system of retraining and professional development of academic staff of VET providers to increase human potential for modernization of VET;

- creation and development of management mechanisms ensuring inclusion of the VET system in solving problems with staff at enterprises;

- creation of a vocational guidance system for young people aimed at changing the attitude of the society to the demanded workers' professions, the technical areas of training, and complex science-intensive specialties.

- strengthening participation of regions in the integrated modernization of VET.

With the purpose of development of regional economic systems, different models of their staffing are formed:

1) multi-profile territorial colleges - in small towns and rural areas where there is no sustainable demand for one or more vocations.

2) specialized sector resource centres as regional entities of sector and intersectoral competences that implement network study programs updating the procedures of organising production processes and increasing requirements for educational and methodological resources.

<sup>&</sup>lt;sup>2</sup> From the Address of the President of the Russian Federation to the Federal Assembly of 4.12.2014): <u>http://kremlin.ru/events/president/news/47173</u>

At the same time the VET system challenges a number of internal problems that are negatively influencing its development: insignificant and, sometimes, formal participation of business in development of VET organisations, insufficient quantity of hi-tech jobs at SME, low quality of educational services in connection with backwardness of educational infrastructure; insufficient number of mechanisms of the orders supporting educational services; discrepancy of personnel potential quality of the education system to new requirements.

The most obvious solutions are offered by the VET system via:

- Identification and support of talented youth and development of student self-government;
- updating the content and development principles of study programs based on learning outcomes;
- ensuring flexibility of study programs by means of modular technologies.

### **Overall VET structure**

Formal VET in Russia is realized as

- VET study programmes for skilled workers and employees,
- VET study programmes for mid-level employees.

Vocational training programmes implement vocational training in the workers' occupations, positions of employees, retraining programmes for workers, employees, and programme for upgrading skills of workers and employees.

Additional vocational training programmes are being implemented in the system of supplementary vocational training, such as continuing training programs and vocational retraining programmes.

Each study programme, excluding programs of supplementary vocational training, is implemented in accordance with the corresponding federal state educational standard (FGOS).

Succession of the main study programmes is one of the principles of forming the nomenclature of occupations of workers and employees, specialties of VET, and directions of the higher education. The nomenclature is created on enlarged groups providing creation of individual learning paths.

### VET stakeholders

It is generally accepted that the following participants of the labour market and educational services are VET stakeholders:

1) Federal state bodies of the RF exercising public administration in the sphere of education;

2) Regional bodies of territorial subjects of the RF exercising public administration in the sphere of education;

3) Regional authorities for labour and employment of the population;

4) Local government bodies exercising control in the field of education and creating consultative, advisory and other bodies;

5) Associations of legal entities and employers, public associations that carry out activities in the field of education;

6) Regional enterprises and organisations;

7) Educational organisations of different levels;

8) Individuals - students, their parents and legal representatives.

When training mid-level employees in VET, the educational process is implemented jointly with enterprises and organisations on a bilateral or multilateral contractual basis by means of practices (training, placement and pre-diploma) as well as by means of training in vocational modules. VET providers can be members of industrial clusters, as a rule, in regions and districts. Each region has its own practice of relationships, which depends on the existing economy.

At present, the importance of employers' associations grows tremendously. The main role in this belongs to the All-Russian Employers' Association "The Russian Union of Industrialists and

Entrepreneurs". The National Agency for Development of Qualifications has been founded to create modern effective mechanisms for interaction between business and the education system.

#### **Governance and VET funding**

The VET system is administered at federal (Ministry of Education and Science of the RF) and regional levels (the Ministries of Education and Divisions of Education of regions and republics).

At the level of institutions, management can include trustees, managers and supervisory boards, which may include (depending on the charter of the educational institution) representatives of employers, parents and students.

Educational organisations function in three organisational and legal forms: state budget, autonomous and non-governmental (private) educational organisations.

A state budget educational organisation is a non-profit organisation established by the RF or a subject of the RF, or a municipal entity to perform work and provide educational services.

An autonomous educational organisation is a non-profit organisation created by the RF to perform work and provide services in the field of education. Autonomous institutions, in comparison with budgetary ones, have the right to attract borrowed funds, open accounts in credit institutions, and independently manage certain types of property. As a non-profit organisation, it has exhaustive lists of core and non-core activities.

A non-governmental (private) educational organisation is an educational organisation established in accordance with the legislation of the RF by an individual or individuals and/or by a legal entity, legal entities or their associations, with the exception of foreign religious organisations.

The very new mechanism of management and financing for Russia is the normative financing per capita to improve the efficiency and quality of vocational education.

Other innovations are large-scale state-funded projects and programs that implement project-based policies. For example, "Development of a strategy and programs for modernization of VET for implementation of the project" Strategies for Social and Economic Development of Regions of the Russian Federation "; "Development of a system of advanced vocational training taking into account the prospects of technological development of the economy and increasing labour productivity", "Development of an independent assessment of the quality of educational and scientific activities in priority sectors of the economy", "A set of measures aimed at improving the system of secondary vocational education for 2015-2020", and others.

In 57 pilot regions, integrated programs for development of VET have been implemented, using the mechanism of state support of innovative projects on the terms of co-financing from subjects of the RF and employers. Within the framework of the programs, the infrastructure of educational organisations has been substantially changed.

The mechanisms and forms of public reporting about the work of educational organisations, open financial planning and other business processes, independent forms of assessment (audit) of their activities, a modern system of monitoring and statistics of education in accordance with international standards and practices have been recently developed.

### Credit transfer to University/HE (vertical mobility)

The Federal Law on Education declares that "the education system creates conditions for continuing education through implementation of basic educational programs, additional educational programs, provision of the simultaneous mastering of several educational programs, as well as accounting for the existing education, qualifications and practical experience ".

Study programs in the secondary vocational education are formed without the use of a credit system. Transition to a higher level of education is carried out on the basis of agreements between educational organisations; coordination of programs is conducted conditionally, the previous education and experience are not often taken into account. In cases, where study programs of different levels are

implemented in a single educational complex, as a rule, a unified integrated educational program is formed for the group training. Individual requests of customers are taken into account without applying the principles of definition, accumulation, accounting of existing skills.

#### **VET horizontal mobility**

VET mobility is not a popular theme for discussion in the RF in contrast with the student degree mobility for HEIs. The possibility for student mobility is mentioned in the Federal Law on Education, but there are no legislative and methodical norms and procedures for VET students. In this case, each student has the right to transfer to another VET institution, but an individual must undertake some extraordinary steps to transfer to another institution and prove the accumulated knowledge and skills to the management of this institution by vague rules, which depend on each VET provider's understanding of the Federal Law on Education.

#### Concept of federal state educational standards (FGOS) for VET of the fourth generation (draft)<sup>3</sup>

The key idea defining the purpose of new FGOS for VET and distinguishing them from the previous educational standards consists in separation of the concepts "learning outcomes" and "vocational qualification".

Unlike FGOS–3 (the third generation), developed separately for each vocation and speciality of VET, FGOS–4 will be developed for the group of vocations and specialties by the principle of unification of all general skills. It will be allocated from one to five educational groups in each enlarged group of vocations and specialties. On the basis of each federal state educational standard, several programs for training in all vocations and specialties entering an educational group will be developed. According to the preliminary estimates, it will allow to reduce a number of developed standards from more than six hundred (in FGOS–3) to a hundred - hundred fifty (in FGOS–4) and will create conditions for permanent modernization and expansion of the number of vocational study programs according to quickly changing requests of employers.

Study programs will present the results characterizing a vocational qualification and what vocational competences, knowledge and skills will be provided. At the same time, FGOS–4 does not define these results, but methodical requirements to their determination on the basis of the corresponding occupational standards. FGOS-4 will completely open requirements to learning outcomes of VET regarding the general and vocational knowledge, skills and competencies, and determine requirements in academic load, modules, and credits.

Vocational qualification of workers and employees is defined by a complex of generalized labour functions and the labour functions, which are contained in occupational standards.

#### The pedagogical principles with FGOS-4 and occupational standards

When drawing up a study program based on occupational and educational standards, it is necessary to ensure compliance with the following pedagogical rules:

- Autonomy and certifiability: each type of activity can be developed separately with the receipt of a corresponding certificate;

- Completeness: the willingness of graduates to implement the type(-s) of activities equivalent to the level of qualification of the worker or mid-level employee necessary for the employer;

- Sequential decomposition: vocational competencies for each type of activities are determined by its decomposition (concretization, fragmentation), and each type of activities can be decomposed into 5-7 vocational competencies; please do not repeat vocational competencies in different activities;

<sup>&</sup>lt;sup>3</sup> Concept of federal state educational standards of secondary vocational education of the fourth generation (draft). Federal institute of education development, Center of vocational education, Moscow. 01.04.2015.

- Rule of formulation: a description of a type of activities, practical experience is given through the verbal noun, vocational competencies are given through an indefinite form of the verb, the remaining results are transferred from the occupational standard without changes;

- Synchronization of the theoretical content and skills training;

- Interdisciplinarity (the training process is oriented to application of theoretical knowledge of different disciplines for the solution of practical tasks within labour functions);

- Principle of separation and complementarity of vocational and occupational qualifications;

- Principle of succession of learning outcomes on different educational levels;

- Principle of "expediency of the purposes" of VET – reasonable approach to the content of disciplines and modules;

- Principle of forming of an academic load in credits follows from the principles of succession of learning outcomes on different education levels and expediency of the purposes;

- Principle of modular organisation of educational process.

#### Some figures about VET in Russia

A specific feature of the VET system in the RF, in contrast to the EU countries, is a greater formalization of training. More than 90% of VET providers are state, regional or municipal. The share of budgetary admission in the organisations of the VET system is 72.3% of the total number of seats.

According to the monitoring data of 2016 the network of VET providers in Russia is represented by 4571 organisations: 3198 VET institutions; 387 universities, implementing VET study programs, and 986 branch offices.

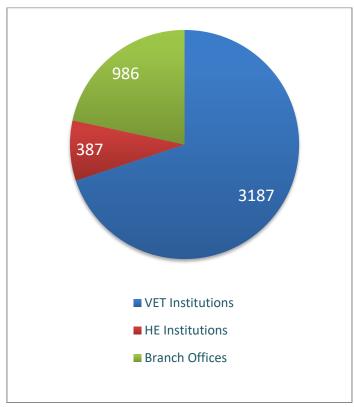


Figure 2. Distribution of VET providers in the RF

The number of students of the VET system (data for 2016) is 2 730 916, from them 536 956 persons study according to the training programs of skilled workers and employees, 1 680 472 persons – according to training programs of mid-level employees and 505 504 persons study in higher education institutions implementing VET study programs.

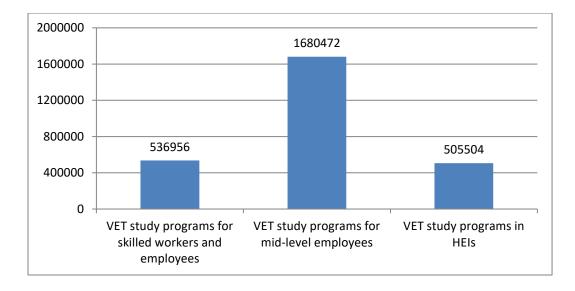


Figure 3. Distribution of learners among VET providers

The number of pedagogical staff of VET organisations (data for 2016) is 163 286 persons, where 26 364 are trainers.

Age categories of teachers and trainers: younger than 30 years – 12,8%. 30 – 39 years – 20, 7%, 40-49 years – 20, 5%, 50-59 years – 26,7%, older than 60 years – 19,3%.

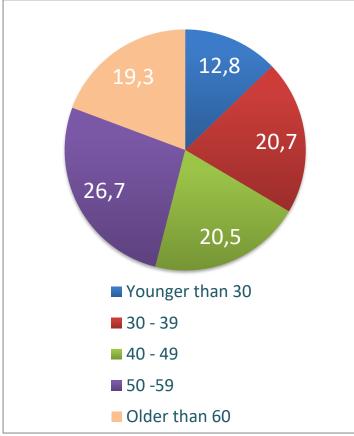


Figure 4. Age distribution of teachers and trainers

All figures are taken from the research conducted by RSVPU during 2014-2016 and are reflected in the following publications:

- Olga I. Vlasova, Alla A. Voronina, Vitaly A. Kopnov, Tatiana V. Permyakova. Russian Trainers as a Professional Group: modern state and problems of development. Ekaterinburg, RSVPU. 2015. 174 p. ISBN 978-5-8050-0602-0.
- Irina V. Chebykina, Alexander G. Kislov, Alla A. Voronina, Tatiana V. Permyakova, Vitaly A. Kopnov. In-service Trainers: Interdisciplinary Research. Ekaterinburg, RSVPU. 2016. 169 p. ISBN 978-5-8050-0604-4.
- Olga I. Vlasova, Alexander G. Kislov, Vitaly A. Kopnov, Vitaly S. Kuimov, Tatiana V. Permyakova, A Social Portrait of the Russian Trainer. Ekaterinburg, RSVPU, 2015. 129 p. ISBN 978-5-8050-0566-5.
- Vitaly A. Kopnov, Tatiana V. Permyakova, Alexander G. Kislov, Olga I. Vlasova, Vitaly S. Kuimov, Maria A. Dremina & Anastasia N. Blinova. A Social Portrait of the Russian Trainer. *The International Journal of Environmental and Science Education*. 2016. Volume 11. Issue 16. pp. 8873-8889.

## **1.3 Legislative regulations in VET**

#### **Study programs and Curricula**

Development and implementation of study programs is regulated by Article 12 of the Federal law on Education. The content of vocational education and training provides a qualification. VET study programs are divided generally into two types: 1) main VET study programs, and 2) supplementary training programs, and programs of professional development and occupational retraining.

VET study programs and curricula are developed in accordance with federal state educational standards or other educational standards that include requirements to structure of the main VET study programs, conditions of their implementation (personnel, financial, resources, etc.) and to learning outcomes. Main VET study programs are developed on the basis of the established qualification requirements or occupational standards.

The content of supplementary vocational training programs also has to consider requirements of occupational standards and job evaluation catalogues for the corresponding positions, occupations and specialties.

The programs of professional development and occupational retraining are developed on the basis of the established qualification requirements, occupational standards and requirements to learning outcomes relevant to FGOS of VET and/or HE.

#### **Structure of VET study programs**

According to Article 12, Clause 5 of the Federal Law on Education "Organisations that carry out educational activities in accordance with the study programs that have accreditation, develop educational programs in accordance with federal state educational standards and take into account relevant exemplary basic educational programs."

The structure of the basic VET study programs and learning outcomes is defined in FGOS for vocations and specialties.

A basic VET study program includes a curriculum, a calendar-training schedule, working programs of educational disciplines, professional modules, evaluation and methodological materials, as well as other components that ensure upbringing and training of students.

A curriculum of a VET study program determines the list, labour intensity, sequence and distribution of study subjects, courses, disciplines/modules, practice, other types of training activities of trainees and the form of their intermediate certification for the periods of study.

Fundamental in the development of training programs is the need to build skills and competencies that can be used in future in the labour market. It is the subsequent employment that determines the choice of vocational training programs. To do this, it is necessary to balance the interests of employers and students, involve employers' representatives in development of training programs, conduct continuous monitoring of employment of graduates of VET institutions.

To determine the structure of VET study programs and the complexity of their development, a credit system can be applied.

#### Forms of vocational education and training

In accordance with Article 17 of the Federal Law on Education, vocational education and training can be obtained:

- in organisations providing educational activities;

- outside organisations that carry out educational activities (in the form of family education and self-education).

Depending on the volume of compulsory contact hours of a pedagogical worker with students, training at an educational organisation is carried out in full-time, part-time or in absentia.

Training in the form of family education and self-education is carried out with the right to pass the intermediate and state final certification in a VET organisation. It is also possible to combine different forms of education and training.

Forms of education and training for the basic study programs for each level of education, vocational speciality and direction of training are determined by the relevant federal state educational standards or other educational standards. Forms of training in supplementary VET programs are determined by the organisation that carries out educational activity independently.

#### **Assessment & Validation**

The Federal Law on Education determines the **quality** of education as "The complex characteristic of learning and training activity of a student showing the degree of their compliance with federal state educational standards, educational standards, federal state requirements and/or needs of an individual or legal entity, for the benefit of which, educational activity, including extent of achievement of the planned results of the educational program, is carried out."

Consequently, the quality of the secondary VET is determined by its socio-economic ability to meet the needs of the society, the state and the economy in the mid-level professionals in general, and the educational needs of the individual, in particular.

Mastering of a basic VET study program, including a separate part or the entire volume of a discipline (module) of the study program, is accompanied by intermediate certification of students. Its forms are determined by the curriculum and the order defined by the educational organisation.

Mastering of a basic VET study program is assessed in the process of state certification, which is mandatory and is conducted in the manner and in the form defined by the educational organisation on the basis of the requirements of FGOS. Within FGOS for VET, the objects of assessment are: knowledge, skills, vocational and general competence, practical experience. To assess them, an evaluation fund of assessment materials and tasks for each study program is formed. It is defined by FGOS that the funds of evaluation tools for intermediate and final certification are developed and approved by the educational organisation independently only after receiving a preliminary positive conclusion of employers.

Two types of quality assurance are implemented in VET: internal and external.

External quality assurance of VET is carried out, based on the needs of the society and the labour market, employers that determine the requirements for qualification of graduates. The internal quality management system is often being formed in educational organisations on the basis of ISO standards and recommendations of the ENQA.

# 2. Russian National Qualification System (NQS) and VET

## 2.1. National Qualification System

Officially, the Federal Law on Education in the Russian Federation treats qualifications as "a level of knowledge, skills, and competence that characterizes the preparedness to perform a certain type of professional activity." The Federal Law "On Amendments to the Labour Code of the Russian Federation" No. 236 of 3.12.2012 and Federal Law "On Technical Regulation" No. 184 of December 27, 2002 have a similar definition for qualification: it is "the level of knowledge, skills, professional activity". The basic concepts used in the Russian NQS are very close to the OECD study on qualifications and lifelong learning systems (OECD, 2007).

#### **Principles of constructing the NQS**

The national qualification system is created following the fundamental principles:

- **Accessibility** - providing the study process in which students begin learning by recognizing their knowledge, skills and competencies;

- **Horizontal mobility** - ensuring the transition of students from one training program to another, having received official recognition of their knowledge, skills and experience;

- **Vertical mobility** - ensuring the transition of students from one training program to another, of a higher level if compared with the previous training program.

A system of qualifications can also be defined as a set of measures designed to recognize learning outcomes that link education and training to the labour market and the civil society.

#### **Purpose of the NQS**

The purpose of the NQS is defined by two interrelated global values for development of the Russian Federation.

1) Creation of a "qualifications market", in which the "value" of an employee is determined by his real qualifications, and replacement of the existing "diploma market", where the value of the

employee is determined by the diploma proving completion of a study programme at an educational institution.

2) Elimination of discrepancy between vocations, qualifications and needs of the labour market, education subsystems (higher education, continuous vocational education, general secondary education, secondary vocational education, non-formal education) for lifelong learning.

The NQS is provided for:

- Persons responsible for development of educational and training policies to obtain data for development of study programs, including continuing VET programs; levels for managing this system;

- Quality assurance authorities that can have methods and tools for accurately defining the requirements for certificates and diplomas, methods for creating and recognizing minimum standards that meet the needs of the scope of work; tools for monitoring the qualification system;

- Employees to have the opportunity to reasonably plan their own training and career;

- Employers to have reliable indicators for understanding the level of skills and competencies of candidates for jobs, clear benchmarks for comparing qualifications, means of identifying shortcomings in competencies and training needs (formal and informal, including on-the-job training), quality indicators of qualifications and their relevance at the national level;

- Training organisations to have information on qualifications recognized at the national level, quality assurance mechanisms, mechanisms of interaction with employers, which form the basis for clear formulation of the objectives of training programs and methods of assessment.

## Structure of National Qualification System

Since around 2009, Russia has developed a sustainable understanding<sup>4</sup> of the essence of the National Qualification System as a set of mechanisms for legal and institutional regulation of the demand for qualifications of workers in the labour market and offers of qualifications from the education and training system, which includes the following components (see Fig. 5):

National	Labour market classifiers and registers
Qualification System	National and Sector Councils for Development of Qualifications
	Occupational standards
	Educational standards
	National Qualification Framework (NQF) - not approved finally
	System of quality assuarance and evaluation
	Information infrastructure

Figure 5. Structure of the National Qualification System

### Labour market classifiers

All-Russian classifier of workers' occupations, positions of employees and tariff categories was prepared by Rosstandart RF in 1994. Currently it contains 3180 professions.

In general, the Ministry of Labour and Social Protection of the Russian Federation maintains several registers, namely:

- Register of occupational standards (see below),
- Register of areas and types of professional activity,
- Register of labour functions,
- Register of professional qualifications councils (see below),
- All-Russian classifier of economic activities (see below),
- Public database of professional communities and employers' associations,
- Uniform Wage-Rates and Skills Handbook (ETKS),
- Unified Skills Guide for Positions of Managers, Specialists and Non-manual Workers (EKSD),
- All-Russian classifier of occupations (OKZ),
- All-Russian classifier of workers professions, positions of employees and wage grades.

All-Russian classifier of economic activities (abbreviated OKVED 2) is built on the basis of harmonization with the official Russian version of the Statistical Classification of Economic Activities in the European Economic Community (edition 2) - Statistical classification of economic activities in the European Community (NACE Rev.2) by storing codes (up to four characters inclusive) and names of the corresponding groupings in the NACE CODE 2 (from NACE Rev.2) without changing the scope of concepts. Features reflecting the needs of the Russian economy to detail the types of economic activity are taken into account in OKVED 2 groups at the level of groupings with five- and six-digit codes.

<sup>&</sup>lt;sup>4</sup> M. Coles, O.N. Oleynikova, A.A. Muravyova, National system of qualifications. Ensuring the supply and demand of qualifications in the labor market. Moscow: RIO TK named after A.N. Konyaev, 2009, 115 p.

## National Council for Professional Qualifications under the President of the Russian Federation

National Council for Professional Qualifications under the President of the Russian Federation was established in accordance with the Decree of the President of the Russian Federation on April 16, 2014 No. 249. The Chairman of the National Council is the President of the All-Russian Association of Employers "The Russian Union of Industrialists and Entrepreneurs" A.N. Shokhin. The National Council considers drafts of occupational standards. Ministry of Labour approves occupational standards only if they are based on the conclusions of the National Council.

The National Council

- Coordinates the work aimed at improving the quality of vocational education;
- Supports development and updating of the classifier of types of occupational activity;
- Promotes international cooperation in development of the NQS;
- Creates councils for professional qualifications. Councils for professional qualifications are the permanent bodies of the NQS created for developing systems of professional qualifications for certain types of occupational activity.

### Sector Councils for Professional Qualification Development

Sector councils are called upon to promote the practice of building skills in a sector of the economy. The most important component of the NQS is **Sector Councils for Development of Qualifications** as the institutions formed by sector employers (associations) coordinate the supply and demand of skills and qualifications of the workforce in order to increase the efficiency and productivity of enterprises in a sector. The model of the Council's activities implements a market mechanism that integrates the decentralized responsibility of employers in the field, on the one hand, and their consolidated responsibility for developing and increasing competitiveness in a specific field of occupational activity at the national level, on the other hand.

All councils are networked.

The purpose of sector councils is to identify and analyse the needs for certain qualifications or other contributions to development of the education and training system, where human resources are trained for a specific sector of the economy. Various sector structures are widely used around the world, and such organisational form (a council) can be created through initiatives emanating from social partners or government agencies. The activities of councils are usually regulated by the law that gives them legitimacy and consolidates their mandate: legal recognition ensures the right to express their opinions to state authorities.

At the moment, there are 28 registered councils on Nano industry, Housing and Communal Services, Welding Production, Financial Market, etc. in the register<sup>5</sup> (the Ministry of Labour and Social Protection of the RF) of the councils for professional qualifications empowered by the national council under the President of the Russian Federation for professional qualifications.

### **Occupational standards**

The Government of the Russian Federation established the Agency for Strategic Initiatives (ASI) that began development of the roadmap "Creation of a National System of Qualifications and Competencies" in 2011. After that, the Plan for development of occupational standards for 2012-2015 was approved. First standards were approved on the 30<sup>th</sup> October, 2013.

By the Decree of the President of the Russian Federation of 07.05.2012 No. 597 "On Measures to Implement State Social Policy", the Government of the Russian Federation was given the task to

<sup>&</sup>lt;sup>5</sup> <u>http://profstandart.rosmintrud.ru/obshchiy-informatsionnyy-blok/natsionalnyy-reestr-professionalnykh-</u> <u>standartov/reestr-sovetov-po-professionalnym-kvalifikatsiyam-nadelennykh-polnomochiyami-natsionalnym-</u> <u>sovetom-pr/</u>

develop and approve not less than 800 occupational standards by the year 2015. The register<sup>6</sup> of actual occupational standards (856 units by 01.03.2017) was entrusted to the Ministry of Labour and Social Protection of the Russian Federation.

The occupational standard is a characteristic of the qualification necessary for an employee to perform a certain type of occupational activity (Part 2, Article 195.1 of the Labour Code of the Russian Federation).

The concept of the occupational standard was introduced into the Labour Code at the end of 2012 due to the fact that the characteristics of the occupations contained in the Unified Qualification Handbooks often did not correspond to the current situation in the labour market. At present, when determining the name of a position or the establishment of a system of labour remuneration, employers can equally use both qualification guides and occupational standards. Occupational standards differ from qualification handbooks mainly in that the structure of the description uses a more modern design combining the requirements with the level of knowledge, skills and experience of the employee.

Employers are encouraged to apply the standards when drafting employment contracts, staffing schedules and defining labour remuneration. From July 1, 2016 employers are required to apply occupational standards in case when the Labour Code, other federal law or regulatory act specifies the requirements for qualification of the employee.

A mandatory professional and public discussion of the content of the occupational standard is envisaged before approving.

The structure of the occupational standard was established by the order of the Ministry of Labour of Russia from 12.04.2013 No. 147n "On Approval of the Layout of the Professional Standard" (as amended on September 29, 2014). The main thing to be articulated when reading the standard is: what generalized functions are identified in the standard, which qualification level is established for these functions, what labour functions and actions an employee must perform within the professional sphere, what knowledge and skills should be in use. The occupational standards should define to what OKZ and OKVED 2 the given activity is related to, and also should describe the labour functions in the form of a functional map of the type of occupational activity, characteristics of the generalized labour functions.

### Learning outcomes

In vocational training, learning outcomes for a study program are vocational competencies, including those necessary for working with specific equipment, technologies, hardware-software and other professional tools as indicated in FGOS. In Russia, these terms are often used as synonymous.

In secondary and post-secondary vocational education and training, the general (universal) competencies and vocational competencies, grouped by types of vocational activity, are defined as learning outcomes.

In higher education, depending on the level of the program, the learning outcomes are understood as general cultural or universal competencies, general professional competencies, professional competencies and/or professionally-specialized competencies grouped by types of professional activity.

In supplementary vocational education for professional retraining programs, the result of training is a new qualification and related types of professional activity, labour functions or competences to be improved, and/or new competencies. For professional development programs, this is a vocational competence within the existing qualifications, the qualitative change of which is implemented as a result of training.

<sup>&</sup>lt;sup>6</sup> <u>http://profstandart.rosmintrud.ru/obshchiy-informatsionnyy-blok/natsionalnyy-reestr-professionalnykh-standartov/reestr-professionalnykh-standartov/</u>

### **Educational standards**

The Federal State Educational Standard (FGOS) is a set of mandatory requirements for education of a certain level and/or profession, speciality and group of training, approved by the Ministry of Education and Science in the RF. FGOS are mandatory for those HE/VET providers that have state accreditation. Federal state educational standards set the terms for obtaining general education, vocational education, and higher education taking into account various forms of education and training, educational technologies and characteristics of certain categories of students.

FGOS is the base for:

- Development of samples of basic study programs;

- Development of syllabi, courses, textbooks, evaluation and measuring materials;

- Development of study processes in institutions implementing basic study programs according to a certain standard irrespective of their legal forms and subordination;

- Development of standards for financial provision of educational activities of educational institutions implementing basic study programs, formation of a state (municipal) task for an educational institution;

- Control and supervision in compliance with the law of the Russian Federation in the field of education;

- Assurance of the state (final) and intermediate certification of students;

- Creation of systems of internal quality assurance and quality monitoring;
- Management of methodical services;

- Attestation of pedagogical, administrative and managerial staff in state and municipal educational institutions;

- Organisation of training, professional retraining and advanced training of educators.

Each standard according to the Federal Law on Education includes 3 types of requirements:

- Requirements for the structure of basic study programs, including requirements for correlation of parts of a basic study program and their scope, as well as for the ratio of the compulsory part of a basic educational program and the part formed by participants of the study process;

- Requirements for the learning environment including personnel, financial, material, technical, and other requirements;

- Requirements for learning outcomes in the form of competencies.

### The National Qualification Framework (NQF)

In our country, as well as in many countries of the world, the National Qualification Framework (NQF) is understood as the basis of the national qualification system, which contains a systematic and levelstructured description of recognised qualifications. Using the framework of qualifications, a measurement is made and the relationship between learning outcomes is determined and the ratio of diplomas, certificates of education and training is established. Russia tries to use transnational (for instance, EQF), national and sectorial frameworks of qualifications. A qualification framework is a tool for development and classification of qualifications in accordance with a set of criteria established to determine the levels of training received. This set of criteria can either be embedded in the content of qualification descriptors or described separately as a set of level descriptors. The framework can include all educational achievements and trajectories of an individual without exception.

Russia has been considering a question of forming the NQF since the beginning of the year 2000. The discussion about contents and structure of the NQF has not been finished yet. Currently it is known at least about three drafts of the NQF, although any of which have not been approved as the legal document.

1) Draft of 2008. Developers:

- Ministry of Education and Science,

- Federal institute of development of education,
- Russian Union of Industrialists and Entrepreneurs,
- National agency of development of qualifications.
- 2) Draft of 2011. Developer Research institute of development of professional education.
- 3) Draft of 2012. Developers:
- Ministry of Education and Science,
- Ministry of Labour and Social Protection,
- Russian Union of Industrialists and Entrepreneurs.

Currently there is only an official order of the Ministry of Labour of Russia No. 148n of 4.12.2013 "About the statement of skill levels for development of drafts of occupational standards", which has determined 9 levels of qualifications described in the **Annex** - **Levels of qualifications**. <u>Unfortunately, this document could not define an interaction between the education system and the labour market and is intended only for development of occupational standards.</u>

Nevertheless, the first eight levels almost correlate with the EQF, only the 9th level has a national character.

### A uniform complex of educational and occupational standards for defining qualifications

According to the NQS, occupational and educational standards represent a complex of interconnected documents that provide interaction of the spheres of professional (vocational) education and the labour market for improvement of quality of training of employees and their competitiveness.

The federal state educational standard (FGOS) explains how a study programme has to be arranged from the point of view of the state, and also describes its structure, requirements to resources, and what competences have to be created.

The occupational standard is a document describing the content of an occupational activity within a certain type of economic activity and the requirements to qualification of workers from the point of view of employers' associations and professional communities.

### Differences in educational and occupational standards

Both educational and occupational standards are designed to bring the results of training in the educational organisation in line with the level of qualification in a specific workplace. Thus, we can distinguish the following main differences between educational and occupational standards.

1. The educational standards are necessary to regulate the content and structure of basic study programmes. The occupational standards are necessary to determine the requirements for the level of qualification and competence, the content, quality and working conditions in a specific field of an occupational activity.

2. Job, functions, technologies, as well as knowledge, skills and competencies that a worker must possess, are fixed in the occupational standards. The educational standards specify the competencies that must be formed by a graduate, and what training facilities should be used for training this or that competence.

3. The occupational standards formulate the requirements of employers, which determine the interaction of the education system and the labour market. But with all the diversity of approaches, they are united only by one thing, namely: the occupational standards describe the requirements for the quality and content of labour in a certain field of an occupational activity.

4. The occupational standards describe the requirements for both general and vocational competencies. As a result, the level of qualification is determined by the nature of knowledge and skills, as well as by the complexity of the work and the level of independence.

Scope of occupational standard application:

- By employers when they form HR policy and in HR management, organize training and certification of employees, develop job descriptions, determine job tariffs, assign tariff categories for employees and establish wage systems, taking into account their production management and specifics of labour;

- By VET/HE providers when they develop study programs;

- By Ministry of Science and Education when there is a necessity to develop federal state educational standards for professional (vocational) education.

#### VET study programs and occupational standards

The problem of updating FGOS for VET, taking into account the occupational standards, was formulated in the orders of the President of the Russian Federation following the results of the meeting on development of the occupational standards, which took place on December 9, 2013. All VET study programs of different types and levels are developed on the basis of the requirements of the Federal Law on Education taking into account provisions of the corresponding occupational standards.

The procedure of development of main VET study programs and additional vocational training programs is provided in **Methodical recommendations about development of main VET study programs and additional professional programs taking into account the corresponding occupational standards** (No. DL-1/05bh approved on January 22, 2015). To improve the quality of the developed study programs taking into account the requirements of the occupational standards, it is necessary to engage representatives of employers and associations of employers in the development process together with pedagogical staff of VET providers.

The occupational standards form the basis for educational organisations to develop:

- Study programs based on the requirements of employers (associations);

- Training courses, curricula and teaching materials for various target groups (VET students, adults who need to improve their competencies, unemployed citizens who want to find employment, etc.);

- Training programs and materials to support training and to monitor the impact of the training programs and training results, develop an education and training system that provides flexibility and high quality of training.

Development of the basic VET study programs, taking into account the requirements of the occupational standards, involves creation of a working group together with representatives of employers in order to harmonize all development results.

At the first stage, it is necessary to select an occupational standard, on which the basic program of vocational training will be developed. Selection of occupational standards is based on answers to the following questions:

- What occupation is intended (its purpose and name)?

- What level of qualification is the program intended (in accordance with the "Levels of qualification for the development of draft occupational standards", approved by the order of the Ministry of Labour of Russia from April 12, 2013 No. 148n)?

- Is there an occupational standard with this title in the register of occupational standards?

- Are there any occupational standards with other names that contain requirements for the chosen profession?

The title of the program is given in view of its appointment and with the name of the profession, its code, on the basis of the List of Occupations of Workers and Positions of Employees, for which vocational training is provided. It is necessary to find the name of the profession in the Register of Occupational Standards on the website of the Ministry of Labour and Social Protection of Russia, which is compiled in the alphabetical order.

The learning outcomes of the program can be either for one or several types of activitys and related knowledge, skills and competencies. The definition of activities and their constituent competencies is based on answers to the following questions:

- What generalised labour functions of this skill level should be included in the study program?
- What are the labour functions of the chosen generalised labour function?
- What labour actions, skills, knowledge are included in each of the labour functions?

### Comparison of FGOS and occupational standards when developing study programme

1) A comparison of FGOS and the occupational standards when developing basic VET study programs is necessary for accounting distinctions in their terminology connected with a subject of the description. Decisions are made on the basis of this comparison:

- the need for in-depth or introductory study of a particular vocational module (mastering the type of activity);

- the need to specify, expand and/or deepen the knowledge and skills required by FGOS;

- the need to introduce additional activities in relation to the activities required by FGOS (vocational module) and the relevant vocational competences;

- the need to supplement the list of vocational competencies for the types of activities envisaged by FGOS, and to expand practical experience that assures development thereof;

- prioritizing the formation of general competences provided for by FGOS, and/or the need to supplement the list, taking into account the requirements of occupational standards.

2) Comparison of FGOS and the occupational standards when developing vocational retraining programs.

The decision to develop an appropriate program is made taking into account the actual and prospective demand for a particular occupation (speciality) in the labour market and the availability of the adequate resource support necessary for its implementation. The program is developed on the basis of FGOS for VET. The results of training should meet the requirements of FGOS and the qualification of the relevant occupational standard. Therefore, when developing vocational retraining programs, a comparison of the qualification description in the occupational standard with the requirements for the results of training within FGOS is provided.

3) Comparison of FGOS and the occupational standards when developing HE study programs.

The types of professional activities that are developed by FGOS for higher education (research, design, production, organisation and management, etc.) are "cross-cutting", so, when comparing, one must choose those that serve as the basis for mastering the chosen qualification (generalized labour function or labour function).

The degree of registration of qualification requirements of an occupational standard may differ depending on the level of higher education and the external order - the needs of the labour market, employers' organisations, and citizens. It is taken into account that development of HE study programs leads to acquisition of qualifications corresponding to the current level of development of science, technology, and economics. The program developers correlate the requirements of the occupational standard, the requirements of FGOS and the focus on the program with the aim of forming a graduate's competency model that is maximally prepared for professional activity and possesses the required knowledge and skills, including fundamental research and key competencies for work.

### **Regulated professions**

A number of professions in Russia are regulated. About 20 per cent of jobs in Russia require an applicant to have a license before applicants can start working due to public safety reasons. Jobs that require a license or a special certificate are called regulated occupations in Russia. An employee needs special education and experience before he/she can get a license to work in the most regulated occupations.

To work in a regulated profession, the appropriate regulatory body must register a person. Each regulatory body has their own procedures and requirements to register. An applicant must check with the regulatory body to learn what is needed to be done to be licensed to work in a profession in Russia.

There are 49 kinds of activities that are subject to licensing. The complete list under OKVED is presented in the Law No. 185-FZ of 7th February, 2013. Generally, they are related to information, the environment, fire security, medicine, pharmacology and chemicals, power, communication, health protection, expert activity and transportations.

## 2.2. Quality assurance system, accreditation, recognition

For the NQF to carry out its mission, there have to be provided mechanisms of legal and institutional regulation of demand for qualifications of employees from the labour market and the supply of qualifications from a system of education and training, including the system of ensuring quality of qualifications and institutional procedures of recognition and certification of qualifications. The central elements of this system are occupational standards and procedures of recognition/certification of earlier received trainings/qualifications.

In other words, if the NQF structures systematises the results of training in terms of qualifications, the system of qualifications provides official recognition of these results of training, their quality and connection of education and training with the labour market and the civil society.

### Awarding bodies

To achieve this aim, on the basis of the Federal Law No. 238-FZ "On Independent Qualification Assessment" of 7.3.2016 that has taken effect since January 01, 2017, special appraisal centres of qualifications based on this Law and capable to confirm compliance to the established qualification requirements of occupational standards will be created. In accordance with the Law, independent assessment of qualification represents the procedure of confirmation of compliance of the applicant's qualification to the provisions of the occupational standard or to the qualification requirements established by the legislation held by the appraisal centre of qualifications. The Law establishes legal and organisational bases and the order of carrying out an independent assessment of qualification, and also defines a legal status, the rights and duties of participants of such assessment. The Law isn't applied to public servants.

The independent assessment of qualification is carried out in the form of professional examination by the appraisal centre of qualifications in the order that is established by the Government of the Russian Federation. The examination is held at the initiative of the applicant, at the expense of the applicant or other natural or legal entities, or in direction of the employer, at the expense of the employer, in the order established by the labour legislation.

Independent Qualification Assessment is a special procedure, during which skills of an individual (competitor) are compared with the existing standard that is regulated by the law. Requirements for the employee are presented according to the profession, in which he wants to confirm his competence. Such assessment is not carried out by the employer or within the institution. It is the responsibility of specialised centres for assessment of professional qualification.

Based on the assessment, the employer can give the employee increase, make personnel shifts, and determine the fee size. Workers and applicants use a positive assessment for receiving a desirable job or position, preservations of the available position or increases at work. The appeal to the centre of independent qualification assessment is the right, but not a duty of theemployee. For receiving an independent assessment, the competitor has to pass a special examination. The qualification assessment of employees can be carried out by one of the following ways: 1) in the centre or 2) remotely.

The system of interaction has not been adjusted yet among centres. The combined efforts of various labour unions and associations of employers will organise the complete system.

At the moment, the list of documents, whichan applicant or employee is obliged to provide in the centre of independent qualification assessment for getting a permission to pass a specialised

examination, has not been developed. There is no even a format of the document that has to be given to applicants following the results of such assessment.

If the applicant confirms the professional suitability, he/she receives a qualification certificate. In case when the applicant does not pass the examination, the centre issues the conclusion with some recommendations.

#### Assessment criteria and assessment methods

Implementation of VET study programs is accompanied by intermediate certification of trainees, forms, frequency and procedure for which are established independently by the organisation that carries out educational activities. Vocational training is completed with the final certification in the form of a qualification exam. Qualification examination regardless of the type of vocational training includes practical qualification work and testing of theoretical knowledge within the qualification requirements specified in the qualification guides and/or occupational standards for the relevant occupations of workers or positions of employees. Representatives of employers and their associations are invited to conduct the qualification examination.

A person, who has successfully passed the qualification exam is awarded a grade or a category based on the results of vocational training; and a certificate on the profession of a worker or the position of a mid-level employee is issued.

Evaluation of the learning outcomes that makes up the type of activity implies the statement of readiness of students to apply knowledge and skills, to carry out the necessary actions at workplace that lead to acquisition of a certain result (product) of activity or are a meaningful filling of the labour process of the (professional) activity. It is important to conduct an integral and complex assessment of competencies, rather than of individual skills and knowledge. The assessment of knowledge precedes practical qualification work and is conducted in the traditional form (exam tickets, tests, etc.) or using information technology (special computer programs, simulators).

#### Quality assurance in education: normative regulation and basic administrative procedures

The main state body for ensuring quality of education is the Federal Service for Supervision in Education and Science (Rosobrnadzor). Rosobrnadzor is a federal executive body that exercises control and supervision functions in the sphere of education and science, directly and through its subordinate organisations in cooperation with other federal executive bodies, executive authorities of the subjects of the Russian Federation, local governments, public associations and other organisations. The subordinate organisation of Rosobrnadzor is the Federal State Budgetary Institution "National Accreditation Agency in the field of education" (Rosakrdadagentstvo), which is intended for organisational, technical and analytical support of procedures for state accreditation of educational organisations within the framework of the authority of Rosobrnadzor.

According to Article 12 of the Federal Law on Education, the state regulation of educational activities is aimed at establishing uniform requirements for implementation of educational activities and procedures related to establishment and verification in compliance with these requirements of organisations engaged in educational activities.

State regulation of educational activities includes three areas:

- Licensing of educational activities;
- State accreditation of educational activities;
- State control (supervision) in the field of education.

Additional activities include independent assessment of education quality, professional and public accreditation, openness and accessibility of information on the Internet, monitoring of the education system.

Educational activity is subject to **licensing** in accordance with the legislation of the Russian Federation on licensing certain types of activities. Licensing of educational activities is carried out by types of education, by levels of education, by occupation, specialization, and training areas.

Licensing of educational activities is carried out by the licensing authority - Rosobrnadzor. The license is valid indefinitely.

State accreditation of educational activities is carried out for basic study programs implemented in accordance with the federal state educational standards (FGOS). The purpose of the state accreditation of educational activity is to confirm the compliance of educational activities with the federal state educational standards and with basic educational programs.

When carrying out the state accreditation of educational activities of basic study programs, the accreditation body makes decision on state accreditation or refusal of the study programs for each level of vocational education and training in each aggregated group of occupations, professions and areas of training, declared for the state accreditation.

Experts who have the necessary qualifications in the field of basic study programs declared for state accreditation and/or expert organisations meeting the established requirements participate in the accreditation examination. Experts and expert organisations cannot be in civil relations (experts - also in labour relations) with the accrediting organisation while conducting accreditation expertise in relation to the educational activities of this organisation.

The accreditation body shall accredit experts and expert organisations and maintain an electronic register of experts and expert organisations. The specified register is placed by the accreditation body on its official website on the Internet.

When making decision on state accreditation of educational activities, the accreditation body issues a certificate of state accreditation, the validity of which is six years for the organisation that conducts educational activities in the basic VET study programs.

State **control (supervision)** in the field of education includes the federal state control over the quality of education, and the federal state supervision in the field of education is carried out by authorized federal executive bodies and executive authorities of the subjects of the Russian Federation.

The provisions of the Federal Law No. 294-FZ from December 26, 2008 "On Protection of the Rights of Legal Entities and Individual Entrepreneurs in Implementation of State Control (Supervision)" apply to relations concerning the exercise of state control (supervision) over the activities of organisations engaged in educational activities in the field of education. State supervision is carried out through planned and unscheduled inspections.

**Independent assessment of education quality** is aimed at obtaining information about educational activities, quality of student training and implementation of study programs.

Independent assessment of education quality includes:

- Independent assessment of quality of student training;

- Independent assessment of quality of educational activities of educational organisations.

Independent assessment of education quality is carried out by legal entities that perform specific types of such assessment.

The results of independent assessment of education quality do not entail the suspension or revocation of a license to conduct educational activities, the suspension of the state accreditation or deprivation of the state accreditation with respect to educational organisations.

Based on the results of independent assessment of education quality, it is possible to form the ratings of educational organisations and/or the implemented study programs.

Independent assessment of education quality of organisations is conducted on such general criteria as openness and accessibility of information of educational organisations; comfort of conditions, in which educational activities are carried out; goodwill, politeness, competence of employees; satisfaction with the quality of education.

Independent assessment of education quality organized by public councils is conducted no more than once a year and at least once every three years.

Employers, their associations, and authorized organisations have the right to carry out **professional and public accreditation** of basic VET study professional programs.

Professional and public accreditation represents recognition of quality and level of training of graduates, who have mastered study programs in the specific organisation, meeting the requirements of the occupational standards and the labour market to experts, workers and employees of the corresponding profile. The professional and public accreditation is carried out on a voluntary basis and does not involve additional financial obligations of the state.

**Monitoring** of the education system represents systematic standardized observation of a condition of education and dynamics of changes of its results, conditions of educational activity implementation, the contingent of students, educational and non-learning achievements of students, professional achievements of educational organisations graduates, a condition of educational organisations network.

Щrganisation of the education system monitoring is carried out by the federal public authorities and executive authorities of subjects of the Russian Federation and the local governments exercising control in education.

Analysis of the state and prospects of education development is subject to annual publication in the form of final (annual) reports and to placement on the Internet network on the official sites of the appropriate authorities.

#### Recognition and validation of non-formal and informal learning

In Russia there is no full-fledged system of recognition and certification of HE/VET education and training received outside formal education systems as well as there is no system of validation of learning outcomes of training acquired in informal and non-formal learning.

The first official document, in which informal and non-formal learning is mentioned in the Russian education is the missive of the Ministry of Education and Science of the Russian Federation of 3 March, 2008 No. 03-369, where "modern models of education" are indicated and it is underlined that "lifelong learning becomes very important element of the modern education system" being a part of the education system during the whole life as non-formal learning, which includes courses, trainings, short-term programs, and informal (spontaneous) learning based generally on self-training becomes more and more important and urgent.

Article 17 of the Federal Law on Education states that in the Russian Federation education can be gained both in HE/VET institutions, and out of the official educational systems, by means of self-education, etc. The letter of the Ministry of Education and Science from December 19, 2013 No. 1367 "About the statement of the system of organisation and implementation of study programs in the field of higher education" provides that the HE institution (not VET) can reduce duration of study programs for individuals by recognition of learning results gained earlier (separate units or modules), and also the practical experience obtained, for example, in programs of supplementary education. In the letter, the possible procedure of such recognition is also defined: the student should submit the transcript or other documents confirming learning outcomes gained earlier. The procedure of result recognition of informal and non-formal learning by assessing official documents, which are submitted by the applicant (certificates, transcripts, diplomas, documents confirming other qualifications) is defined. Nevertheless, there is a necessity to create a system, which would allow HE/VET institutions or awarding bodies to estimate competences and qualification obtained outside the formal education.

The situation has cardinally changed regarding adoption of the Federal law of March 7, 2016 No. 238-FZ "About independent qualification assessment", and on its basis, specialised centres for qualification assessment were created, where one can pass a qualification assessment according to the skill level and the occupational standard. Higher educational institutions are only timidly trying to introduce recognition of informal and nonformal learning. We can give a good example, where procedures and rules of VNIFL, as well as preparation of certified experts in this field, have been developed within the framework of the VALERU<sup>7</sup> (Erasmus +) project, which was completed in 2016.

#### Quality assurance at the international level

Russian legislation does not provide a possibility for a HE/VET institution to choose a foreign agency for carrying out obligatory licensing and accreditation.

At the same time, it is necessary to emphasize that interaction with international organisations and networks for ensuring quality is very important for worthy positioning of Russian higher education in the international education market.

It should be also noted that for integration into the European VET and HE areas the full-scale introduction of the Standards and guidelines for quality assurance in the European Higher Education Area (ESG) is expedient.

## 3. Experiments on introducing ECVET in Russian VET

## **Relevance of introduction**

In the Russian Federation the system of credit transfers for VET is under consideration on the local and state level. It was clear that due to Russian participation in Bologna and Torino processes the previous attempt to test the system of credit transfers for VET was based on ECVET.

The need of the ECVET system for the Russian VET is caused by a variety of reasons:

- To increase internationalization and mobility of vocational education and training;
- To promote accumulation principle of trainings for obtaining full qualification;
- To develop network forms for VET;
- To increase efficiency and quality of VET by means of changing VET study programs and training processes in terms of credits, learning outcomes, memorandum of understanding, transfer of credits, and other ECVET tools and principles;
- To enlarge transparency and effectiveness of training processes.

According to Article 13, paragraph 4 of the Federal Law on Education, the credit is a unified unit of measurement of the student's learning load, which includes all types of available educational activities, as provided by the curriculum (including classroom, independent work, and practice).

In the absence of the NQF, the credit system in the Russian Federation, designed to accumulate and transfer credits in VET, is based on the Order of the Russian Ministry of Labour dated April 12, 2013, No. 148n "On the approval of skill levels for development of drafts of occupational standards".

#### **History of introduction**

In 2014 the Ministry of Education and Science of Russia initiated the project "Organisational and methodological support for introduction of credits system in VET", which was implemented at St. Petersburg State University of Trade and Economics.

Within the framework of the project, the Centre for Study of Problems of Vocational Education and Training in Russia on the base of ECVET developed a method for application of credit units in VET regarding planning and realisation of educational process that became the basis for the program of advanced training courses for deputy directors for educational work, methodologists and teachers on the theme<sup>8</sup>: "Modernisation of educational processes by application of credits".

<sup>&</sup>lt;sup>7</sup> <u>http://valeru.net/en/</u>

<sup>&</sup>lt;sup>8</sup> Oleynikova, O.N., Muraveva, A.A., Aksenova, N.M. (2014). The credit system for vocational education. Guidelines. SPb, 2014. 102 p.

In 2014 – 2015, professional development courses were held in St. Petersburg, Moscow, Tver and Novosibirsk. The courses were aimed at the ability of learners:

- To understand the designation, principles and technology of designing credit units for VET study programs;

- To use ideas of diversified experiences in the international VET practice;

- To design a credit system for VET study programs and use it for accumulation or transfer of learning outcomes within the concept of lifelong learning.

In 2014-2015, the guidelines for use of the credit system were also approved in VET organisations of 35 regions of the Russian Federation: Moscow and Moscow region, St. Petersburg and Leningrad region, Kursk region, Samara region, Vologda region, Murmansk region, Tver region, Tula region, Smolensk region, Krasnodar Krai, Novosibirsk region, etc.

During 2016 in Tver region, under instruction of the Ministry of Education and Science of the Russian Federation a pilot project "Scientific and methodical providing on introduction of the system of credit units for nonlinear educational trajectories and recognition of learning outcomes" was implemented, during which the method for application of credit units in VET regarding planning and realisation of educational process was tested. Briefly, the results of approbation of the method showed its effectiveness in terms of:

- Systematization of the educational process and focusing on achievement of learning outcomes;

- Well-founded structure of educational activities for classroom work, independent work, practice, training at the workplace, etc.;

- Strengthening interaction with employers and involving them in design and implementation of VET study programs;

- Providing a systematic approach to implementation of the federal state educational standard for VET.

The results of the approbation also showed that introduction of the credit system in context of the concept of continuing education is extremely relevant and timely.

Results of the project and further development of the methodology and technique of the ECVET system introduction are reflected in the manual<sup>9</sup> published in 2016.

## Guideline for introduction of credits in VET study programs

Finally, it is possible to conclude that experiments with ECVET have provided the following algorithm of transferring VET study programs by ECVET tools:

1. Definition of units of learning outcomes when designing VET study programs

2. Assignment of credits to learning outcomes

3. Distribution of credits for each cycle of a study program based on the number of academic hours specified in FGOS, which determine the maximum workload for students

4. Construction of a functional map

5. Development of a specification for each learning outcome

6. Each unit of learning outcomes in the specification should be determined by the number of credits based on the complexity of a training activity and its significance for gaining a qualification

7. The sum of the credits for the learning outcome consists of the values of the credit for all activities included in the specification.

<sup>&</sup>lt;sup>9</sup> Aksyonova, N. M., Golubeva, T. A., Muravyeva, A. A., Oleynikova, O. N., Sartakova E. V. (2016). Credits in VET. Manual. Moscow: Universitetskaya kniga. 156 p.

ECVET Technical Component	Russian Framework
Qualification	<ul> <li>Qualification is considered as a set of knowledge, skills and competencies of a certain level.</li> <li>Qualification levels are similar to EQF</li> <li>NQF is not established (only draft version)</li> <li>A lot of National Occupational Standards have been introduced.</li> <li>Convergence of Federal State Educational Standards (FGOS) and National Occupational Standards is in progress</li> <li>Legislation and practice of independent qualification assessment are accumulated</li> </ul>
Units of Learning Outcomes	<ul> <li>Qualification is a mixture of learning outcomes, competencies, skills, knowledge, work functions etc.</li> <li>Units of learning outcomes are not emphasised.</li> <li>Learning outcomes are derived from work functions by means of functional analysis</li> <li>Qualification in FGOS consists of general and vocational competences</li> <li>Present competences from FGOS may be considered as learning outcomes are elicited from standards, sector skills bodies and employers.</li> </ul>
Credit Points	<ul> <li>ECTS is fully adopted in Russia</li> <li>There will be difficulties to choose the model of ECVET credit points: workload vs relative weight within the qualification</li> </ul>
Recognition of Learning Outcomes	<ul> <li>Only in formal education. Non-formal and informal learning are only declared as possible parts of learning paths.</li> </ul>
Assessment of Learning Outcomes	<ul> <li>Each formal VET programme is aimed to achieve learning outcomes (competencies)</li> <li>Assessment is a regular and comprehensive practice in formal education</li> <li>Each formal VET programme contains criteria of assessment (routine and final)</li> <li>Each formal VET programme contains control and measuring materials</li> </ul>
Validation of Leaning Outcomes	<ul> <li>Special validation procedures are not developed.</li> <li>It is a part of assessment procedures for work-based learning and work placement.</li> </ul>
MoU	<ul> <li>MoUs are not used. Each case of transfer and student mobility is considered particularly by VET providers. Mobility is not a widespread phenomenon in VET.</li> </ul>
Learning Agreement	• Learning agreements are normally used, but their content is typical and hardly reflects the learning path of a learner.
Transcript of Records	Records are about courses and hours, not about ULOs

# ECVET Technical Components in relation to the Russian Framework

# Annex. Qualification Levels

In accordance with the order of the Ministry of Labour of Russia No. 148n from April 12, 2013 "On the approval of skill levels for the development of draft occupational standards", the following qualification levels are established.

Level	Indicators of qualification levels			The main ways to achieve the
Le	Authority and Responsibility	Type of skills	Type of knowledge	qualification level
Level 1	Activities under the leadership Individual responsibility	Performance of standard tasks (usually physical work)	Application of elementary factual knowledge and/or a limited number of special knowledge	Short-term training or briefing Practical experience
Level 2	Activities under the leadership with elements of independence when performing familiar tasks Individual responsibility	Performing standard tasks Choice of a method for action by instruction Correction of actions taking into account the conditions of their performance	Application of special knowledge	VET study programs, programs of vocational training of workers and non-manual workers, programs of vocational retraining of workers and non-manual workers (usually at least 2 months) Practical experience
Level 3	Activities under the leadership with elements of independence when performing familiar tasks Planning their own activity, proceeding from the task set by the leader Individual responsibility	Performing standard tasks Choice of a method for action based on knowledge and practice Correction of actions taking into account the conditions of their performance	Understanding of technological or methodical bases for solving typical practical problems Application of special knowledge	VET study programs, programs of vocational training of workers and non-manual workers, programs of vocational retraining of workers and non-manual workers (up to 1 year) Practical experience

Level	Indicators of qualification levels			The main ways to achieve the
Lev	Authority and Responsibility	Type of skills	Type of knowledge	qualification level
Level 4	Activities under the leadership with elements of independence for solving typical practical problems when analysis of a situation and changes are needed Planning their own activity and/or activity of group of workers, proceeding from assigned tasks Responsibility for solution of the assigned tasks or results of the activity of the group of employees	Solving various types of practical problems Choice of the known way of action from knowledge and practical experience Current and final control, evaluation and correction of activities	Understanding of scientific and technical or methodological bases for solving practical problems Application of special knowledge Independent work with information	Basic VET study programs for skilled workers (employees) Basic VET study programs and retraining programs for skilled workers, non-manual workers, programs of professional development Practical experience
Level 5	Independent activities to solve practical problems that require an independent analysis of the situation and its changes Participation in management of the assigned tasks within the division Responsibility for the solution of the assigned tasks or results of the activity of the group of employees or division	Solution of various types of practical problems with elements of design Choice of methods for solution in changing (various) conditions of the working situation Current and final control, evaluation and correction of activities	Application of vocational knowledge of technological or methodological nature Independent search of information necessary for te decision on the assigned job	Basic VET study programs and retraining programs for skilled workers, non-manual workers, and mid-level employees, programs of professional development Supplementary vocational programs Practical experience

e	Indicators of qualification levels			The main ways to achieve the
Level	Authority and Responsibility	Type of skills	Type of knowledge	qualification level
Level 6	Self-employment, involving definition of the tasks of one's own work and/or subordinates to achieve the goal Ensuring interaction between employees and related units Responsibility for the outputs at the level of a department or organisation	Development, implementation, monitoring, evaluation and correction of occupational activity, technological or methodological decisions	Application of professional knowledge of technological or methodological character, including innovative decisions Independent search, analysis and evaluation of professional information	HE programs - bachelor's degree VET study programs for training middle-level employees Supplementary professional (vocational) programs Practical experience
Level 7	Defining a strategy, managing processes and activities, including innovation, with the decision at the level of large organisations or departments Responsibility forperformance of large organisations and departments	Solving the development problems of occupational activity and/or organisation with the use of diverse methods and technologies, including innovative ones Development of new methods, technologies	Understanding the methodological aspects of professional activity Creation of new knowledge of applied nature in a certain field of activity Determination of sources and retrieval of information necessary for development of professional activity and/or organisation	HE programs – master's degree or specialist's degree Supplementary professional programs Practical experience
Level 8	Defining a strategy, managing processes and activities, including innovation, with decision at the level of large organisations or departments Responsibility for performance of large organisations and departments	Solving problems of research and project management, connected with enhancement of effectiveness of processes	Creation of new knowledge of interdisciplinary and intersectoral nature Evaluation and selection of information necessary for development of the field of activity	HE education – Doctorate' s degree (post-graduate courses), post-graduate military course, program of residency HE programs – master's degree or specialist's degree Supplementary professional programs Practical experience

le/	Indica	The main ways to achieve the		
Level	Authority and Responsibility	Type of skills	Type of knowledge	qualification level
Level 9	Definition of strategy, management of large technical systems, social and economic processes Significant contribution to a particular field of activity Responsibility for the results of activities at the national or international levels	Solving problems of the methodological, research and project nature, connected with development and enhancement of efficiency of the processes	Creation of new fundamental knowledge of interdisciplinary and intersectoral nature	HE education – Doctorate' s degree (post-graduate courses), post-graduate military course, program of residency Supplementary professional programs Practical experience

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