







REFERENCING REPORT OF THE SLOVAK QUALIFICATIONS FRAMEWORK TO THE EUROPEAN QUALIFICATIONS FRAMEWORK

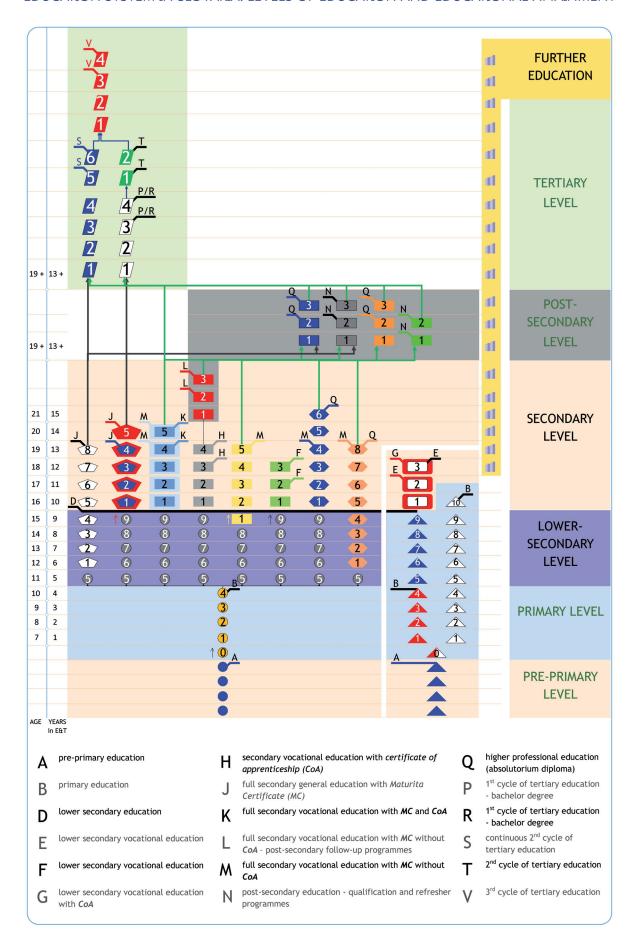
# REFERENCING REPORT OF THE SLOVAK QUALIFICATIONS FRAMEWORK TO THE EUROPEAN QUALIFICATIONS FRAMEWORK

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## ANNEX NO. 1: EDUCATION SYSTEM IN SLOVAKIA

## EDUCATION SYSTEM IN SLOVAKIA: LEVELS OF EDUCATION AND EDUCATIONAL ATTAINMENT



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SYMBOL	TYPE OF SCHOOL	PROGRAMMES		NATIONAL IDENTIFIER	ISCED 2011	LEVEL OF EDUCATION
11		FOR EMPLOYEES FOR UNEMPLOYED SECOND CHANCE FOR VULNERABLE GROUPS OTHER		- - - -		ADULT EDUCATION / FURTHER EDUCATION
1			'CLE (PhD)	٧	864	
	HIGHER EDUCATION	2 <sup>nd</sup> CYCLE	(INTEGRATED)	S	766	-
17	INSTITUTION	2 <sup>nd</sup> CYC	LE (MASTER)	Т	767	- TERTIARY
<u></u>		1 <sup>st</sup> CYCLE	E (BACHELOR)	P / R	645/655/665	-
1		HIGHER F	PROFESSIONAL	Q	554	
1		SECOND C	QUALIFICATION	N	454	-
1	SECONDARY VOCATIONAL SCHOOL	SPEC	CIALISING	Q	554	POST- SECONDARY
1		REF	FRESHER	N	454	_
1		FOL	LOW UP	L	454	-
1		6	-YEAR	M / Q	354/554	
1	CONSERVATORY*	8	-YEAR	M / Q	354/554	=
1				М	354	-
1				К	354	-
1	SECONDARY VOCATIONAL SCHOOL			Н	353	=
1	VOCATIONAL SCHOOL	5-YEAR	R BILINGUAL	М	354	-
1	_			F	253	SECONDARY
1	APPRENTICE SCHOOL			G	252/352	-
1	PRACTICAL SCHOOL			E	253	-
		8	-YEAR	J	344	-
	GYMNÁZIUM (SECONDARY	5-YEAR	R BILINGUAL	J	344	-
	GRAMMAR SCHOOL)	4	-YEAR	J	344	-
5				D	244	
	-	2 <sup>nd</sup> STAGE	MP** var. A	D	244	LOWER SECONDARY
5			MP** var. B	D	242	- SECONDART
1	-			В	100	
1	PRIMARY SCHOOL	1 <sup>st</sup> STAGE	MP** var. A / var. B	В	100	-
	-		MP** var. C	В	100	- PRIMARY
0	-		) GRADE / NTORY GRADE	A	030	
	- KINDERGARTEN	KINDERGARTEN		- A	020	PRE-PRIMARY
		SPECIAL K	(INDERGARTEN  A QUALIFICATION AT POST-			

<sup>\*</sup> COMPLETING THE LAST GRADE LEADS TO A QUALIFICATION AT POST-SECONDARY LEVEL ( HIGHER PROFESSIONAL EDUCATION )
\*\* SPECIAL NEEDS EDUCATION FOR MENTALLY CHALLENGED PUPILS

# ANNEX NO. 2: DUAL SYSTEM AND ITS SPECIFIC FEATURES IN SLOVAKIA

The new legislation on dual system of VET - the Act 61/2015 on Vocational Education and Training - is the result of the transformation process of vocational education and training and employers acting as one of the bodies coordinating VET. Pupils are trained in the workplace and the organisation signs an apprenticeship contract with the pupil under which the organisation is fully responsible for training, funding and completing placement of the apprentices who are supervised by professionally qualified trainers - employees of the company.

On 10 and 11 December 2012 in Berlin, a Ministerial Conference was held which resulted in the signing of a memorandum. Ministers of the participating countries stressed the importance of increased cooperation and support of activities that are meant to introduce dual education, apprenticeships and practical trainings in the workplace of employers in vocational education and training of the partner countries. The signatories of the Memorandum are Germany, Slovakia, Latvia, Greece, Italy, Spain and Portugal. The follow-up for the Slovak-German bilateral cooperation in VET was the signature of Common Understanding in VET cooperation between Ministry of Education, Science, Research and Sport of the Slovak republic and Federal Ministry of Education and Research of Germany, where all relevant topics for VET development have been addressed.

Also a strong cooperation with Austria has been established. Austrian IBW institute presented a study of Successful Transformation of VET and Implementation of Dual Education, where 7 key elements for implementation of dual education were defined. Following this study a pilot project with Austrian Chamber of Commerce has been introduced in Zlaté Moravce, where elements of dual education have been tested one year prior to the new Act on VET came into force. The Ministry of Education, Science, Research and Sport of the Slovak Republic and the Austrian Chamber of Commerce have signed Memorandum of Understanding regarding all relevant issues on VET.

#### Important features of Slovak VET

Vocational education and training (VET) has a strong tradition in Slovakia and it is one of the essential components of education here. Orientation towards industry, subcontracting manufacture and schools formerly directly linked with businesses create good preconditions so that VET can be further developed. There are 32 groups of fields of study recognised by legislation for secondary schools and most of study programs put emphasis not only on theoretical knowledge, but on practical skills, experiences and knowledge too. For that reason, it has to be a part of educational programs of secondary vocational schools practical training aimed at gaining relevant practical skills, experiences and knowledge.

The 2008 reform introduced governance mechanisms for linking secondary vocational education and training more closely to the labour market. The VET tradition and past experiences of reforming are assets in designing changes that can improve responsiveness to the labour market.

## New Act on VET provides the direction for reform

The new act aims to establish a clear division of rights and responsibilities for stakeholders, employers and employer associations particularly through a clear legal contractual relationship between schools, pupils/apprentices and companies/enterprises.

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Large employers in particular are keen supporters of more extensive work based learning in VET. The VET system in Slovakia is relatively comprehensible with a small set of vocational pathways (with and without maturita or higher VET) while the number of programmes are modest in international comparison. In 2016/2017, 493 VET programmes existed in total.

Slovak upper secondary education is fairly flexible and able to accommodate different local models for the division of learning between theory and practice. Such flexibility is achieved through the autonomy of schools to develop school-level curricula and in the capacity of the VET streams of upper secondary education to adjust the mix of theory and practice.

The Act on VET was accepted by the Slovak National Council on 12 March 2015 and it entered into effect on 1 April 2015. The aim of the new act is to enable a smooth transition of secondary vocational schools from education to the labour market and reduce the risk of unemployment for young graduates. There are incorporated elements enabling the preparation of students in the dual education. The main goal of the act however, is to prepare high quality workforce for employer in order to address competitiveness and sustainable development of economy.

Once we consider the legislative process, we have to say that a working group for the development of the draft act on VET was created by representatives of the Ministry of Education, Science, Research and Sport of Slovakia and the Ministry of Economy of Slovakia, representatives of employers and employers' associations, representatives of school founders (self-government regions Žilina and Bratislava), representatives of employees and a research group of the national project RSOV (Development of VET). The draft act had been continuously consulted with other experts in the various parts of the content.

### Regulated issues

The Act n. 61/2015 on Vocational Education and Training in Slovakia regulates the following issues:

- vocational education and training offered to pupils attending secondary vocational school,
- types of secondary vocational schools,
- practical training,
- dual education system,
- verification of employers' capability for the provision of practical training in the dual education system,
- contractual relations between the employer and secondary vocational school and between the employer and pupil in the course of practical training,
- the material and financial support of pupils,
- coordination of vocational education and training for the labour market.

#### Organisation of VET according to the new Act - place of practical training

Vocational training, vocational practise and art practise are offered to the pupils:

- in the workshop,
- at the employer's workplace,
- at the workplace of practical training, if the pupil is trained in the system of dual education.

Practical courses are pursued by the pupils at the secondary vocational school. Where it is required by the nature of work, practical courses may be organized also at the employer's workplace or the workplace of

practical training. Where it is required by the nature of the occupation or the professional activities of the particular study branch or the particular training branch, vocational training, vocational practise and art practise may be temporarily organized also at a different place. The practical training as a work-based learning is fully organised and covered by the employer, who has to sign a treaty on dual education. In this treaty, the responsibilities and duties of both subjects in the system of dual education are defined. The work-based learning is provided by the employer at his workplace, which must be certified by a corresponding chamber of employers.

According to article 10 of Act on VET, the pupil in the system of dual education prepares himself or herself for his or her future occupation, occupations or other professional activities based on the demands and requirements of the employer with whom the pupil has signed an apprenticeship contract.

The employer in the system of dual education has a very strong role to influence the VET provisions in VET programs. His own demands can be reflected in school curricula. In dual education, the employer has a responsibility to participate at the creation of school curricula.

The employer, who has been certified to provide the practical training in system of dual education, has to fulfil certain requirements. The employer must fill in the application for the certification procedure in order to enter the system of dual education. The application must be sent to the representative chamber until 30th of September of the year that proceeds the 1st September of the year in which the employer can provide the practical training in the system of dual education.

The application for the certification of employer to provide the practical training in system of dual education contains:

- identification data of the employer,
- main activities of the employer,
- field of study or fields of study in which the employer will provide the practical training,
- number of pupils in system of dual education,
- secondary VET school the pupils of which will attend and with whom the employer has signed contract
  on dual education,
- estimated number of VET teachers and secondary VET trainers under who the pupils will carry out their practical training and who are the employees of employer,
- the estimated number of VET teachers and secondary VET trainers who will supervise the pupils 'practical
  training and who are the employees of secondary VET school in case the employer is unable to provide
  trainers,
- estimated number of in-company trainers,
- school year from which the employer starts to provide the practical training
- signature of the employer.

Annex to the application is a certificate of authorization of the employer to perform the activities which corresponds with the content of education in a given field of study and certificate of availability of employer's facilities for the corresponding part of the school curricula of a given field of study. The requirements for material and technical equipment of the employer must match the capacity of secondary VET school to provide the education in the given field of study.

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#### **Contract on Dual Education**

To enter the system of dual education the employer must sign the contract on dual education. The contract includes:

- identification data of the employer,
- identification of secondary VET schools,
- the obligation of the employer to provide pupils practical training at his own expense and responsibility,
- a commitment from secondary VET schools to organize vocational education and training in the system of dual education,
- field of study in which the system of dual education will be performed,
- number of pupils in system of dual education,
- form of practical training, place of practical training,
- number of VET teachers, secondary VET school trainers who are employees of employer under whose authority pupils will carry out the practical training,
- number of VET teachers, secondary VET school trainers who are employees of secondary VET school (if employer does not have them) under whose authority pupils will carry out the practical training,
- number of in-company trainers in case the pupil carries out his or her practical training under guidance of in-company trainer,
- timetable of practical training in accordance with the established organization of education and training in secondary VET schools,
- manner in which the in-company trainer assesses and evaluates the pupil,
- financial provision of practical training and teaching staff,
- material provision for pupils,
- financial provision for pupils,
- form of participation of the employer at the final examination,
- a way of ensuring mutual rights and obligations of contractual parties,
- time period for which the contract has been concluded,
- form of withdrawing from the contract,
- date and signature of contractual parties.

The employer as well as secondary VET school can decide to sign more contracts with other employers or secondary VET schools respectively.

#### The trainees 'contract

The employer and the legal representative of the underage pupil or adult pupil discuss the particulars of an apprenticeship contract and conditions of practical training in the system of dual education. This contract can be signed, at latest, on 31th of August before the start of a first school year of pupil. The contract contains:

- identification data of the employer,
- name, surname and date of birth of the legal representative of pupil in the case of an underage pupil,
- name, surname and date of birth of the pupil,
- identification data of secondary vocational school which the pupil attends,
- obligation of the employer to prepare pupils for their occupation, occupations or professional activities in system of dual education,

- a commitment of the pupil to participate in the practical training directly by the employer in accordance with his/her specific needs and requirements,
- · field of study,
- form of practical training,
- place of practical training,
- organization of study, including a timetable of practical training in accordance with provisions of organization of education and training in secondary VET schools,
- · material provision for pupils,
- · financial provision for pupils,
- form of ensuring mutual rights and obligations of the contractual parties,
- form of withdrawing from the contract,
- date and signature of contractual parties.

### Health and safety rules

When a pupil carries out his or her workplace training, the employer must provide him or her with the personal protective equipment and must conduct the assessment of health, sensory and psychological capabilities of pupil if it is required by the nature of the practical training. A practical training provider is required to provide meals for pupils during the practical training.

In the system of dual education the employer has the possibility, not the obligation, to finance the accommodation of pupil in school dormitory and travel expenses from place of residence of pupils to the secondary VET school, workplace of employer or dormitory and back.

### Financial rules

The pupil who creates a productive work in the workplace of employer receives a reward for his or her productive work, which can be from 50% to 100% of the wage of employees of employer. The amount of the reward of productive work depends on the quality of the work performed and the behaviour of pupil. The pupil can receive also a company scholarship paid by the company as a part of the company's social program. It is paid on monthly basis up to the quadruple of subsistence minimum.

In the fields of study, which have been selected by the Ministry of Education, Science, Research and Sport of the Slovak Republic as insufficient on the labour market (the demand of the labour market is greater than the actual number of pupils in these fields of study), the government offers the motivation scholarships to pupils in order to motivate the young people to study technical fields.

It is paid on a monthly basis in the following way:

- 65% of subsistence minimum by average of grades of pupil up to 1.8
- 45% of subsistence minimum by average of grades of pupil from 1.8 to 2.4
- 25% of subsistence minimum by average of grades of pupil from 2.4 including 3.0.

## Centre of Vocational Education and Training

The secondary VET school can become a centre of VET. The founder of the school must give his consent and it is awarded by the representative chamber of employers for the given area of industry or services. The secondary VET school can use this title when:

secondary VET school cooperates with the employers in area of VET,

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- has recommended training facilities designed by the normative of material and technical provision,
- is an educational institution for further education according to the Act on Lifelong Learning No. 568/2009 Coll. preparing for the occupation, occupations and other professional activities connected to the linked fields of study,
- usually those schools have higher standards of equipment and pedagogical and professional staff and cooperation with the employers.

#### Support for Employers to enter the System of Dual Education

Employers are motivated to take part in VET by fiscal incentives in form of tax exemptions, which are based and fixed per pupil according to the extent of provided work based training. Employers' associations will certify employers in the dual system and they will be audited by the State School Inspection as they will be responsible for the practical training of students.

Most of the expenses account for tax incentives (reduced tax base by 3,200 per pupil for 200 - 400 hours of work based learning per year, or 1,600 for less than 200 - 400 hours).

#### Recommendations for the future:

- ✓ to offer government-funded partnership grants for schools and companies to cover transformation costs and motivating schools to enter a cooperation model that is less stable than the current one based on institutional contracts between schools and companies;
- √ to create quality assurance procedures for companies and graduates entering the dual system;
- ✓ to create an infrastructure supporting supply and demand of pupils and various quality programmes with strong element of work-based learning or apprenticeships, including training of experts on employers' side enabling the world of work to take full responsibility for providing high-quality training programmes;
- ✓ to attract pupils into the dual system. Mistrust of young people and their parents towards
  apprenticeship caused by labour market turbulences particularly in the 1990s must be overcome by
  offering generous incomes to apprentices and clear career progress opportunities. Slovakia still misses
  a flexible qualifications system that would offer apprentices in blue-collar professions advancement
  to an institutionalised "master craftsman" qualification, non-university tertiary qualifications and
  recognition of results of non-formal and informal learning.
- √ to introduce more incentives for small and medium enterprises for their greater role in VET and dual education.
- ✓ to implement a system of career guidance at lower secondary and upper secondary level of education.
- ✓ to promote higher VET in accordance with approaching Industrial revolution 4.0.
- √ to support a comprehensive policy for continuous training of VET teachers and VET trainers and incompany trainers.

# ANNEX NO. 3: LIST OF QUALIFICATIONS PLACED ON THE LEVELS OF SKKR

SKKR level	Qualification(s)	Explanation		
1	Primary education certificate with supplement	Holder of this qualification possesses basic general knowledge and carries out simple skills. The certificate is awarded after finishing the first cycle of primary education. This document enables its holder to continue in the second cycle of primary education.		
2	Lower secondary education certificate with supplement	Holder of this qualification possesses deeper general knowledge, basic professional knowledge. The knowledge and skills comprise introduction to the simple practice and enables its holder to enter the labour market (low-skilled worker).  The certificate is awarded after finishing the second cycle of primary education and enables the holder to continue his/her study at the secondary school.		
	Certificate of qualification	This qualification is acquired solely in non-formal and informal setting (recognition of working experience). It does not serve as an entry for the study at secondary level of formal education.		
	Certificate of final exam and certificate of apprenticeship	This qualification certifies the completing of the lower secondary education in the length of 2 years. It does not represent an entry to the higher levels of education. Typical holder is a semi-skilled worker.		
3	Certificate of final exam and Certificate of apprenticeship	This qualification certifies the completing of the lower secondary education in the length of 3 - 4 years of study. Knowledge, skills and competences refer to the field (of education or work) and thus enable the direct entry into the labour market as well as obtaining the trade licence.		
	Certificate of qualification	This qualification is usually awarded by successful completion of accredited course of further education. It is usually required for granting the trade licence.		
		This type of qualification confirms successful completion of upper secondary education in the length of 3 - 4 years of study and represents an entry to the higher levels of education (post-secondary non-tertiary, tertiary).		
4	Maturita Certificate	Maturita certificate awarded in both academic pathway (gymnasium) and VET pathway are considered to be equal and thus are placed on the same level of SKKR. The length of study varies from 4 to 8 years. Both represent an entry to HE and accredited further education. VET certificate allows for entry into the labour market or granting the trade licence.		
	Certificate of qualification	This qualification is usually awarded by successful completion of accredited course of further education. It is usually required for granting the trade licence. Holders of this certificate work as e.g. technicians and specialists.		

5	Maturita Certificate + Certificate of apprenticeship  Certificate of final post-secondary examination + Absolutorium diploma	This type of qualification confirms successful completion of upper secondary education in the length of 6 - 8 years or successful completion of post-secondary non-tertiary education in the length of 2 - 3 years of study. It represents an entry to the higher levels of education (post-secondary non-tertiary, tertiary).	
Certificate of qualification This qualification is usually awarded for successful co		This qualification is usually awarded for successful completion of specialised accredited course of further education required for carrying out specialised job positions with high level of autonomy.	
+ Diploma Supplement both in professional and academic orientation. It allows for the 2 <sup>nd</sup> cycle when Certificate of qualification This qualification is usually awarded by successful completion of specialised academic orientation.		This qualification is awarded after successful completion of the 1 <sup>st</sup> cycle of tertiary education - bachelor study, both in professional and academic orientation. It allows for the 2 <sup>nd</sup> cycle where required.	
		This qualification is usually awarded by successful completion of specialised accredited course of further education required for carrying out specialised job positions with high level of autonomy.	
7	Diploma + Certificate of State Exam + Diploma Supplement  This qualification is awarded after successful completion of the 2 <sup>st</sup> cycle of tertiary education - either study or examina rigorosa. It allows for the 3 <sup>rd</sup> cycle entry where required.		
/	Certificate of qualification	This qualification is usually awarded for successful completion of specialised accredited course of further education required for carrying out specialised job positions with high level of autonomy.	
8	Diploma + Certificate of State Exam + Diploma Supplement	This qualification is awarded after successful completion of doctoral studies.	

# ANNEX NO. 4 DESCRIPTORS OF THE SLOVAK QUALIFICATIONS FRAMEWORK - SKKR

	Descriptors of the Slovak Qualifications Framework - SKKR					
Le	evel	KNO	WLEDGE	SKIL	SKILLS	
EQF	SKKR	General Vocational		Cognitive	Cognitive Practical	
	J	The inc	dividual has:	The indivi	dual can:	The individual is characterized by:
1.	1.	basic general knowledge at the level of remembering		reproduce basic knowledge	perform simple repetitive tasks	performance of simple working activities under supervision in familiar and stable conditions
2.	2.	basic general knowledge at the level of understanding	basic professional knowledge at the level of remembering	practically use information in specific situations	<ul> <li>perform complex repetitive tasks</li> <li>use simple methods, tools and materials in familiar conditions</li> </ul>	<ul> <li>performance of simple working activities under supervision with some autonomy</li> <li>perception of own share of responsibility</li> </ul>
3.	3.	broader general knowledge	professional knowledge of concepts, methods, procedures and standards	use common technical, non- technical and technological documentation, standards and standards in a respective field	<ul> <li>apply general and professional knowledge to solve simple problem tasks</li> <li>use common procedures, methods, tools and materials when carrying out activities in the field</li> </ul>	<ul> <li>independent and creative work in standard, rarely changing conditions</li> <li>accountability for own performance</li> <li>evaluation of own work</li> </ul>

	Descriptors of the Slovak Qualifications Framework					
L	evel	KNOV	/LEDGE	SKIL	LS	COMPETENCES
EQF	SKKR	General	Vocational	Cognitive	Practical	Responsibility, autonomy, social competences
		The ind	ividual has:	The indivi	dual can:	The individual is characterized by:
4.	4.	deepened general knowledge at the level of application	knowledge of regularities, principles, processes, standards and general concepts in a broader context	Practically apply information of general nature	<ul> <li>apply deepened general and professional knowledge</li> <li>use technical documentation</li> <li>apply complex procedures, methods, tools and materials when carrying out activities in the field</li> </ul>	<ul> <li>independent solving of problem tasks in predictably changing conditions</li> <li>responsibility for work in predicatably changing conditions</li> <li>responsibility for management of a smaller team</li> <li>evaluation of the results of one's own work and the work of others</li> </ul>
5.	5.	deepened general knowledge at the level of analysis	specialized professional knowledge in the field of work or education	monitor, analyze, plan, organize and evaluate specific working procedures	implement specific working procedures     identify what constitutes a problem in the application of a chosen procedure     propose specific working procedures and solutions	<ul> <li>taking responsibility for the management, evaluation and development of activities in changing conditions</li> <li>a high level of autonomy</li> <li>creative work</li> <li>the ability to transfer information and skills to others</li> </ul>
6.	6.	• general knowledge at the level of synthesis	practical and methodological knowledge of key areas in the field, which serve as the basis for practice, research or artistic creation	<ul> <li>propose solutions to methodical, professional, artistic or practical problems</li> <li>modify general and professional knowledge to solve specific professional problems</li> </ul>	<ul> <li>implement solutions to methodical, professional, artistic or practical problems</li> <li>use creative methods, tools, equipment and materials</li> </ul>	<ul> <li>autonomy in solving specific problems in changing environment</li> <li>planning his/her own education</li> <li>autonomy and responsibility in decision-making</li> <li>ability to present his/her opinions appropriately and professionally</li> <li>creative and flexible thinking</li> </ul>

	Descriptors of the Slovak Qualifications Framework					
Le	evel	KNOW	/LEDGE	SKIL	LS	COMPETENCES
EQF	SKKR	General	Vocational	Cognitive	Practical	Responsibility, autonomy, social competences
		The indi	ividual has:	The indivi	dual can:	The individual is characterized by:
7.	7.	highly advanced knowledge at the level of evaluation	professional and methodological knowledge in several areas of the field or practice, serving as a basis for innovation and originality in practice, research or arts	<ul> <li>propose and evaluate solutions for methodical, professional, artistic, practical or scientific problems in various areas of the field or practice</li> <li>formulate recommendations for the development of scientific, working or artistic field</li> <li>establish scientific or practical assumptions for problem-solving</li> </ul>	<ul> <li>implement and evaluate solutions for methodical, professional, artistic, practical or scientific problems in various areas of the field or practice</li> <li>create tutorials, projects of implementation and evaluation procedures for activities in the field</li> </ul>	<ul> <li>a high level of autonomy and predictability in known and unknown environments</li> <li>initiative and responsibility for managing work of a work team</li> <li>innovative, creative thinking</li> <li>professional presentation of the results of his/her own study or practice</li> </ul>
8.	8.	<ul> <li>the most advanced knowledge at the level of evaluation</li> <li>knowledge of the priorities necessary for the development of the society</li> </ul>	professional and methodological knowledge in several areas of the field or practice, serving as a basis for innovation and originality in practice, research or arts necessary for planning of research and development, or the development of an area of professional practice	create and formulate new hypotheses, judgments and strategies for further development of science or field of work     evaluate theories, concepts and innovations	apply his/her own findings based on theoretical analysis and scientific research of comprehensive and/or interdisciplinary nature     design, validate and implement new research and working procedures	<ul> <li>critical, autonomous and analytical thinking in unpredictable, changing conditions</li> <li>taking into account social, scientific and ethical aspects in the direction for further development of the society</li> <li>the ability to present results of research and development to professional community</li> <li>responsibility for leadership in a given scientific or professional field</li> <li>planning his/her own development and development of the society in the context of scientific and technical progress</li> </ul>

## ANNEX NO. 5 - COMPARISON OF THE EQF AND SKKR DESCRIPTORS, INCLUDING THE DUBLIN DESCRIPTORS

#### SKKR - Level 1

Both EQF and SKRK refer to the same *determiners* (or quantifiers): e. g. "basic" or "simple".

#### a) Knowledge

Attention is focused on mastering basic general knowledge and its simple reproduction.

#### b) Skills

Attention is focused on acquisition and performance of basic skills. In addition to the determiner "simple" SKKR descriptor adds "repetitive" to stress the known and stable (nonchanging) context.

#### c) Competence

The level of autonomy and responsibility is very low. The determiner "direct" is excluded in SKKR. However, this does not influence an overall context of the level.

#### General remark:

This level of SKKR applies in particular to the educational programmes of primary education. It may also cover basic common units of *general* qualifications (the simplest learning outcomes) that can serve as a basis developing basic skills and competences for individuals with severe (particularly mental) disabilities, or for recognition of the basic knowledge and skills for those who did not finish primary education. Learning is acquired during compulsory education.

**Example(s) of qualifications:** GE qualification (primary education - 1st level)

#### SKKR - Level 2

#### a) Knowledge

On the contrary to EQF, SKKR works with two categories of knowledge - general and vocational. In the case of general knowledge, the level of acquired knowledge moved from simple reproduction of *memorized* knowledge to the understanding (i. e. ability to provide own, although simple, explanation).

#### b) Skills

The determiners in this categories are similar: "routine" (EQF) and "repetitive" (SKKR). Both refer to the use of simple tools. On the other hand, the SKKR refers to more complex tasks.

#### c) Competence

Both frameworks refer to a "certain degree of autonomy". However, on the contrary to the EQF, SKKR stresses the ability of an individual to recognise also his/her own responsibility to a certain, limited degree. Furthermore, SKKR includes the work under supervision.

#### General remark:

In general, both levels refer to simple task performance. Despite the introduction of the concept of "autonomy" in SKKR, the general idea of this level is comparable. It is the entrance into LLL. Education is obtained during compulsory education. It can also be achieved through non-formal and informal learning. Learning takes place in schools, educational institutions for further education, training centres, companies, etc. It can include also introduction into practice after learning or training. Qualification at this level leads to further education, which may include further VET.

**Example(s) of qualifications:** GE qualification (primary education - 2<sup>nd</sup> level); finisher, various auxiliary workers (in farming)

#### SKKR - Level 3

#### a) Knowledge

Both EQF and SKKR refer (list) to the concepts, methods and procedures. SKKR includes also the standards whereas EOF refers to rules.

#### b) Skills

SKKR lists in the category of cognitive skills a wide range of areas the holder of a qualification must be familiar with. This resulted from the fact that the qualifications at this level are professionally oriented and thus the attention is focused on mastering professional skills. The context is not present in the EQF descriptors; SKKR determines the shift from unchanging conditions to rarely changing context.

#### c) Competence

Comparing to EQF, SKKR stresses the autonomy, responsibility and self-evaluation (evaluation appear on the level 4 of the EQF). It introduces also the "creativity" - comparing to the EQF in which the creativity appears on the level 5.

#### General remark:

Qualifications at the SKKR level 3 entitle their holders to apply for trading licence. Therefore, an individual has to possess some level or creativity, autonomy and responsibility to carry out the activities as a small trader. As such, we do not consider this approach to contradict the overall similarity of both levels.

Qualifications at this level are recognised as general education and vocational education suitable for many working positions. It leads to further education, which may include further VET. This level is a key stage of LLL.

Formal education is provided at secondary VET schools or by further VET. Qualifications can also be awarded through non-formal and informal learning. Learning takes place in schools, educational institutions for further education, training centres, companies, etc. It can also include introduction into practice.

**Example(s) of qualifications:** warehouse keeper, public transportation ticket inspector, cashier

#### SKKR - Level 4

#### a) Knowledge

Both frameworks refer to "broad context" for knowledge. SKKR stresses the increment in general knowledge as this level marks the completion of secondary education (both general and vocational).

#### b) Skills

Both frameworks refer to changing, but predictable context. SKKR refers to technical documentation due to the fact that the holders of qualifications on level 4 are usually technicians. The difference in wording "a range of cognitive and practical skills required to generate solutions" (EQF) and "apply complex procedures, methods, tools and materials when carrying out activities". Anyway, problem solving is mentioned in the category "competence".

#### c) Competence

Self-evaluation was already introduced on level 3 of SKKR. Management and supervision

of others are common for both frameworks.

#### General remark:

Differences in wording and used determiners are minor and do not influence an overall similarity of this level of both frameworks.

Education is achieved during compulsory education as general or vocational. Qualifications are also awarded through programmes of further VET or acquired through non-formal and informal learning. Learning takes place in schools, educational institutions for further education, training centres, companies, etc. Obtaining a qualification includes also practice.

Individuals with this qualification understand cross-sectoral contexts directly related to the field of practice or learning. They solve problems independently; they propose not only suitable known solutions, but generate new solutions with a substantially limited level of innovation. They are capable of self-reflection and self-evaluation, as well as able to evaluate and plan the work of a smaller team, and to manage the team efficiently.

Qualifications at this level may represent an entry to tertiary education. This level supports specialised VET, direct access to independent qualified work, which includes implementation of supervision and coordination.

**Example(s) of qualifications:** GE qualification (upper secondary general education), various technicians (e. g. in power engineering), quality controller, warehouse foreman

#### SKKR - Level 5

#### a) Knowledge

SKKR uses the determiner "specialised" similarly to the EQF. However, SKKR refers also to general knowledge on the level of analysis.

#### b) Skills

Both frameworks refer to the development of solutions. Creativity was mentioned on the level 3 of SKKR. Problem solving in SKKR is oriented in the area of professional skills on the contrary to the EQF´s "abstract problems". SKKR stresses the specific working procedures. In the category of skills, SKKR outlines "implementation" and "proposal" of working procedure whereas EQF relates to the "development" of "creative solutions".

#### c) Competence

Both frameworks refer to evaluation and development of "performance" (EQF) or "acti-

vities" (SKKR). Similarly, EQF and SKKR refer to changing context. Responsibility is mentioned in SKKR only.

#### General remark:

Both EQF and SKKR refer to the increase in all categories of descriptors in unpredictable, changing context. Despite the different wording we can say that both frameworks determine the similar level of creativity. Contrary to EQF, SKKR descriptors bring out the ability of information transfer.

#### QF-HE

The comparison with Dublin descriptors for short cycles shows that both levels build on the deepening of the knowledge acquired during the previous learning. Both frameworks also refer to the "occupation" (QF-EHEA) or "working situation" (SKKR). The main difference can be observed in the area of autonomy: whereas SKKR determines high level of autonomy, QF-EHEA states "some autonomy". Stronger ties to the context of learning are expressed in Dublin descriptors.

This level indicates completion of secondary education and high-level formal VET. University qualifications can be obtained in short cycles. Teaching takes place in schools, educational institutions for further education, training centres, companies, etc. It can also include introduction into practice. A qualification at this level requires substantial level of autonomy. Such qualifications are required for many job positions with high level of responsibility. It allows direct access to tertiary education.

**Example(s)** of qualifications: various specialists (e. g. automatization specialist in engineering, specialist in agrochemical control), masters-supervisors (e. g. in glass manufacture).

#### SKKR - Level 6

#### a) Knowledge

EQF uses the determiner "critical" (understanding). This might be understood differently by different users. To avoid this ambiguity, SKKR applies different levels of critical thinking for different levels. On the level 6 the synthesis is applied; "synthesis" is an ability to combine knowledge and eventually develop a new idea.

#### b) Skills

The ability to combine, use and develop new solutions is reflected also in the category "skills" of SKKR.

#### c) Competence

# REFERENCING REPORT OF THE SLOVAK QUALIFICATIONS FRAMEWORK TO THE EUROPEAN QUALIFICATIONS FRAMEWORK

Both frameworks refer to autonomy and responsibility in decision making. They both indicate the level of self-management in the area of professional development. SKKR refers also to the planning of individual's own education. Flexibility and creativity is stressed.

#### General remark:

Both EQF and SKKR refer to one field of work or study. Both SKKR and EQF levels emphasize a shift to decision-making, unpredictability of the situation and field-specific problem solving. SKKR adds the necessity not only to master the specialised field of work or learning, but besides the transfer of information to others, it highlights the increase in the descriptor towards appropriateness of such transfer (accommodation to situation).

#### QF-HE

The level 6 of SKKR and the descriptors for the 1st cycle show the similarities: level of synthesis (SKKR) and "gathering and interpreting information" (QF-EHEA). Contrary to level 5, both levels refer to planning own learning with high level of autonomy. Both levels build on previous education but contrary to Dublin descriptors, SKKR does not stress the "general education". Another similarity lays in the area of transfer information to diverse audience (ability to "communicate" in QF-EHEA).

HE qualifications can be acquired within the first cycle and/or relate to the completion of a short cycle. Learning takes place in institutions of higher education, further education, training centres, companies, etc. It can include also introduction into practice.

A holder of such qualification is required to show substantial level of autonomy, critical and analytical thinking. It is suitable for many jobs with a high level of responsibility. It leads to further education, which can include further VET. It allow direct access to the second cycle of tertiary education.

**Example(s) of qualifications**: specialists in the area of quality management (e. g. in cellulose operation, in the area of environmental policies), inorganic chemist (Bc.)

#### SKKR - Level 7

#### a) Knowledge

EQF and SKKR indicate an interdisciplinary aspect of this level and originality in thinking.

#### b) Skills

In the area of knowledge and skills, SKKR outlines the ability to evaluate as the highest level of critical thinking. SKKR emphasizes skills including the development and implementation of projects.

#### c) Competence

Context is in both frameworks characterised as unpredictable. EQF introduces the transfer of the information to others - on the contrary to SKKR which refers to this concept on the level 6.

#### General remark:

Both SKKR and EQF emphasize specialisation and innovative approaches to the problem solving. Furthermore, they point out the contribution to the development of a field of study, research or work and their cross-boundary character. The difference in SKKR levels' descriptors just accentuate the dimension of implementation and creativity. Overall, similar character of EQF and SKKR levels remain unaffected.

#### OF-HE

The comparison with Dublin descriptors for the 2<sup>nd</sup> cycle of HE shows substantial similarities: both frameworks refer to ability to deliver "judgement" (or "evaluation" in SKKR), multidisciplinary aspect of knowledge, skills and competence. Both levels also stress originality and innovation with regards to problem solving. And similarly, both types of descriptors outline the ability to communicate ideas to diverse audience.

Formal education is provided in specialised HEIs. Qualifications at this level are awarded after completion of the second cycle of HE, but also by recognition of professional and vocational qualifications (non-formal and informal learning). It relates to an independent work with other people and provides space for development of work and education according to individual interest.

**Example(s) of qualifications:** engineering specialist - design engineer, specialist researcher in foundry industry, system developer in power engineering

#### SKKR - Level 8

#### a) Knowledge

Both frameworks refer to the utmost level of knowledge and interdisciplinary character of the knowledge.

#### b) Skills

EQF refers to the wording "extend and redefine" which might imply "re-formulating" of existing knowledge or skills. SKKR descriptor stipulates "new" (hypothesis, judgements and strategies) to avoid this implication. Both frameworks on this level refer to "evaluation" as the highest cognitive capacity.

## c) Competence

In the area of "competence" both frameworks refer to the concept of leadership: leadership (SKKR) - substantial authority/forefront (EQF). On the contrary to the EQF, SKKR outlines the social context and ethical aspect of this level

#### General remark:

Both SKKR and EQF levels emphasize the highest level of mastering the knowledge and skills, interdisciplinary character and leadership competences of a holder of such qualification. The general understanding that a qualification placed on this level reflects complex, interdisciplinary aspect of knowledge, skills and competences as well as development of new knowledge, new methods etc. remains unaffected in both frameworks.

#### QF-HE

SKKR descriptors on the level 8 and the descriptors for the 3<sup>rd</sup> cycle of HE show substantial similarities: both frameworks underline critical thinking and the ability of development in the area of research or work. SKKR level descriptors stress the leadership and ability to contribute to the development of the society.

Formal study takes place in specialised HEIs. Qualifications at this level are acquired by completing the third cycle of HE education. It represents systematic understanding of several fields of study and master level of knowledge, skills and competences as well as research methods. It relates to independent work with other people and provides space for the development of research, work and education according to individual interest. People working at this level lead others to a high level of expertise.

This qualification allows access to the work in highly specialised areas and in job positions requiring the leadership of a community or society.

**Example(s) of qualifications:** scientific and research expert (e. g. in medicine, in food-processing industry)

## ANNEX NO. 6 LINKING SKKR AND DUBLIN DESCRIPTORS

SKKR descriptors			Dublin descriptors		
Level	Description	Cycle	Description		
	Knowledge:  deepened general knowledge and expertise at the level of analysis specialised professional knowledge in the field of work or education  Skills:	short	Knowledge and understanding: have demonstrated knowledge and understanding in a field of study that builds upon general secondary education and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle;		
	monitor, analyse, plan, organize and evaluate specific working     procedures		Application of knowledge and understanding: can apply their knowledge and understanding in occupational contexts;		
5	<ul> <li>procedures</li> <li>implement specific working procedures</li> <li>identify what constitutes a problem in the application of a chosen</li> </ul>		Creating judgment: have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems;		
3	<ul><li>procedure</li><li>propose specific working procedures and solutions</li><li>Competences:</li></ul>		Communication: can communicate about their understanding, skills and activities, with peers, supervisors and clients;		
	a high level of autonomy     creative work		The ability to undertake further education: have the learning skills to undertake further studies with some autonomy.		
	taking responsibility for the management, evaluation and development of activities in changing conditions				
	• the ability to <u>transfer information</u> and skills to others				
4	<ul> <li>Knowledge:</li> <li>general knowledge at the level of synthesis</li> <li>practical and methodological knowledge of key areas in the field, which serve as the basis for practice, research or artistic creation Skills:</li> <li>propose solutions to methodical, professional, artistic or practical</li> </ul>	1	Knowledge and understanding: have demonstrated knowledge and understanding in a field of study that builds upon and their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;		
6	<ul> <li>problems</li> <li>modify general and professional knowledge to solve specific professional problems</li> </ul>		Application of knowledge and understanding: can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;		

	<ul> <li>implement solutions to methodical, professional, artistic or practical problems</li> <li>use creative methods, tools, equipment and materials Competences:</li> <li>autonomy in solving specific problems in changing environment</li> <li>planning his/her own education</li> <li>autonomy and responsibility in decision-making</li> <li>ability to present his/her opinions appropriately and professionally</li> <li>creative and flexible thinking</li> </ul>		Creating judgment: have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;;  Communication: can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;  The ability to undertake further education: have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.
7	<ul> <li>Knowledge:</li> <li>general knowledge at the level of evaluation</li> <li>professional and methodological knowledge in several areas of the field or practice, serving as a basis for innovation and originality in practice, research or arts</li> <li>Skills:</li> <li>propose and evaluate solutions for methodical, professional, artistic, practical or scientific problems in various areas of the field or practice</li> <li>formulate recommendations for the development of scientific, working or artistic field</li> <li>establish scientific or practical assumptions for problem-solving</li> <li>implement and evaluate solutions for methodical, professional, artistic, practical or scientific problems in various areas of the field or practice</li> <li>create tutorials, projects of implementation and evaluation procedures for activities in the field</li> <li>Competences:</li> <li>a high level of autonomy and predictability in known and unknown environments</li> <li>initiative and responsibility for managing work of a work team</li> <li>innovative, creative thinking</li> <li>professional presentation of the results of his/her own study or practice</li> </ul>	2	Knowledge and understanding: have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with Bachelor's level, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;  Application of knowledge and understanding: can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;  Creating judgment: have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;  Communication: can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;  The ability to undertake further education: have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

#### 8 Knowledge:

- general knowledge at the level of evaluation
- knowledge of the priorities necessary for the development of the society
- professional and methodological knowledge in several areas of the field or practice, serving as a basis for innovation and originality in practice, research or arts necessary for the planning of research and development, respectively. development of vocational practice

#### Skills:

- create and formulate new hypotheses, judgments and strategies for further development of science or field of work
- evaluate theories, concepts and innovations
- apply his/her own findings based on theoretical analysis and scientific research of comprehensive and/or interdisciplinary nature
- design, validate and implement new research and working procedures

#### Competences:

- planning <u>his/her own development and development of the society</u> in the context of scientific and technical progress
- responsibility for leadership in a given scientific or professional field
- <u>critical, autonomous and analytical thinking</u> in unpredictable, changing conditions
- taking into account social, scientific and ethical aspects in the direction for further development of the society
- the ability to present results of research and development to professional community

**Knowledge and understanding:** have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;

Application of knowledge and understanding: have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity:

- have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication

*Creating judgment:* are capable of critical analysis, evaluation and synthesis of new and complex ideas;

**Communication:** can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;

The ability to undertake further education: can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society

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# ANNEX NO. 7: LIST OF THE GOVERNMENTAL INSTITUTIONS AND SECTOR COUNCILS TAKING PART IN THE SKKR DEVELOPMENT AND IN THE REFERENCING PROCESS

#### **Governmental bodies:**

- 1. Ministry of Education, Science, Research and Sport of the Slovak Republic
- 2. The Ministry of Labour, Social Affairs and Family of the Slovak Republic
- 3. Ministry of Health of the Slovak Republic
- 4. Ministry of Interior of the Slovak Republic
- 5. Ministry of Transport, Posts and Telecommunications of the Slovak Republic
- 6. Ministry of Defence of the Slovak Republic
- 7. The Ministry of Construction and Regional Development of the Slovak Republic
- 8. Ministry of Environment of the Slovak Republic
- 9. Ministry of Agriculture of the Slovak Republic
- 10. Ministry of Economy of the Slovak Republic
- 11. Ministry of Finance of the Slovak Republic
- 12. Ministry of Culture of the Slovak Republic

#### **Sector Councils**

- 1. Administration, economics and management
- 2. Automotive and mechanical engineering
- 3. Banking, financial services and insurance
- 4. Pulp and paper industry and the printing industry
- 5. Chemicals and pharmaceuticals
- 6. Transport, logistics and postal services
- 7. Electrical engineering
- 8. Energy, gas and electricity
- 9. Metallurgy, foundry and blacksmith
- 10. IT and telecommunications
- 11. Culture and publishing
- 12. Forestry and wood industry
- 13. Sales, marketing, gastronomy and tourism
- 14. Agriculture, veterinary and fisheries
- 15. Food industry
- 16. Crafts, handicrafts and personal services
- 17. Glass, ceramics, mineral products and non-metallic materials
- 18. Construction, geodesy and cartography
- 19. Extraction and processing of raw materials and geology
- 20. Textiles, clothing, footwear and leather processing
- 21. Science, research, education and sport
- 22. Public service and administration Security and emergency teams
  - Military forces and civilian personnel
  - Local Government
  - Government management
- 23. Water, waste and environment
- 24. Health and social services

# REFERENCING REPORT OF THE SLOVAK QUALIFICATIONS FRAMEWORK TO THE EUROPEAN QUALIFICATIONS FRAMEWORK

#### Other institutions:

National Union of Employers - Federation of Employers' Associations of the Slovak Republic - Trade Unions Confederation of the SR - Association of Towns and Communities of Slovakia - National Institute of Certified Measurement - State Pedagogical Institute - Methodological and Pedagogical Centre — National Institute for LLL - SAAIC - Slovak Academic Association for International Cooperation — IUVENTA - TREXIMA - BOZPO, Ltd. - U.S.STEEL Košice - Student Council for Higher Education of SR - Association of institutions for adult education in Slovakia - Slovak Roofers Guild - Club 500 - Ironworks Podbrezová - Slovak Association of Small Enterprises - Slovak Insurance Association - Students Council of Higher Education in Slovakia - Slovak Mining Chamber - Slovak Agricultural and Food Chamber - Slovak Rectors' Conference - Slovak Chamber of Trades - Slovak National Observatory - State School Inspection - TESLA Liptovský Hrádok - Union of Conservatories SR - Institute of Information and Prognosis of Education SR - Institute of Education and Services - Association of Automotive Industry - Association of Construction Entrepreneurs of Slovakia — and some other institutions participating in the work of working groups and other supporting structures.

# ANNEX NO. 8 LIST OF MEMBERS OF THE NATIONAL BOARD FOR EDUCATION AND QUALIFICATIONS

Institution	Representative
Ministry of Transport, Construction and Regional Development of the Slovak Republic	Ing Iveta Šimonovičová
Ministry of Economy of the Slovak Republic	Mgr. Martin Svoboda
Ministry of Culture of the Slovak Republic	Mgr. Andrea Legátová
Ministry of Defence of the Slovak Republic	PhDr. Denisa Šebeňová
Ministry of Agriculture and Rural Development of the Slovak Republic	Mgr. Dagmara Bezáková
Ministry of Labour, Social Affairs and Family of the Slovak Republic	Ing. Radoslav Štefánek
Ministry of Justice of the Slovak Republic	Mgr. Daniela Bobáková
Ministry of Education, Science, Research, and Sport of the Slovak Republic	Ing. Marián Galan
Ministry of Education, Science, Research, and Sport of the Slovak Republic	Mgr. Monika Korkošová
Ministry of Interior of the Slovak Republic	JUDr. Anton Kulich
Ministry of Foreign and European Affairs of the Slovak Republic	Ing. Anna Jamborová
Ministry of Health of the Slovak Republic	doc. PhDr. Zuzana Slezáková, PhD.
Ministry of Environment of the Slovak Republic	PhDr. Jana Hruštincová
Federation of Employers' Associations	Mgr. Roman Conorto
Confederation of Trade Unions of the Slovak Republic	Ing. Vlasta Szabová-Fedorková
Government Council for Vocational Education and Training	p. Július Hron
Government Council for Vocational Education and Training	Ing. Ján Žačko
National Union of Employers	Ing. Igor Patráš
Slovak Mining Chamber	Ing. Fedor Boroška
Slovak Forestry Chamber	Ing. Rudolf Valovič
Slovak Chamber of Commerce	Ing. Viliam Gonda
Slovak Agricultural and Food Chamber	Ing. Jozef Artim
Slovak Chamber of Crafts	Ing. Robert Schmidt
State Institute of Vocational Education and Training	Ing. Ivan Stankovský, CSc.
Automotive Industry Association	Ing. Jozef Uhrík
Association of Towns and Communities of the Slovak Republic	PhDr. Anna Labátová

# ANNEX NO. 9: STATEMENTS OF QUALITY ASSURANCE BODIES AND INTERNATIONAL EXPERTS



NÁRODNÝ ÚSTAV CERTIFIKOVANÝCH MERANÍ VZDELÁVANIA

ŽEHRIANSKA 9, 851 07 BRATISLAVA 5

#### Stanovisko

Národného ústavu certifikovaných meraní vzdelávania k Priraďovacej správe Slovenského kvalifikačného rámca SKKR pre EQF (Verzia z júla 2017)

Národný ústav certifikovaných meraní vzdelávania (ďalej iba "NÚCEM") plní v rámci rezortu školstva úlohy v oblasti monitorovania a hodnotenia výsledkov vzdelávania, realizuje celonárodné testovania žiakov základných a stredných škôl na úrovni štátnych vzdelávacích programov a zároveň realizuje medzinárodné merania v súlade s pravidlami štúdií, do ktorých sa Slovenská republika zapája. NÚCEM preto zohráva kľúčovú úlohu pri zabezpečovaní kvality vzdelávania v Slovenskej republike (ďalej iba "SR").

V rámci svojich kompetencií sa NÚCEM aktívne zapojil do čiastkových aktivít v súvislosti s prípravou Slovenského kvalifikačného rámca (ďalej iba "SKKR").

Predložená správa je jasne štruktúrovaná. Je v nej venovaný obsiahly priestor pre opis súčasného stavu školského systému v SR, ktorý tvorí kvalitné východisko pre spracovanie kapitol súvisiacich so samotným SKKR. V správe sú jednoznačne popísané úlohy a ciele tvorby SKKR. Jednotlivé aspekty a sub-rámce SKKR sú jednoznačne formulované. Zároveň správa v dostatočnej miere popisuje napĺňanie jednotlivých kritérií EQF Advisory Group.

NÚCEM považuje prípravu SKKR za veľmi dôležitú aktivitu v rámci rezortu školstva SR a predloženú správu hodnotí ako kvalitný výstup tejto aktivity.

Zároveň týmto potvrdzujeme záujem NÚCEM naďalej participovať v jednotlivých fázach priraďovacieho procesu SKKR.

S pozdravom

PaedDr. Ivana Pichaničová, PhD. zástupkyňa riaditeľky NÚCEM

#### **Translation**

#### Opinion

of the National Institute for Certified Educational Measurements on the Referencing Report of the Slovak Qualification Framework to EQF (version of July 2017)

The National Institute for Certified Educational Measurements (hereinafter referred to as "NUCEM") performs tasks in monitoring and evaluating results of education, implements nationwide testing of primary and secondary schools pupils at the level of state educational programs and, at the same time, implements international measurements in line with the rules of studies in which the Slovak Republic has been involved. NUCEM therefore plays a key role in ensuring the quality of education in the Slovak Republic (hereinafter referred to as "SR").

Within its competencies, NUCEM was actively involved in partial activities related to the development of the Slovak Qualification Framework (hereinafter referred to as "SKKR").

The report has a clear structure. It includes an extensive description of the current state of the school system in the Slovak Republic, which serves as a good starting point for the chapters related to SKKR. The report clearly describes the tasks and objectives of the SKKR development. The various aspects and sub-frameworks of SKKR are clearly formulated. At the same time, the report adequately describes fulfilment of the individual EQF Advisory Group criteria.

NUCEM considers the creation of SKKR as a very important activity within the education sector in SR and asseses the submitted report as a high quality output of this activity.

At the same time, we hereby confirm the interest of NUCEM to participate in the implementation of SKKR. Yours sincerely,

PaedDr. Ivana Pichaničová, PhD.

Vice Director of NUCEM

Bratislava, 22. 08. 2017

#### Stanovisko

Štátnej školskej inšpekcie k Priraďovacej správe Slovenského kvalifikačného rámca SKKR pre EQF

Zabezpečenie kvality vzdelávania je jedným z kritérií priraďovacieho procesu, ktorý v sebe zahŕňa pravidelné hodnotenie inštitúcií, ich programov alebo systémov a práve jednou z organizácií, ktorá vykonáva kontrolu a hodnotenie výchovy a vzdelávania, podmienok výchovy a vzdelávania a riadenia školy je Štátna školská inšpekcia.

Predložená Priraďovacia správa zrozumiteľne vysvetľuje postupnosť a jednotlivé kroky procesu implementácie Slovenského kvalifikačného rámca (SKKR) a priradenie jeho úrovní k Európskemu kvalifikačnému rámcu.

Systematicky a v logickej nadväznosti popisuje štruktúru vzdelávacieho systému v SR, z ktorého vychádza opis vývoja a aktuálneho stavu procesov SKKR, stanovenie jeho jednotlivých úloh a cieľov i rozdelenie na subsystémy tak, aby sa dosiahol zámer rovnocennosti a porovnateľnosti kvalifikácií. Vývoj a popis plnenia stanovených kritérií priraďovacieho procesu a zúčastnených aktérov sú prehľadne a jasne vyjadrené.

Vysvetľujúce tabuľky a názorné schémy sú dobrou vizuálnou pomôckou a dotvárajú obraz o jednotlivých oblastiach a častiach správy.

Štátna školská inšpekcia hodnotí Priraďovaciu správu ako kvalitný výstup tejto aktivity a považuje prípravu SKKR za veľmi dôležitú aktivitu v rámci rezortu školstva SR. Zároveň potvrdzujeme záujem naďalej participovať v jednotlivých fázach priraďovacieho procesu SKKR.

S pozdravom

PaedDr. Viera Kalmárová hlavná školská inšpektorka

#### Opinion

# of the State School Inspection on the Referencing Report of SKKR to EQF

Quality assurance in education is one of the criteria of the referencing process, which involves a regular evaluation of institutions, their programmes or systems; one of the organizations that performs the control and assessment of education and learning, the conditions of education and learning process and school management is the State School Inspection.

The submitted Referencing Report clearly explains the sequence and individual steps of the Slovak Qualification Framework (SKKR) implemention and assigning its levels to the European Qualifications Framework.

It describes systematically and logically the structure of the education system in the Slovak Republic, which provides a basis for a description of the development and current state of the SKKR processes, defining its individual tasks and objectives and its division into the sub-systems in order to achieve the aim of equivalence and comparability of qualifications. The development and description of fulfillment of the referencing criteria and the actors involved are clearly expressed.

Explanatory tables and schematic illustrations are a good visual aid and they help to enhance the impact of the topics described in the report.

The State School Inspection assesses the Referencing Report as a high quality output and considers the SKKR development a very important activity within the education sector in Slovakia. At the same time, we confirm the interest to continue our participation in various stages of the SKKR referencing process.

Yours sincerely,

PaedDr. Viera Kalmárová Senior Chief Inspector **Prof. Ewa Chmielecka, Poland**Educational Research Institute, Warsaw
EQF AG member

## Comments to the Referencing report of the Slovakian Qualifications Framework to the EQF (version of July 2017)

I participated in work of the Slovakian working team preparing the Slovakian National Qualifications Framework referencing report in the period of 2014-17. My role as the foreign expert in the referencing team was limited to making comments to successively provided versions and/or fragments of the referencing report and to participate in a couple of discussions of the Slovakian referencing team. During this period I was submitted with at least three versions of the report. I took part in three scheduled meetings of the team and made comments to the draft versions of the referencing report fragments discussed during these meetings. During this period the visible progress in work on the Slovakian referencing report was done. Below find my comments to the "final version" of the referencing report of July 2017.

### General overview of the SK referencing report

The methodology adopted in the Slovakian NQF/EQF referencing process is relevant for the objective of the work and follows the main guidance published by the EQF Advisory Group. The Referencing Report itself is well structured: the sequence of chapters and their content confirm understanding of the idea of referencing the SK Qualification Framework to the European Qualification Framework and - more general - the idea of the qualifications system. All necessary elements of the referencing report are on place. The details and additional information is sent to the Appendixes which makes reading easier.

The most essential part of any referencing report is the way the national qualification framework is responding to the ten referencing criteria formulated by the EQF Advisory Group. All these criteria are considered and answered, in general, in satisfactory way. Some critical comments - see below.

#### Some comments and recommendations

Although the editorial and internal composition aspects of the report are to the great extent acceptable nevertheless some contents of the report create difficulties for a reader in understanding the national qualification system in Slovakia. These are mainly related to the issues of relationship between the qualifications' frameworks, qualifications' register and occupations' register, the relationship and interactions between different "sub-frameworks" and different types of qualifications. These elements of the qualification system will be corrected and made clear by new regulations concerning qualification which demands changing also the relevant legislation. Also some standards and procedures related to the quality assurance are not sufficiently present at different segments of educational system with special attention to be paid towards the HE programmes need to be corrected by systemic legislative solutions and in practice.

The authors of the referencing report are fully aware of these difficulties (see SWOT analysis) and are expecting the necessary improvement coming together with the ongoing reforms mentioned in the report. The realistic road map for their implementation could be a valuable element of the report. Also the deeper semantic analysis of the relationship between language used in the SK RR and in the EQF could give to the reader better understanding of reference of both frameworks.

Ewa Chmielecka Warsaw, 21 July 2017

#### Sabine Schüller

Federal Ministry of Education and Research, Germany Member of the EQF Advisory Group

## Comments to the referencing report of the Slovakian Qualifications Framework (SKKR) to the EQF

I have been involved in the Slovakian referencing process between 2014 and 2017 together with Prof. Ewa Chmielecka from Poland. The focus of my role as an international expert was to give advice and assistance in drafting the referencing report. During that period, I participated in two meetings of the national working group and made written comments to various versions of the referencing report. I shared my experience from the German referencing process with the Slovakian colleagues and tried to act as a critical friend. Knowing from my own national experience how difficult it is to explain a national education/qualifications system and national processes to an international audience, I always tried to point out that it is of utmost importance that a referencing report has to be understandable to international readers, in terms of language/translation and in terms of how the information is described and explained.

From the beginning my impression as an international expert with an outside perspective was that the SKKR process in Slovakia has been a very challenging one. While developing a national qualifications framework and referencing it to the EQF surely is a challenge for every country, Slovakia belongs to those countries where the development of a national qualifications framework has been part of ongoing reforms of the education system which makes the task even more challenging. While the task of developing a national qualifications framework as part of developing a national qualifications system was and still is complex enough, it was not less difficult for the Slovakian colleagues to explain and describe the complexity in a way which makes it transparent and understandable for international readers.

From my point of view this should be kept in mind when reading the Slovakian report. It also explains why parts of the report might still be difficult to understand for foreign readers as some parts are still difficult to understand for me. This applies for example to the relationship between the SKKR, the National Qualifications Register and the National Occupations Register. It does not necessarily mean that more information is needed, but it might be helpful if the Slovakian colleagues could address this issue in their presentation at the 42nd meeting of the EQF Advisory Group. Also, the use and/or understanding of the term "qualification" is still a bit confusing. It seems as if there are still different understandings of the term which for example becomes obvious in picture 4.

As I have provided a lot of detailed comments on various versions of the referencing report, I will not do that here, but offer my assistance to the Slovakian colleagues in the stage of finalising the report for publication on the EU-portal. Overall the referencing report is well structured, the three main chapters reflect the three essential areas of a referencing report. The ten referencing criteria are all addressed and satisfactorily met. The report makes clear that the reform of the education system in Slovakia is an ongoing process and a lot is work in progress. As far as it is possible to judge from an external perspective, the report gives an honest and realistic picture of the state of play in Slovakia which forms a good basis for trust.

From my personal point of view I would like to congratulate the Slovakian colleagues for the progress which has been made since 2014. I joined the SKKR process in a very difficult time, and the first draft of the report was far from being a referencing report. Therefore, I would like to congratulate the Slovakian colleagues for the progress which has been made step by step since 2014 and wish them success for their ongoing work.

Berlin, 24.08.2017

## ANNEX NO. 10: SUMMARIES OF THE ANALYSES OF SKKR AND NQR

# Comparative analysis of allocating qualifications to the levels of the Slovak Qualifications Framework and NQFs in selected EU countries

The analysis was supported by the EQF National Contact Point and conducted by a working group composed of experts, who were involved also in the project Development of the National Qualifications Register. The purpose of the analysis was to evaluate the first phase of the levelling process of qualifications to SKKR levels and suggest amendments to the existing methodology, if necessary. Using a comparative approach, the analysis compared SKKR and the methods of levelling qualifications with the national frameworks in selected EU countries - Denmark, Estonia, the Netherlands, Norway, Slovenia and Scotland. The working group analysed almost 600 out of 1000 qualifications recently included in the National Qualifications Register.

The analysis confirmed that most of qualifications, which are a part of the NQR, are directly linked to occupations. This finding corresponds with the Methodology for the development of the National Qualifications Register used during creation of NQR. The main source of qualifications is the National Register of Occupations (defined by Act no. 5/2004 Coll. on employment services), an information system which contains descriptions of standard requirements defined by the labour market for particular jobs. These requirements are formulated in a form of occupational standards. These standards are the basis for the development of qualifications in the NQR; the occupation standard is analysed to identify a qualification and compared with a study branch.

The method of levelling used for SKKR is based on "best fit" methodology which takes into account the context of VET or academic education, theoretical or practical preparation. A qualification does not have to cover all descriptors and the levels of learning outcomes can vary (but not more than one level). Based on this, a qualification is allocated to the level which prevails. The practice in the European countries shows, that levelling of qualifications is based on a combination of technical (linguistic) and social/political aspects (e.g. importance of a qualification on the labour market), which is also the case of SKKR.

The analysed qualifications showed that the primary function of National Qualifications Register in its primary phase was rather transformation. The development and levelling of new smaller qualifications related to the performance of a job was more dominant. The most represented qualifications are those at the levels 3, 4, 7 and 6. The largest part of qualifications come from non-formal education, followed by those, which can be obtained by both learning pathways (formal and non-formal).

A detailed analysis of qualifications in NQR showed that in some cases there is a minimum difference in the description of a qualification standard and occupational standard. Another examined aspect was an anticipated match between SKKR level and a level of education (ISCED). About three-quarters of qualifications has confirmed this consistency (about 86% of analysed qualifications).

A key part of the analysis focused at correctness of levelling. The results showed that 86% of surveyed qualifications were allocated the right level of SKKR.

The analysis formulated recommendations in 5 areas.

The first area relates to the current terminological inconsistency, mainly in the term qualification. The working group recommends to keep strictly the definition of qualification introduced by the Recommendation on the establishment of EQF. It also involves leaving the concept of partial and full qualification, which is defined by the recent legislation. The change of this concept has been already reflected in the process of preparation of a new act on LLL<sup>1</sup>.

<sup>1</sup> Note by the authors of the Referencing Report.

Another conclusion recommends to strengthen the communication role of SKKR, i.e. transparency of the system of qualification and identification of possible learning pathways for an individual user. It also includes allocation of all existing qualifications available in formal and non-formal system of education and their transparent structure. The system of education also requires constant analysis and revision, as well as clear procedures for levelling.

The rules of levelling qualifications should be based on the relevant legislation and regulating documents. The primary condition for levelling qualification must be its description in the language of learning outcomes. To simplify the levelling process for qualifications with the same standards, the study recommends to level the type of a group of qualifications, where possible.

In tertiary education, it is necessary to follow international standards and transform the content of higher education to learning outcomes, as well as to include the compliance with the Dublin descriptors to the accreditation criteria procedures in Slovakia.

The recommendation relating to the sub-framework of occupational qualification states a necessity to define clearly this type of qualifications and their structure. To ensure flexible response to the labour market needs, there should be created a possibility to create smaller qualifications based on these needs with respective procedures of validation and certification.

## Validation of non-formal and informal learning in Slovakia

State Vocational Education Institute, building on the results of the national project Development of the National qualifications system, in the effort to continue with the implementation of a functioning system, supported an analysis of the validation of non-formal and informal learning in Slovakia. The main aim of the analysis was to map the existing practice and draft possible strategy for common, cross-sectoral procedures.

This task was appointed to a working group consisting of representatives of policy makers, educators, public employment services and employers.

Main focus of the analysis was on the following four areas:

- **Terminology** comparison of definitions used in various sources and across different sectoral legislation;
- Definitions mapping the use of key terms and definitions of the suitable terms to be used in the field of validation;
- **Description of existing validation system in Slovakia** analysis of the legislation, mapping of existing practice and the stages of validation;
- Recommendations for the Slovak Republic for implementation of a common system.

During the course of the analysis there were some interesting findings mostly concerning four key target groups. In the **academic field**, the legislation and regulations are set and only validation of existing documentation that testifies acquired education is relevant. On the other hand, in the area of **occupational qualifications**, there is a possibility to produce a confirmation of acquired experience of min. 5 years, issued by an employer and the learner is permitted to take an exam of professional competence without attending a course previously. A learner can be certified after successful completion of the exam.

A lot of knowledge, skills and competence are acquired by the participants in the **youth and youth workers** sector. There is a significant gap when it comes to validation of this, with limited means to certification. The **public employment offices** offer various guidance methods to people seeking employment. One of the instruments is a portfolio of competences, a tool for gathering evidence of experience, but there is no further procedure developed, without the possibility to acquire a certificate at the present.

One of the authors conducted a survey with the employers with several conclusions. For example, the

# REFERENCING REPORT OF THE SLOVAK QUALIFICATIONS FRAMEWORK TO THE EUROPEAN QUALIFICATIONS FRAMEWORK

employers see validation as something conducted by themselves during a trial period of an employee. They validate proclaimed skills and evaluate the need for further training of the employee. The employers have also indicated that some of the documents from courses that claim to further develop a qualification of an employee are often unreliable and the proclaimed skills sometimes aren't present. The employers would welcome a process that would be trustworthy, and the common example given is the driving licence. Private institutions teach and train the learner, but the exam is conducted by an authority of the state (in this case the police) and the results are up to the standard.

There were 15 recommendations formulated in the analysis of various nature. The overall emphasis was on the fact, that validation process needs to be integrated in to the system of lifelong learning and it can not be separated. The approach should see quality, reliability and transparency of the system as the highest priority. There should be an independent body created, that would oversee and coordinate the development and the execution of the validation process.

The recommendations were as follows:

- equality of opportunities should be available to everybody;
- open and permeable system of education;
- creation of a long-term approach to education, with the emphasis on the possibility to transfer acquired experience and have it validated in various fields;
- integration of the validation process into lifelong learning;
- informing the public about the validation process through campaigns, raise awareness to the issue;
- revision of the legal framework;
- closer cooperation with relevant stakeholders;
- setting up transparent methods for financing the validation process, targeted for specific groups;
- focus on the quality of assessment process;
- diversification of the education, implementation of new methods and a more tailored education to meet the needs of the learners;
- ensuring the equality of certificates, regardless of the educational path that led to acquiring them;
- focus on the assessors educating them and creating a competent body;
- making further analysis of the cost and benefits and find a national solution;
- emphasis on quality in validation.

# International sectoral qualifications and sectoral qualifications - development in Europe and situation in Slovakia

The analysis has two main goals. Firstly, it examines the recent development of approaches towards international sectoral and sectoral qualifications, both at the European level and national levels in other EU countries. Secondly, it explains the term "sectoral qualification" within the Slovak context. However, there have been uncertainties about the distinction between some types of qualifications, especially between occupational and sectoral qualifications. Therefore the analysis aims to specify firm and distinctive characteristics of sectoral qualifications and looks for an appropriate definition, taking into account already existing definitions (European Commission, CEDEFOP).

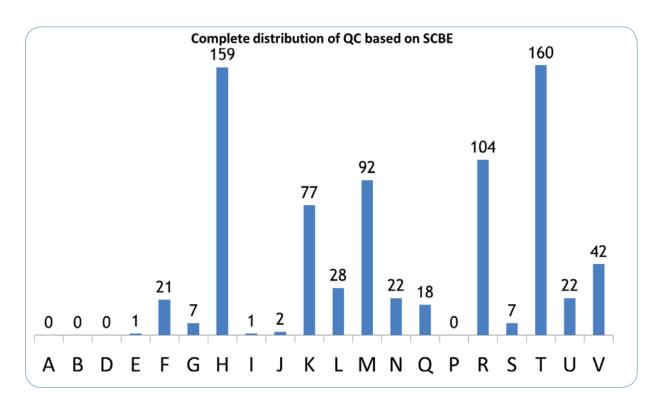
The analysis looked at the levelling of sectoral qualifications to the national qualifications in some European countries, esp. in the Netherlands and Scotland. It summarised the main characteristics of this type of qualifications: an international and sectoral aspect, diversity in standards, quality, availability and its value on the labour market.

The working group analysed 32 sectoral and international sectoral qualifications, including:

Sectoral qualifications	International sectoral qualifications
<ul> <li>Barista</li> <li>Authorised architect</li> <li>Advocate</li> <li>Welder</li> <li>Mechatronic</li> <li>Driving instructor</li> <li>CNC Machine Tending</li> </ul>	<ul> <li>Frontex border guard</li> <li>Certified Information Systems Auditor (CISA)</li> <li>European Foundation Certificate in Banking</li> <li>Officer in Charge of Engineering Watch</li> <li>European EnergyManager</li> </ul>

One of key questions, which the analysis dealt with, was the approach to levelling of (international) sectoral qualifications. It pointed out the possibility to distinguish between including and levelling qualifications. Some international sectoral qualifications (or sectoral qualifications), especially those that are not described in learning outcomes, could be included to NQF without levelling them. Such inclusion could still work as a tool to enhance transparency with an open possibility for later levelling. The working group also recommended creating a separate (fifth) sub-framework of SKKR for international sectoral qualifications as one of possible solution; however, this point has to be still further discussed on the national level.

# ANNEX NO. 11: STATISTICAL OVERVIEW OF QC INCLUDED IN THE NQR



(A) PRE-PRIMARY	0
(B) PRIMARY	0
(D) LOWER SECONDARY	0
(E) LOWER SECONDARY	1
(F) LOWER SECONDARY VET	21
(G) UPPER SECONDARY, VET WITH VOCATIONAL CERTIFICATE	7
(H) SECONDARY VET WITH VOCATIONAL CERTIFICATE	159
(I) SECONDARY VET WITHOUT MATURITA WITH VOCATIONAL CERTIFICATE	1
(J) FULL GENERAL SECONDARY WITH MATURITA	2
(K) SECONDARY VET WITH MATURITA AND VOCATIONAL CERTIFICATE	77
(L) FULL VET WITH MATURITA WITHOUT VOCATIONAL CERTIFICATE	28
(M) FULL SECONDARY GENERAL, FULL VET WITH MATURITA	92
(N) POST-SECONDARY	22
(Q) TERTIARY, UPPER SECONDARY WITH GRADUATE DIPLOMA	18
(P) TERTIARY, 1 <sup>ST</sup> CYCLE (Bc.)	0
(R) TERTIARY, 1 <sup>ST</sup> CYCLE (Bc.)	104
(S) TERTIARY, 2 <sup>ND</sup> CYCLE (MA.)	7
(T) TERTIARY, 2 ND CYCLE (MA.)	160
(U) TERTIARY, 2 ND CYCLE (MA.)	22
(V) TERTIARY, 3 <sup>RD</sup> CYCLE (PhD.)	42

# ANNEX NO. 12: COMPARISON OF THE SLOVAK VET SYSTEM WITH THE EQAVET INDICATORS

EQAVET Indicator	Sources of information and organisations involved	Use of data
Indicator I Relevance of quality assurance systems for VET providers: (a) share of VET providers applying internal quality assurance systems defined by law/at own initiative (b) share of accredited VET providers	a) MESRaS SR does not have data on numbers of providers applying internal quality assurance systems  b) VET providers (Network of schools and school facilities in the SR	a) SSI, VET providers (schools to improve internal self-assessment) b) SVEI, MESRaS SR - rationalization of the network and the system of training departments
Indicator II Investment in training of teachers and trainers: (a) share of teachers and trainers participating in further training (b) amount of funds invested	a), b) Ministry of Education, Science, Research and Sport of SR	Not specified
Indicator III Participation rate in VET programmes: Number of participants in VET programmes, according to the type of programme and the individual criteria	Slovak Centre of Scientific and Technical Information (number of VET students)	<ul> <li>MESRaS SR uses the data to design/activate/deactivate state/school curricula in relation to labour market needs - e. g. to strengthen the cooperation between basic schools and secondary VET schools, enhancing attractiveness of VET.</li> <li>Higher Territorial Units (regional self-administration) decide on the number of first VET classes to be opened in a respective school year</li> </ul>
Indicator IV Completion rate in VET programmes: Number of persons having Successfully completed/abandoned VET programmes, according to the type of programme and the individual criteria	Centre of Scientific and Technical Information collects data on VET graduates	<ul> <li>MESRaS SR - to design/activate/deactivate state/school curricula in relation to labour market needs.</li> <li>The Center for Labor, Social Affairs and Family uses data on VET graduates for graduate tracking on the labor market within regular prognoses of the labor market development</li> </ul>
Indicator V Placement rate in VET programmes: (a) Progression of VET learners after completion of training, according to the type of programme and the individual criteria (b) share of employed learners after completion of training, according to the type of programme and the individual	Central Office of Labour, Social Affairs and the Family, MESRaS SR	<ul> <li>MESRaS SR - to design/activate/deactivate state/school curricula in relation to labour market needs.</li> <li>Higher Territorial Units (regional level) decide on the number of first VET classes to be opened in a respective school year</li> </ul>

Indicator VI Use of acquired skills at the workplace: (a) information on occupation obtained by individuals after completion of training,  (b) satisfaction rate of individuals and employers with acquired skills/ competences	a) Central Office of Labour, Social Affairs and the Family in cooperation with Centre of Scientific and Technical Information  b) data not collected	<ul> <li>MESRaS SR - to design/activate/deactivate state/school curricula in relation to labour market needs.</li> <li>Higher Territorial Units (regional level) decide on the number of first VET classes to be opened in a respective school year</li> </ul>
Indicator VII Unemployment rate according to individual criteria	Central Office of Labour, Social Affairs and the Family in cooperation with Centre of Scientific and Technical Information	<ul> <li>MESRaS SR - to design/activate/deactivate state/school curricula in relation to labour market needs.</li> <li>Higher Territorial Units (regional level) decide on the number of first VET classes to be opened in a respective school year</li> </ul>
Indicator VIII Prevalence of vulnerable groups: (a) percentage of participants in VET classified as disadvantaged groups (in a defined region or catchment area) according to age and gender	MESRAS SR, Centre of Scientific and Technical Information based on statistical reports from schools	MESRAS SR - the data is used to adapt state curricula to the requirements of vulnerable groups at national level
Indicator IX Mechanisms to identify training needs in the labour market: (a) information on mechanisms set up to identify changing demands at different levels (b) evidence of their effectiveness	a) Governmental Council for VET, MESRaS SR, Central Office of Labour, Social Affairs and the Family, National Occupations Register b) data not collected	SVEI, MESRaS SR, Central Office of Labour, Social Affairs and the Family, emloyers' organisations - more flexible to labour market needs, and promoting innovations in branches of study and training
Indicator X Schemes used to promote better access to VET: (a) information on existing schemes at different levels (b) evidence of their effectiveness	MESRaS SR, Centre of Scientific and Technical Information, SVEI	MESRaS SR - data in the further setting of the VET system in SR

# ANNEX NO. 13: EXAMPLES OF CARDS OF QUALIFICATIONS

# Qualification name: Beekeeper

Qualification code	C6123000-00317
SKKR level	3
Sector council	Agriculture, veterinary and fishing
SK ISCO-08	6123000 Beekeeper
SK NACE Rev.2	A AGRICULTURE, FORESTRY AND FISHING, 01 Crop and animal production, hunting and related service activities
Evidence of acquired qualification	certificate
Occupation name	Beekeeper

# Qualification Standard

Knowledge:	
Define OHS regulations	
define the basis of economics and marketing in beekeeping	
define the laws, regulations and other administrative provisions related to beekeeping, process and marketing of apicultural products	
identify sites suitable for beekeeping	
define types of bee diseases	
define the biology of the European honeybee (Apis mellifera)	
characterize different approaches to methodology in beekeeping	
Skills:	
follow OHS and fire safety regulations	
assess state andquality of bee colonies and apicultural products	
breed bee colonies	
maintain beekeeping equipment, tools and devices	
harvest and produce apicultural products	
work with beehives and bee colonies	
manage bee colonies during the year	
treat and healbees	
keep records of a beekeeping season	
Competences:	
autonomy in decision-making process	
autonomy in organization and planning	
autonomy in the process of production	
autonomy in problem analysis and problem-solving	
responsibility for the quality	
responsibility for performing tasks and duties	
ability to work in a team	

## **Assessment Standard**

Assessed area:		
define types of bee diseases, treat and heal bees		
Assessment criteria:	Assessment methods	Assessment tools
Use different methods to treat bee colonies against the mite	practical testing	practical demonstration
choose the correct procedure to collect a sample of grist in order to examine the occurrence of the mite Varroa destructor	practical testing	practical demonstration
choose the correct procedure to collect a sample to diagnose American Foulbrood (AFB)	practical testing	practical demonstration
Suggest measures in case of occurrence of nosema disease	written method	written assignment
suggest measures in case of occurrence of chalk brood	written method	written assignment
protect bee colonies from pests	practical testing	practical demonstration
identify pests on bee colonies	oral method	oral answer
Conditions for successful accomplishment of the example of the example.	m;	
Condition for successful accomplishment of the exam is	s to fulfill the crite	ria by 70 % at least.
Assessed area:  define the laws, regulations and other administrative p	rovisions related to	beekeeping, processing
-		
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regu	llations, keep recor	
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regu season	Assessment	rds of a beekeeping
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations are season  Assessment criteria:	Assessment methods	Assessment tools
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations are season  Assessment criteria:  specify Slovak technical standard for honey	Assessment methods written method	Assessment tools exam
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations are season  Assessment criteria:  specify Slovak technical standard for honey record the data of a performed hive inspection	Assessment methods written method	Assessment tools exam protocol
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations are season  Assessment criteria:  specify Slovak technical standard for honey record the data of a performed hive inspection specify laws and regulations related to beekeeping	Assessment methods written method written method written method	Assessment tools exam protocol exam
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations are season  Assessment criteria:  specify Slovak technical standard for honey record the data of a performed hive inspection specify laws and regulations related to beekeeping specify available subsidies for beekeeping label honey in accordance with requirements	Assessment methods written method written method written method written method written method written method	Assessment tools exam protocol exam exam
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations are season  Assessment criteria:  specify Slovak technical standard for honey  record the data of a performed hive inspection  specify laws and regulations related to beekeeping  specify available subsidies for beekeeping  label honey in accordance with requirements  for its sale  describe and explain compulsory record keeping	Assessment methods written method	Assessment tools exam protocol exam exam oral answer with
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations regulations.  Assessment criteria:  specify Slovak technical standard for honey record the data of a performed hive inspection specify laws and regulations related to beekeeping specify available subsidies for beekeeping label honey in accordance with requirements for its sale describe and explain compulsory record keeping of beekeeping	Assessment methods written method written method written method written method written method written method oral method written method	Assessment tools exam protocol exam exam oral answer with elaboration
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations season  Assessment criteria: specify Slovak technical standard for honey record the data of a performed hive inspection specify laws and regulations related to beekeeping specify available subsidies for beekeeping label honey in accordance with requirements for its sale describe and explain compulsory record keeping of beekeeping determine OHS regulations	Assessment methods written method written method written method written method written method written method oral method written method mitten method	Assessment tools exam protocol exam exam oral answer with elaboration exam
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations reason  Assessment criteria:  specify Slovak technical standard for honey record the data of a performed hive inspection specify laws and regulations related to beekeeping specify available subsidies for beekeeping label honey in accordance with requirements for its sale  describe and explain compulsory record keeping of beekeeping determine OHS regulations  Conditions for successful accomplishment of the examples.	Assessment methods written method written method written method written method written method written method oral method written method mitten method	Assessment tools exam protocol exam exam oral answer with elaboration exam
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations season  Assessment criteria:  specify Slovak technical standard for honey record the data of a performed hive inspection specify laws and regulations related to beekeeping specify available subsidies for beekeeping label honey in accordance with requirements for its sale describe and explain compulsory record keeping of beekeeping determine OHS regulations  Conditions for successful accomplishment of the exam is	Assessment methods written method written method written method written method written method written method oral method written method mitten method	Assessment tools exam protocol exam exam oral answer with elaboration exam
define the laws, regulations and other administrative p and marketing of apicultural products, define OHS regulations season  Assessment criteria:  specify Slovak technical standard for honey record the data of a performed hive inspection specify laws and regulations related to beekeeping specify available subsidies for beekeeping label honey in accordance with requirements for its sale  describe and explain compulsory record keeping of beekeeping determine OHS regulations  Conditions for successful accomplishment of the exam is Assessed area:	Assessment methods written method written method written method written method written method written method oral method written method mitten method	Assessment tools exam protocol exam exam oral answer with elaboration exam

	T	T
propose reliable ways of transport of bees, according		
to the current legal framework	oral method	oral answer
describe the use and times of use of prominent beekeeping plants	oral method	oral answer
Conditions for successful accomplishment of the example of the example.	n:	
Condition for successful accomplishment of the exam is	to fulfill the criter	ia by 70 % at least.
Assessed area:		
assess state and quality of bee colonies and apicultural colonies, follow OHS and fire safety regulations	products work with	n beehives and bee
Assessment criteria:	Assessment methods	Assessment tools
demonstrate inspection of bee colonies under OHS regulations	practical testing	practical demonstration with elaboration
suggest appropriate measures on the basis of determined state	oral method	oral answer
	orat method	orat ariswer
assess state and quality of apicultural products visually and organoleptically	practical testing	practical demonstration
assess state and quality of apicultural product	practical testing	practical demonstration
describe correct method for beehive wintering	oral method	oral answer
describe correct method for winter feeding of honeybees in accordance with OHS	oral method	oral answer
Conditions for successful accomplishment of the example of the example.	n:	
Condition for successful accomplishment of the exam is	to fulfill the criter	ria by 70 % at least.
Assessed area:		
characterize different approaches to methodology in be	ekeeping	
	Assessment	
Assessment criteria:	methods	Assessment tools
describe methodology of beekeeping in multiple- storey hive	oral method	oral answer
describe methodology of beekeeping in low-storey hive	oral method	oral answer
describe alternative methodology of beekeeping	oral method	oral answer
Conditions for successful accomplishment of the example of the exa		orat ariswer
Condition for successful accomplishment of the exam is		ria by 70 % at least.
Assessed area:		
maintain beekeeping equipment, tools and devices		
, , , ,	Assessment	
Assessment criteria:	methods	Assessment tools
repair selected beekeeping equipment	practical testing	practical demonstration
demonstrate mechanical and chemical cleaning of a beehive		practical demonstration
describe maintenance of selected beekeeping equipment	oral method	oral answer with elaboration
Assessment criteria: repair selected beekeeping equipment demonstrate mechanical and chemical cleaning of a beehive describe maintenance of selected beekeeping	practical testing	practical demonstration practical demonstration oral answer with

	1	1			
demonstrate disinfection of selected beekeeping tools and equipment	practical testing	practical demonstration			
Conditions for successful accomplishment of the exam:					
Condition for successful accomplishment of the exam is	Condition for successful accomplishment of the exam is to fulfill the criteria by 70 % at least.				
Assessed area:					
define the biology of the European honeybee (Apis mel	lifera)				
	Assessment				
Assessment criteria:	methods	Assessment tools			
specify the anatomy and physiology of the European honeybee	written method	exam			
specify organs, glands, sensory organs of a honeybee	written method	exam			
specify basic nutrition of the European honeybee	written method	exam			
specify basic genetics of bees	written method	exam			
specify basic biology of bee colonies	written method	exam			
Conditions for successful accomplishment of the exa	m:				
Condition for successful accomplishment of the exam is	s to fulfill the criter	ria by 70 % at least.			
Assessed area:					
define the basis of economics and marketing in beekee	ping				
Assessment criteria:	Assessment methods	Assessment tools			
specify basic economic terminology	written method	exam			
specify legal measures related to entrepreneurship in beekeeping sector	written method	exam			
specify the basis of marketing and management	written method	exam			
Conditions for successful accomplishment of the exa	1				
Condition for successful accomplishment of the exam is	s to fulfill the criter	ria by 60 % at least.			
Assessed area:		Ź			
manage bee colonies during the year					
Assessment criteria:	Assessment methods	Assessment tools			
describe correct working procedure for spring management of bees	oral method	oral answer			
describe correct working procedure for summer management of bees	oral method	oral answer			
describe correct working procedure for late-summer management	oral method	oral answer			
describe correct working procedure for autumn management of bees	oral method	oral answer			
describe correct working procedure for winter management of bees	oral method	oral answer			
Conditions for successful accomplishment of the exam:  Condition for successful accomplishment of the exam is to fulfill the criteria by 70 % at least.  Assessed area:					
			<u> </u>	·	

harvest and produce apicultural products		
Assessment criteria:	Assessment methods	Assessment tools
describe different techniques to harvest and process honey	written method	written assignment
describe different techniques to harvest and process beeswax	written method	written assignment
specify different techniques to process bee pollen	written method	written assignment
describe different techniques to process royal jelly	written method	written assignment
describe handling of honey according to hygiene standards for food	written method	written answer
describe basic indicators of honey quality	written method	written answer
Conditions for successful accomplishment of the example.	m:	
Condition for successful accomplishment of the exam is	to fulfill the crite	ria by 70 % at least.
Assessed area:		
Breeding of bee colonies		
Assessment criteria:	Assessment methods	Assessment tools
describe breeding of bee colonies through creating putaways	written method	written answer
describe breeding of bee colonies through taking brood box away and putting an empty one in its place to relocate the bees	written method	written answer
describe breeding of bee colonies through putaways	written method	written answer
describe the main causes of swarming, types of swarms, ways of toning down the swarming moods and use of bee swarms	written method	written answer
Conditions for successful accomplishment of the exam:		

## Organisational and methodical instructions

## Methodical instructions:

Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18

Condition for successful accomplishment of the exam is to fulfill the criteria by 70 % at least.

## Instructions for realisation of the exam:

Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18

## Assessment process:

Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18

## Final assessment:

Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18

Structure of the examination commission:

Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18

Requirements for the professional competence of the examiner:

The examiner must meet at least one requirement::

-secondary vocational education with Maturita exam in the branch of beekeeping -at least 5 years of practical training in the field of agriculture with a focus on beekeeping

Material and technical conditions of the exam:

In order to ensure proper assessment process, the examiner should be provided with the following:
-Material requirements: a complete beehive with bee colonies, different laboratory and beekeeping tools and equipment, samples of bee products, didactic materials
-Space requirements: apiary site, specialized classroom

The qualifications card was approved by the National Board for Education and Qualifications on:	06.08.2015
Validity of the qualifications card from:	06.08.2015

## Qualification name: Goldsmith, jeweller

Qualification code	U7313001-00218
SKKR level	4
Sector council	Crafts, handicrafts and personal services
SK ISCO-08	7313001 Goldsmith, jeweller
SK NACE Rev.2	C INDUSTRIAL PRODUCTION, 32 Other production; R ART, ENTERTAINMENT AND RECREATION, 90 Creative, arts and entertainment activities
Evidence of acquired qualification	certificate of apprenticeship
Occupation name	Goldsmith and jeweller

## **Qualification Standard**

Knowledge:
define basic principles and rulebook of business and its requisites
describe laws and duties of employers and employees given by the legal framework
define forming of precious metals and gems in the arts and crafts sector
describe the properties of precious metals and non-metal materials
describe technology of metal forming in arts and crafts
characterize ways of creating and fixing jewellery made from precious metals
characterize the technology of melting and casting of precious metals
define technology of soldering and surface finishing of metals
describe production procedures of given jewels
characterize deep and jewellery technique
define chemical processing of precious metals
define the Hallmarking Act
Skills:

produce jewels according to the principles of health and safety, hygiene, environmental protection and fire protection

explain the technical documentation and art supplies needed to produce an arts and crafts product made form precious metals

choose the correct technological procedure, materials, tools and set-out for jewellery making operate furnaces for melting precious metals in the production of jewellery

melt and cast precious metals in the jewellery production

operate machines for pressing, rolling, pulling, annealing and soldering of precious metals

cut out, cut, saw, bend, twist and push in precious metals

finish the jewels

fix and adjust jewels

process a drawn design for the production of the jewel

construct a jewel according to the drawn design

put gemstones into jewellery

## Competences:

ability to communicate with a client

responsibility for the quality of finished product

ability to analyse and solve problems

creativity, responsibility for personal development

independence in organisation and planning of work related activities

## **Assessment Standard**

## Assessed area:

define forming of precious metals and gems in the arts and crafts sector, describe technology of metal forming in arts and crafts, describe the properties of precious metals and non-metal materials

Assessment criteria:	Assessment methods	Assessment tools
characterize the processing of precious metals and gemstones in arts and crafts	oral method	oral answer
describe the properties of precious gemstones	written method	written answer
explain the technology of forming metals	oral method	oral answer
describe the properties of precious metals and non- metal materials	written method	written task

#### Conditions for successful accomplishment of the exam:

Condition for successful accomplishment of the exam is to fulfil the criteria by 75% at least.

## Assessed area:

characterize ways of creating and fixing jewellery made from precious metals, define technology of soldering and surface finishing of metals, characterize the technology of melting and casting of precious metals, describe technology of metal forming in arts and crafts

Assessment criteria:	Assessment methods	Assessment tools
explain the method of creating and fixing of jewellery	oral method	oral answer

perform the technology of soldering and surface finishing of metals	practical exam	practical example with description
Characterise the technology of melting and forming of precious metals	oral method	oral answer with elaboration
Explain the technology of forming metals	oral method	oral answer
Conditions for successful accomplishment of the exa	m:	
Condition for successful accomplishment of the exam i		ria by 75% at least.
Assessed area:		
define the Hallmarking Act, define chemical processing	of precious metals	S
	Assessment	
Assessment criteria:	methods	Assessment tools
define the Hallmarking Act, hallmarking labels ,labels of products - genuineness, labels, regulations on management, loss standards	oral method	oral method with elaboration
define chemical processing of precious metals	oral method	oral answer
characterise afination	oral method	oral answer
describe the way of acquiring genuine gold and silver describe metallization, gilding, chemical colouring	oral method	oral answer
Conditions for successful accomplishment of the exa		orat unswer
Condition for successful accomplishment of the exam i		ria hy 75% at least
Assessed area:	s to rath the trice	ind by 75% at teast.
characterize deep and jewellery technique describe pr	oduction procedur	Δς
enaracterize deep and jewettery teeningue describe pr		
Assessment criteria:	Assessment methods	Assessment tools
describe characteristics of a garnet and jewellery jewel	oral method	oral answer with elaboration
describe approach to the technologies of jewellery production	oral method	oral answer
list types of jewellery rings	oral method	oral answer
describe fundamentals in jewellery making	oral method	oral answer
describe procedures - simple and complicated rings, bracelets, necklaces, broches, earrings, cufflinks	oral method	oral answer with elaboration
Conditions for successful accomplishment of the exa	m:	
	- + - £ £  +	ria by 75% at least
Condition for successful accomplishment of the exam i	s to fulfil the crite	Ta by 75% at teast.
Condition for successful accomplishment of the exam i Assessed area:	s to fulfil the crite	na by 75% at teast.
Assessed area: explain the technical documentation and art supplies r made form precious metals, process a drawn design for correct technological procedure, materials, tools and s	needed to produce r the production of	an arts and crafts produc the jewel,choose the
· · · · · · · · · · · · · · · · · · ·	needed to produce r the production of	an arts and crafts produc the jewel,choose the

Choose and write down the correct technological procedure, material, and tools for the production of		
the jewel	written method	written assignment
use technological documentation and drawn documentation for production of the jewel	practical testing	practical testing with elaboration
Produce a jewel according to self-drawn documentation	practical testing	practical demonstration

## Conditions for successful accomplishment of the exam:

Condition for successful accomplishment of the exam is to fulfil the criteria by 75% at least.

#### Assessed area:

gemstones into jewellery fix and adjust jewels ,finish the jewels, produce jewels according to the principles of health and safety, hygiene, environmental protection and fire protection

Assessment criteria:	Assessment methods	Assessment tools
produce and fix a jewel according to the health and safety regulations, hygiene, environmental and fire protection	practical testing	practical demonstration with elaboration
demonstrate putting of gemstones into jewellery	practical testing	practical demonstration with elaboration
use protecting tools when working and work in accordance with health and safety regulations	practical testing	practical demonstration
demonstrate fixing and adjusting of jewels	practical testing	practical demonstration

## Conditions for successful accomplishment of the exam:

Condition for successful accomplishment of the exam is to fulfil the criteria by 75% at least.

#### Assessed area:

operate furnaces for melting precious metals in the production of jewellery, melt and cast precious metals in the jewellery production, operate machines for pressing, rolling, pulling, annealing and soldering of precious metals, cut out, cut, saw, bend, twist and push in precious metals

Assessment criteria:	Assessment methods	Assessment tools
describe procedure, set-up and basic maintenance of a furnace for melting precious metals	oral method	oral answer with elaboration
describe procedure, set-up and maintenance on a press, rolling stand, pulling bench	oral method	oral answer with elaboration
describe the procedure of annealing and soldering of precious metals	oral method	oral answer with elaboration
demonstrate melting and putting of a precious metal during a jewel production according to the design	practical testing	practical demonstration
demonstrate cutting, filing, bending, twisting and braking down of precious metals	practical testing	practical demonstration
use protective measures and work according to the health and safety regulations, hygiene and fire regulations	practical testing	practical demonstration

## Conditions for successful accomplishment of the exam:

Condition for successful accomplishment of the exam is to fulfil the criteria by 75% at least.

#### Assessed area:

define basic principles and rulebook of business and its requisites, describe laws and duties of employers and employees given by the legal framework

	Assessment	
Assessment criteria:	methods	Assessment tools
describe principles of business and trade, kinds of		
trade, general and specific conditions of being able		
to trade, maintaining a trade through the appointed		oral answer with
person	oral method	elaboration
describe rights and obligations in the area of		
business - in health and safety, creating of a price,		oral answer with
employment	oral method	elaboration
list and explain rights and obligations of employees		
and of an employer given by the legal framework		oral answer with
. , , , ,		
(conditions, contracts)	oral method	elaboration

## Conditions for successful accomplishment of the exam:

Condition for successful accomplishment of the exam is to fulfil the criteria by 75% at least.

## Organisational and methodical instructions

#### Methodical instructions:

Formal education: Act no. 245/2008 Coll. on Upbringing and Education (School Act) and on amendments and supplements to certain laws, as amended, § 72-90 and §109-111. Non-formal and informal learning: Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18.

#### Instructions for realisation of the exam:

Formal education: Act no. 245/2008 Coll. on Upbringing and Education (School Act) and on amendments and supplements to certain laws, as amended, § 72-90 and §109-111. Non-formal and informal learning: Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18.

## Assessment process:

Formal education: Act no. 245/2008 Coll. on Upbringing and Education (School Act) and on amendments and supplements to certain laws, as amended, § 72-90 and §109-111. Non-formal and informal learning: Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18.

#### Final assessment:

Formal education: Act no. 245/2008 Coll. on Upbringing and education (School Act) and on amendments nd supplements to certain laws, as amended, § 72-90 and §109-111. Non-formal and informal learning: Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18.

## Structure of the examination commission:

Formal education: Act no. 245/2008 Coll. on Upbringing and Education (School Act) and on amendments and supplements to certain laws, as amended, § 72-90 and §109-111. Non-formal and informal learning: Act no. 568/2009 Coll. on Lifelong learning and amendments and supplements to certain laws, as amended, § 17 and § 18.

Requirements for the professional competence of the examiner:

The chairman and at least two members of the examination committee are pedagogical staff members of a certified educational institution with the necessary qualifications.

#### Material and technical conditions of the exam:

The educational institution secures for the exam the following: Practical exam:

- suitable space and needed energy resources according to health and safety regulations;
- work clothes according to the health and safety regulations provided by the learner himself/herself (a cover and sturdy shoes);
- protective equipment provided by educational institution;
- hand tool and equipment for production provided by the learner himself/herself;
- gauges and measuring instruments;
- drawn documentation, technological documentation;
- semi finished AG, synthetic gemstones, solder, Fluoron, borax, 30% H2SO4, water;
- goldsmith's workshop, equipped with goldsmith's tools and instruments, instruments for cleaning of the product, instruments for pre-drawing of the patterns, set of polishing disks. It's necessary to equip the exam with sufficient amount of sandpaper, polishing material, ultrasound;
- room for final products;
- technical equipment for the documentation of final product.

#### For the oral exam:

- a room or selected classroom;
- ICT equipment.

The qualifications card was approved by the National Board for Education	
and Qualifications on:	25.09.2015
Validity of the qualifications card from:	25.09.2015

## Qualification name: Electro technician specialist technologist

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Qualification code	U2151001-00101
SKKR level	7
Sector council	Electrical engineering
SK ISCO-08	2151001 Electro technician specialist technologist
SK NACE Rev. 2	C INDUSTRIAL PRODUCTION, 26 Production of compute, electronical and optical products; C INDUSTRIAL PRODUCTION, 27 Production of electrical products
Evidence of acquired qualification	diploma
Occupation name	Electro technician specialist technologist

## **Qualification Standard**

## Knowledge:

define the regulations for safety and protection of health at work, hygiene at work, protection from fire and environmental protection

define with comparison the principles of function of electrical machines and appliances

characterize the technical norms and corresponding technical documentation in electrical engineering

define the suitability of use of electrical measuring instruments and systems in measuring

compare the kinds of consumer electronics (white appliances, black appliances, etc.) from the view technological production

characterize the selected production procedures

describe appropriate methods of measuring and ways of evaluating electrical and non-electrical values

identify individual elements and their cooperation in systematic engineering

#### Skills:

apply the principles of safety and protection of health at work, hygiene at work, protection from fire and environmental protection

select the correct procedures with regard to technical and economical requirements

optimize the production in electrical engineering

prepare project documentation of electrical instruments and installations and select the corresponding materials

diagnose the uptime and functionality of systems through measuring technique

coordinate operational plans of the production of electrical engineering with other departments of the company

use ICT to organize the production and operative process

introduce new procedural changes in the production

operate selected computer systems

evaluate the performances of the employees according to selected criteria

## Competences:

ability to organize and plan work activities

responsibility for solving of problems

ability to analyze and decide correctly upon solving arisen problems

ability to lead a collective and communicate with people

#### Assessment Standard

## Assessed area:

identify individual elements and their cooperation in systematic engineering, characterize the technical norms and corresponding technical documentation in electrical engineering, define with comparison the principles of function of electrical machines and appliances, introduce new procedural changes in the production

Assessment criteria:	Assessment methods	Assessment tools
describe the operation of corresponding production		
processes in electrical engineering or in electronics	written method	written task
define optimizing of methods in production with regard to various aspects of optimization (economical, human resources, logistics,)	oral method	oral answer
project (software modeling) the production processes from the point of view of directing, organization, flow of the material including the application of relevant norms and standards	practical examination	practical demonstration with elaboration

T	1
written method	written task
written method	project
m:	
to fulfil the criteri	a by 75% at least.
ruments and syster	ns in measuring,
Assessment methods	Assessment tools
practical examination	practical demonstration with elaboration
written method	written answer
practical examination	practical demonstration with elaboration
practical examination	practical demonstration
m:	
to fulfil the criteri	a by 75% at least.
	cal and non-electrical
Assessment methods	Assessment tools
written method	written task
written method	written answer
written method	written answer
m:	
s to fulfil the criter	ia by 75% at least.
e and functionality	ances, etc.) from of, systems through cal and economical
Assessment methods	Assessment tools
	written method m: to fulfil the criteri ruments and syster  Assessment methods  practical examination  written method  practical examination  practical examination  f evaluating electring  Assessment methods  written method  Assessment iances, black appliate and functionality ith regard to technic

list min. 10 kinds of electronical products	oral method	listing
optimize selected production procedure	written method	written task
describe starting materials and parts of production	written method	written task
describe and draw out a concept of production process of selected products of electrical engineering with appointing the measuring points and measuring technique	written method	written task

## Conditions for successful accomplishment of the exam:

Condition for successful accomplishment of the exam is to fulfil the criteria by 75% at least.

#### Assessed area:

prepare project documentation of electrical instruments and installations and select the corresponding materials , diagnose the uptime and functionality of systems through, measuring technique , coordinate operational plans of the production of electrical engineering with other departments of the company evaluate the performances of the employees according to selected criteria

Assessment criteria:	Assessment methods	Assessment tools
independently identify measuring tools and measurements during the control of a production line	written method	project
outline a functioning scheme of selected electronic product	written method	written answer
identify control points of a production line	written method	written task
outline an operative plan of production in electrical engineering (needed steps for implementation of production)	written method	written answer
test the functionality of a system through control points	practical examination	practical demonstration
identify the parameters of evaluation of employees in selected production	oral method	oral answer with elaboration

## Conditions for successful accomplishment of the exam:

Condition for successful accomplishment of the exam is to fulfil the criteria by 75% at least.

## Assessed area:

use ICT to organize the production and operative process, operate selected computer systems, define the regulations for safety and protection of health at work, hygiene at work, protection from fire and environmental protection, apply the principles of safety and protection of health at work, hygiene at work, protection from fire and environmental protection

Assessment criteria:	Assessment methods	Assessment tools
set up working parameters of a production line	practical examination	simulated task
inspect the working parameters of a production line	practical examination	practical demonstration with elaboration
identify starting material of a production line	written method	written task

describe the functionality of machines and equipment in production	written method	written task
determine parameters of a production line and the needed service	written method	written task
evaluate the production data with the aim of optimizing the process and minimizing the cost	written method	written task
describe the health and safety regulations, hygiene at work, fire prevention and environmental protection	written method	test

#### Conditions for successful accomplishment of the exam:

Condition for successful accomplishment of the exam is to fulfil the criteria by 75% at least. The test of health and safety must be passed at the minimum of 90%.

## Organisational and methodical instructions

#### Methodical instructions:

Act no. 131/2002 Coll. on higher education institutions and on amendments to certain laws, as amended, § 63.

Instructions for realisation of the exam:

Act no. 131/2002 Coll. on higher education institutions and on amendments to certain laws, as amended, § 63.

The exam has got a written and a practical part.

Written part of the exam precedes the practical and oral part of the exam and can be evaluated separately before the beginning of an oral exam by the member of the examination committee, it can be organized in form of a test.

Oral part of the exam is going to be undertaken by all the learners, apart from those who did not achieved the needed marks in more than two parts of the written exam.

The examination committee marks the learner with "passed" or "fail".

If the learner fails the exam, he/she can apply for a retake, if the learner did not pass two subjects. If the learner doesn't succeed in the retake, he/she can apply for a second retake, which is going to be the final attempt with the final result.

The learner can retake the exam after two months at the earliest, but until one year after taking part in the original exam at the latest.

If the learner can resign from the exam - the resignation is perceived as if the learner did not take part in the exam at all. The learner that was successful in the exam acquires a certificate of professional competence in the corresponding qualification.

## Assessment process:

Act no. 131/2002 Coll. on higher education institutions and on amendments to certain laws, as amended, § 63.

#### Final assessment:

Act no. 131/2002 Coll. on higher education institutions and on amendments to certain laws, as amended, § 63.

#### Structure of the examination commission:

Act no. 131/2002 Coll. on higher education institutions and on amendments to certain laws, as amended, § 63.

Requirements for the professional competence of the examiner:

Act no. 131/2002 Coll. on higher education institutions and on amendments to certain laws, as amended, § 63.

## Material and technical conditions of the exam:

For the proper course of the exam, must the examiner have:

- 1. Material conditions (measuring instruments and tools, computers, simulator, operating software, printers, scanners, calculators, evaluation tables, legislative norms, grade papers, data files, professional literature)
- 2. Technical conditions (corresponding classroom, laboratories, theoretical and practical classrooms)

The qualifications card was approved by the National Board for Education	
and Qualifications on:	05.08.2015
Validity of the qualifications card from:	05.08.2015

## Qualification name: Lawyer

Qualification code	U2611002-01042
SKKR level	7
Sector council	Administrative, economics and management
SK ISCO-08	2611002 Lawyer
SK NACE Rev.2	M PROFFESIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES, 69 Activities in law and accounting
Evidence of acquired qualification	certificate
Occupation name	Lawyer

## **Qualification Standard**

Knowledge:		
specify procedural and substantive law		
describe the legal framework connected to the practice of a lawyer		
define the fact state of a law case		
specify the forms of business		
categorize the kinds of a criminal case		
explain the process of an enforcement proceeding		
explain the terminology from the criminal, business, civil and other legislation		
describe the required attributes of formal documentation and correspondence		
Skills:		
apply the Act on Legal Profession in practice		
apply legal guidance for clients in practice		
adhere to the legal norms in practice		
represent a client in proceedings, lawsuits, trials		
evaluate economical context		
put together standpoints, documents, statements for cases		
communicate in an exact, correct and clear manor at work		

perform legal services - collating, change and liquidation of a public business companies, limited

companies, limited liability companies, joint stock companies and cooperatives

complete agenda of business-legal character for corporate entities and others and perform connected activities

sell legal services

#### Competences:

responsibility for the conduct of himself/herself

responsibility for adherence to the Act on Legal Profession

independence in decision making and in solving of problems

independence in finishing tasks and obligations

communicability

ability to lead business meetings with clients

responsibility for defending of client's interest within the legal framework

independence in organizing and planning of the working activities

## **Assessment Standard**

#### Assessed area:

describe the legal framework connected to the practice of a lawyer, explain the terminology from the criminal, business, civil and other legislation apply the Act on Legal Profession in practice, describe the required attributes of formal documentation and correspondence, apply the Act on Legal Profession in practice

Assessment criteria:	Assessment methods	Assessment tools
explain the term of the lawyer's secrecy and connected responsibilities	oral method	oral answer with elaboration
specify the obligations of a lawyer in leading a lawyer's practice	oral method	oral answer with elaboration
explain the lawyer - client relationship	oral method	oral answer with elaboration
define various terms connected to the layer's practice in relation to legislation	written method	test
produce a law search and describe the process of gaining information	written method	written answer with elaboration
create a contract of legal representation	practical exam	practical exercise

#### Conditions for successful accomplishment of the exam:

Condition for successful accomplishment of the exam is to fulfil the criteria by 80% at least.

## Assessed area:

sell legal services, perform legal services - collating, change and liquidation of a public business companies, limited companies , limited liability companies, joint stock companies and cooperatives, describe the required attributes of formal documentation and correspondence, evaluate economical context, specify the forms of business, complete agenda of business-legal character for corporate entities and others and perform connected activities

Assessment criteria:	Assessment methods	Assessment tools
describe the legal obligations of business-legal character - debts, claims	oral method	oral answer with elaboration

describe the procedure of enlisting data into the business register, including representation in the procedure of acquiring a trade permit	oral method	oral answer with elaboration
simulate a business meeting with a client - focus on creating a relationship with a client, identifying the needs, active listening, leading of the business meeting	practical exam	simulated task
Prepare a draft of a lawsuit based on previous information and client's needs	written method	written answer
Conditions for successful accomplishment of the exa	m:	
Condition for successful accomplishment of the exam i	s to fulfil the criter	ia by 80% at least.
Assessed area:		
categorize the kinds of a criminal case define the fact substantive law, represent a client in proceedings, law in practice, put together standpoints, documents, stat	suits, trials apply le	
Assessment criteria:	Assessment methods	Assessment tools
describe the basic signs, kinds of a crime and the possibilities of defense	oral method	oral answer with elaboration
explain the term of a perpetrator and accomplice	oral method	oral answer with elaboration
specify the principles of sentences and kinds of sentences	oral method	oral answer
specify procedural and substantive law	oral method	oral answer with elaboration
simulate and interview with an accuse client	practical exam	simulated task
evaluate a situation and write a law standpoint for a case	practical exam	task - a problem
Conditions for successful accomplishment of the exa		
Condition for successful accomplishment of the exam i	s to fulfil the criter	ia by 80% at least.
Assessed area:		
adhere to the legal norms in practice, explain the proc communicate in an exact, correct and clear manor at v		ent proceeding,
Assessment criteria:	Assessment methods	Assessment tools
define the law of obligations - formation, change and demise of obligations	oral method	oral answer with elaboration

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Condition for successful accomplishment of the exam is to fulfil the criteria by 80% at least.

oral method

practical exam

explain the process of enforcement proceedings

Suggest the procedure in defense in enforcement

Conditions for successful accomplishment of the exam:

proceedings

oral answer with

task - a problem

elaboration

## Organisational and methodical instructions

Organisational and methodical mistractions		
Methodical instructions:		
Act on Legal Profession no. 586/2003 Coll.		
Instructions for realisation of the exam:		
Act on Legal Profession no. 586/2003 Coll.		
Assessment process:		
Act on Legal Profession no. 586/2003 Coll.		
Final assessment:		
Act on Legal Profession no. 586/2003 Coll.		
Structure of the examination commission:		
Act on Legal Profession no. 586/2003 Coll.		
Requirements for the professional competence of the examiner:		
Act on Legal Profession no. 586/2003 Coll.		
Material and technical conditions of the exam:		
Material conditions: PC, phone, calculator, scanner, fax machine, office and stationary supplies, necessary software equipment, internet connection.  Technical condition: basic examination classroom, meeting room equipped with a table for the committee and the learners.		
The qualifications card was approved by the National Board for Education		
and Qualifications on: 18.09.20		

Validity of the qualifications card from:

18.09.2015 18.09.2015

## **ANNEX NO. 14: GLOSSARY**

English term	Slovak Term	Explanation
assessment of learning outcomes	hodnotenie vzdelávacích výstupov	The process of confirming that the assessed results of learning outcomes achieved by a learner correspond to specific outcomes which may be required for a unit or a qualification.
assessment standard	hodnotiaci štandard	Part of a qualification card providing information on scope, methods, tools and criteria of assessment process, staff, material, technological and space conditions for exam conduct.
competences	kompetencie	Intellectual/sensory/motor qualities/characteristics of individuals that are a prerequisite for the use of acquired knowledge and skills in order to execute required activities in a particular environment (work, academic, personal), and under certain circumstances (e.g. interaction with people). In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy.
content standard	obsahový štandard	A set of requirements on what a student should know/be able to do by the end of a learning process. They are binding for a teacher.
descriptor	deskriptor	A generic lexical unit characterizing the expected learning outcomes achieved at the appropriate level of EQF/NQF  Descriptor is a generic set of key words which characterise knowledge, skills and competences at a certain level
education standard	vzdelávací štandard	A set of requirements on a pupil to obtain a certification on attainment. It is divided into a content standard and a performance standard.
European Qualifications Framework	Európsky kvalifikačný rámec	A reference tool for the description and comparison of qualification levels in qualifications systems developed at national, international or sectoral level.
formal education	formálne vzdelávanie	Learning that occurs in an organised and structured environment which is explicitly designated for learning and which typically leads to awarding a level of education and/or a qualification usually in the form of a certificate or diploma. It includes the systems of general education, initial VET upon the entry to employment and higher education (2008/C 111/01). In Slovakia it represents the "school" education.
further education	ďalšie vzdelávanie	Education provided in institutions of further education, which builds on school education, and allows receiving a partial qualification or full qualification; or amend, renew, extend or deepen the qualification acquired in school education, or to accommodate interests and gain eligibility to participate in the life of civil society (568/2009 Coll.) Types of further education:

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further education	ďalšie vzdelávanie	further vocational education in an accredited education program
		retraining in an accredited educational program
		continuing education
	, , , , , , , , , , , , , , , , , , ,	• interest education, civic education, education of seniors and other education.
informal learning	informálne učenie sa	Learning resulting from daily activities related to work, family or leisure, which is not organised or structured in terms of objectives, time or learning support. Informal learning is not necessarily intentional from the learner's perspective; examples of learning outcomes acquired through informal learning are skills acquired through life and work experience, learned languages and intercultural skills acquired during the stay in another country, the skills acquired through household activities (e.g. child care):
knowledge	vedomosti	Adopted and understood information (facts, theories, procedures, etc.), general or specialized (factual).
learning outcome	vzdelávací výstup	A statement of what a learner knows, understands and is able to do upon completion of a learning process, which is defined in terms of knowledge, skills and competences.
levelling	zarad'ovanie	A process of comparing the qualification against the national descriptors the result of which is placing a qualification on the level of SKKR.
lifelong learning	celoživotné vzdelávanie	All activities that are carried throughout life, with the aim of improving knowledge, skills and abilities. Lifelong learning in the education system of the Slovak Republic consists of: a) school education, and b) further education following the level of education achieved in school education (568/2009 Coll.)
national occupational standard	národný štandard zamestnania	Provides the information on actual requirements for work performance according to the following elements:  • characteristics (general description of an occupation);
		• alternative names ;
		the form of regulation;
		certificates and other written evidences;
		level of education;
		practical experience;
		classification parameters;
		• general abilities;
		vocational knowledge;
		vocational skills

# REFERENCING REPORT OF THE SLOVAK QUALIFICATIONS FRAMEWORK TO THE EUROPEAN QUALIFICATIONS FRAMEWORK

National Occupations Register	Národná sústava povolaní	An integrated information system of descriptions of standard labour market demands for particular jobs. NSO specifies requirements for professional skills and practical experience necessary to carry out work activities in jobs on the labour market
National Qualifications Register	Národná sústava kvalifikácií	A public register containing description of partial and full qualifications recognized and distinguished in the Slovak Republic, required for the performance of work activities for a given profession in the form of qualification standards and assessment standards.
non-formal education	neformálne učenie sa	learning that takes place through the planned activities (in terms of learning objectives, time allotted for education), where a certain educational support is available (e.g. relationship between students and teachers); it can include programs that teach job skills, literacy programs for adults as well as basic education of early school leavers. The very common forms of non-formal education include in-house training, through which a company updates and improves skills of their workers, for example skills in information and communication technologies, structured online education (e.g. by using of open educational resources) and courses organized by civil society organizations for its members, its target group or the general public. (2008/C 111/01). In Slovakia non-formal learning is understood as "further" education.
occupational qualification	profesijná kvalifikácia	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to a given occupational standard described in the National Occupations Register.
performance standard	výkonový štandard	Content standard elaborated in detail. It contains specific learning targets with minimum performance limits They are binding for a pupil/student.
professional competence	odborná spôsobilosť	A proof of required education and professional experience, or successful execution of an examination, unless otherwise provided for by a respective law. It is a special condition to perform certain activities, especially professional qualification within a regulated occupation.
professional qualification	odborná kvalifikácia	Capacity to carry out a regulated profession (occupation) confirmed by an evidence of professional qualification or evidence of pursuing professional experience.
qualification	kvalifikácia	A formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to a given standard.
qualification card	karta kvalifikácie	Comprehensive information on qualification consisting of a qualification standard and assessment standard and other relevant information (statistical classifications, recognition and validation etc.).
qualification standard	kvalifikačný štandard	Part of a qualification card consisting of list of learning outcomes structured into knowledge, skills and competences.

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regulated profession	regulované povolanie	An activity, group of activities or profession that can be carried out only in accordance with specific conditions laid down by the laws of a State. Regulated profession can be implemented on the basis of regulated education, which may be associated with the use of a professional title or designation of the occupation, as well as on the basis of membership in a chamber or in any other professional organization. The regulated professions in the Slovak Republic are regulated by several legal norms:
		1. Act no. 293/2007 Coll. on the recognition of professional qualifications, as amended
		2. Trade Act
		3. The rules relating to the health professions, veterinary surgeons, architects, landscape architects, civil engineers, lawyers and others.
referencing	prirad'ovanie	The process of assigning national qualifications frameworks or systems to EQF based on 10 criteria ensuring transparency of the processes and methods.
school curriculum	školský vzdelávací program	The 2nd level of pedagogical documentation. Each school draws from educational standard of respective state curriculum with the possibility of differentiation in the form of disposable hours. ScC is created by schools according to their profiling and goals, but in line with the regional labour market needs.
skill	zručnosť	Motor/intellectual individual's ability to apply knowledge, materials, tools and instruments in practice (e.g. in the exercise of a particular activity).
Slovak Qualifications Framework	Slovenský kvalifikačný rámec	An instruments at national level serving for classification and grading of qualifications and qualifications levels according to certain criteria aimed at monitoring and coordinating qualifications systems to increase transparency, access to qualifications in relation to the labour market and lifelong learning. The National Qualifications Framework contains levels of classification of qualifications according to a set of criteria for achieved knowledge, skills and competence and is linked to the levels of the European Qualifications Framework.
state curriculum	štátny vzdelávací program	The highest and the most general pedagogical document, which defines the joint requirements for the whole group of study or training branches. It also stipulates so-called "education standard", which sets the basic target requirements on graduate's achievement. It is expressed in the form of "performance" and "content" standards.
validation of learning outcomes	uznávanie vzdelávacích výstupov	The process by which an authorized authority certifies that an individual acquired the learning outcomes that have been assessed according to the relevant standards and consist of the following four different stages: identification of specific individual's experience through an interview;  1. documentation on the visibility of individual experience;  2. formal evaluation of these experiences  3. certification of assessment results, which can lead to a partial or full qualification; (2008/C 111/01)