



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

2017

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**OF THE SLOVAK
QUALIFICATIONS
FRAMEWORK TO
THE EUROPEAN
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2017

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LIST OF ABBREVIATIONS

ATMS	Association of Towns and Municipalities of Slovakia
C	conservatory
Coll.	Collection of Laws
CSTI SR	Centre of Scientific and Technical Information SR
CTU SR	Confederation of Trade Unions of the Slovak Republic
ECVET	European Credit Transfer System in Vocational Education and Training
EHEA	European Higher Education Area
ENQA	European Association for Quality Assurance in Higher Education
EQAVET	European Quality Assurance Reference Framework in Vocational Education and Training
EQR	European Qualifications Framework
EU	European Union
FEA	Federation of Employers' Associations of the Slovak Republic
FQ	full qualification
HEI	higher education institution
HTU	Higher territorial unit
ISCED	International Standard Classification of Education
IT	intellectual talent
LLL	lifelong learning
MESRaS	Ministry of Education, Science, Research and Sport of the Slovak Republic
MLSAaF	Ministry of Labour, Social Affairs and Family of the Slovak Republic
NCE	National Classification of Education
NCP	National Coordination Point
NCEQ	National Council for Education and Qualifications
NICME	National Institute of Certified Measurements of Education
NIE	National Institute for Education
NILLL	National Institute of Lifelong Learning
NOS	National Occupational Standard
NOR	National Occupations Register
NQR	National Qualification Register
NUE SR	National Union of Employers of the Slovak Republic
PD	physical disability
PQ	partial qualification
QC	qualification card
QF EHEA	Qualifications Framework of the European Higher Education Area
SCBE	Statistical Classification of Branches of Education
SC	state curriculum
ScC	school curriculum
SVEI	State Vocational Education Institute
SKKR	Slovak Qualifications Framework
SR	Slovak Republic
SSI	State School Inspection
SVS	secondary vocational school
VET	vocational education and training
WG	working group

FOREWORD

This document is an updated version of the current state-of-play report on the implementation of the Slovak Qualifications Framework which was presented to the European Qualifications Framework Advisory Group in December 2015.

The Referencing Report explains linking the Slovak Qualifications Framework with the European Qualifications Framework for Lifelong Learning and describes processes and principles which ensure its compatibility.

The Referencing Report is an outcome of a collaborative work of the EQF National Coordination Point and the Department of Lifelong Learning of the Ministry of Education, Science, Research and Sport of the Slovak Republic. It was reviewed and commented by relevant departments of the Ministry of Education, Science, Research and Sport of the Slovak Republic, national and foreign experts, and members of the EQF Advisory Group.

INTRODUCTION

The Slovak Qualifications Framework (SKKR) has opened the way for creation of an open, transparent and flexible qualifications system in Slovakia. The driving force for its implementation in the Slovak Republic were increasing effort for internationalisation of education and removing barriers to the European mobility. SKKR is a tool, which allows common understanding and fine-tuning of learning outcomes taking into account different learning pathways. It builds on involvement and participation of stakeholders in the development of qualifications and offers opportunities for adaptation of qualifications to the needs of the labour market and society. In the international context, it supports recognition and transparency of qualifications.

The history of the Slovak Qualifications Framework dates back to 2009, when the Slovak Government made a legislative commitment to its creation by adopting the Government Resolution No. 105/2009 of 4 February 2009. The Resolution announced the steps necessary for building the national structures and started processes leading to its full implementation.

The Referencing Report summarises the developments of SKKR in 2009-2017 and explains its relation to the European Qualifications Framework as well as its compatibility with EQF. The report covers qualifications from general education, VET, HE and occupational qualifications. The system of higher education in Slovakia has been undergoing an extensive reform and major legislative changes are expected in the forthcoming period. Therefore, the self-certification report to the Qualifications framework for the European Higher Education Area will be submitted separately, after the reform has been fully adopted.

It also presents the roadmap for future in the light of the national reform of education announced by the newly elected government in November 2016 and an anticipated influence of SKKR on the Slovak qualifications system, mainly in the direction towards validation of non-formal and informal learning.

Development of SKKR, as well as elaboration of this document, required close cooperation and open dialogue among experts and stakeholders, especially concerning the expectations and the impacts of SKKR.

The Referencing Report consists of five parts:

The first part is a description of the Slovak education system. It includes a general description of all levels of the education system from preschool to the tertiary level, as well as the system of further education. The chapter has an intention to give short characteristics of the types of programmes, methods of completion, and certification and accreditation procedures in Slovakia.

The second part describes the Slovak Qualifications Framework. It contains the history and process of its development; SKKR principles, characteristic features and functions; its structure and types of qualifications awarded within its four sub-frameworks. It also explains the role and functions of the National Qualifications Register.

The third part is a detailed explanation of the application of 10 criteria set as a part of the referencing process by the EQF Recommendation.

Finally, the Future Roadmap describes the recent developments in Slovakia, mainly in the light of the starting national reform of education.



REFERENCING REPORT 2017

Annexes is a separate part of the Referencing Report, which contains supporting materials, examples and documents necessary to clarify and support the narrative part of the report. It includes the SKKR descriptors, selected qualifications included in the National Qualifications Register, information on the system of dual education in Slovakia, summaries of three analyses of SKKR and the National Qualifications Register (NQR) conducted in 2016.

Part I - EDUCATION SYSTEM IN THE SLOVAK REPUBLIC

The main provider of qualifications in the Slovak Republic is formal (school) education. Pre-primary, primary, secondary and tertiary education is in responsibility of the Ministry of Education, Science, Research and Sport of the Slovak Republic (MESRaS, education ministry).

The largest part of schools in Slovakia are public schools, which are established by municipalities and higher territorial units. Church and private schools represent also an integral and equal part of the formal education system. The school system includes also other educational institutions - schools for children with special needs, language schools, and primary art schools. Any form of discrimination in education, including segregation, is prohibited by the Constitution of the Slovak Republic, Anti-Discrimination Act and Act no. 245/2008 Coll. on education and training. The Constitution of the Slovak Republic guarantees that the citizens belonging to national minorities have, in addition to the right to master the state language, also the right to education in their native language. Pupils have the right to an individual approach, respecting their abilities, skills, talents and health, and well as their beliefs, worldviews, nationality and ethnicity. Inclusion in education aims to create culture, policies and practice to take into account the diversity of pupils.

The structure of the education system is showed in the Picture No. 1.

After 1989, the transformation and reform process of the Slovak education system took place in several phases. In 2001, the National Programme of Education for the next 10-15 years (so called “Milénium”) tried to set a new direction of the education system, its objectives and content of education and training towards new needs and requirements of the 21st century. Some of its goals were reflected in the Act No. 245/2008 on education and training (School Act)¹ adopted in 2008.

The Act launched the curricular reform in SR, introduced education standards and quality assessment system with external testing. The concept of *two-level model* of curricula consists of:

1. State curriculum (SC)

- It defines the national education standards (the minimum target requirements for graduate’s achievement) for the general education and VET (in case of VET for study or training branches). Educational goals are expressed in the form of mandatory performance and content standards described as learning outcomes. It enables comparability of the achieved education level and level of qualification. The main role of SC is to define the compulsory content of education; in VET to ensure the consistency between VET and labour market, to define methods, forms and means of verification and validation of school attainment and qualifications. It is a base for the development of school curricula.

2. School curriculum (ScC)

- It is developed by schools in line with SC and their profiles, goals and labour market needs. Besides the mandatory performance and content standards in line with SC, it contains specific educational goals, which clearly define the status of an individual, behaviour of a pupil to be attained upon the completion of the educational process². It is also a tool for school self-evaluation process (internal system of evaluation of

¹ Act No.245/2008 of Coll. on education (School Act) amending and supplementing certain acts as amended

² “Specific educational goal should clearly define the state of an individual, pupil’s behaviour, which should be attained upon completion of the educational process, i.e., what a pupils should know, (which particular knowledge, skills, habits, attitudes, abilities, competences he/she should obtain, to what extent and under what conditions). Methodology of development of school curricula for secondary vocational schools SVEI, 2008, <http://www9.siov.sk/metodika-tvorby-skolskych-vzdelavacich-programov-pre-sos/10692s>

pupils and teachers). The external assessment body of ScC is the State School Inspectorate (SSI)³.

The reform of school education and training system also allowed diverting from centrally managed system and introduced a new dimension in the quality assurance of education and training at schools. Decentralisation of the state administration in 2003⁴ transformed the centralised management of the education system and transferred a part of the governance and responsibilities from the central authorities to regional and local authorities. The reform strengthened autonomy, responsibility and school differentiation and transferred the decision-making processes to school management, as well as strategy, educational concept and profile to schools. It also introduced new measures for monitoring and quality assurance of education and training at schools (both external and internal).

The School Act since 2008 was followed by other reforms. The Act No. 61/2015 Coll. on vocational training and education⁵ brought significant changes by introducing elements of dual education and allowed better involvement of employers and professional organisations in the content and financing of VET (for more details see part Upper-secondary education of this report).

The compulsory school education lasts 10 years. Each Slovak citizen has the right to free education in the state primary and secondary school, guaranteed by the Constitution. This right also applies to the children of foreign nationals with permanent residency in Slovakia, children of asylum seekers, children of Slovak citizens living abroad. As one of the results of compulsory education, Slovakia is among the EU countries with low dropout rates (6.9 % in 2015⁶).

All study and training branches in the formal education are summarised in the *National Classification of Education*⁷ (NCE). It is a statistical classification of all training and study fields and study programmes linked to ISCED 97 and 2011 and ISCED FoET 2013. Classification offers a comprehensible and simple overview of the system of education and vocational training. NCE contains all study fields and study programmes, including inactivated ones.

More details on study and training branches are contained in the *System of study and training branches*⁸ (for secondary vocational education and training) and the *System of study fields*⁹ of higher education.

The Statistical Office of the Slovak Republic issues regularly the *Statistical Classification of Branches of Education*¹⁰ (SCBE).

3 Other SSI activities are mentioned in Criterion 5.

4 Act No. 596/2003 Coll. on School State Administration and School Self-Administration and on amendments and supplements to certain laws as amended

5 Act No. 61/2015 Coll. on vocational training and education and on amendments to certain laws, <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2015/61/20160101>

6 http://ec.europa.eu/eurostat/tgm/table.do?tab=table&plugin=1&language=en&pcode=t2020_40

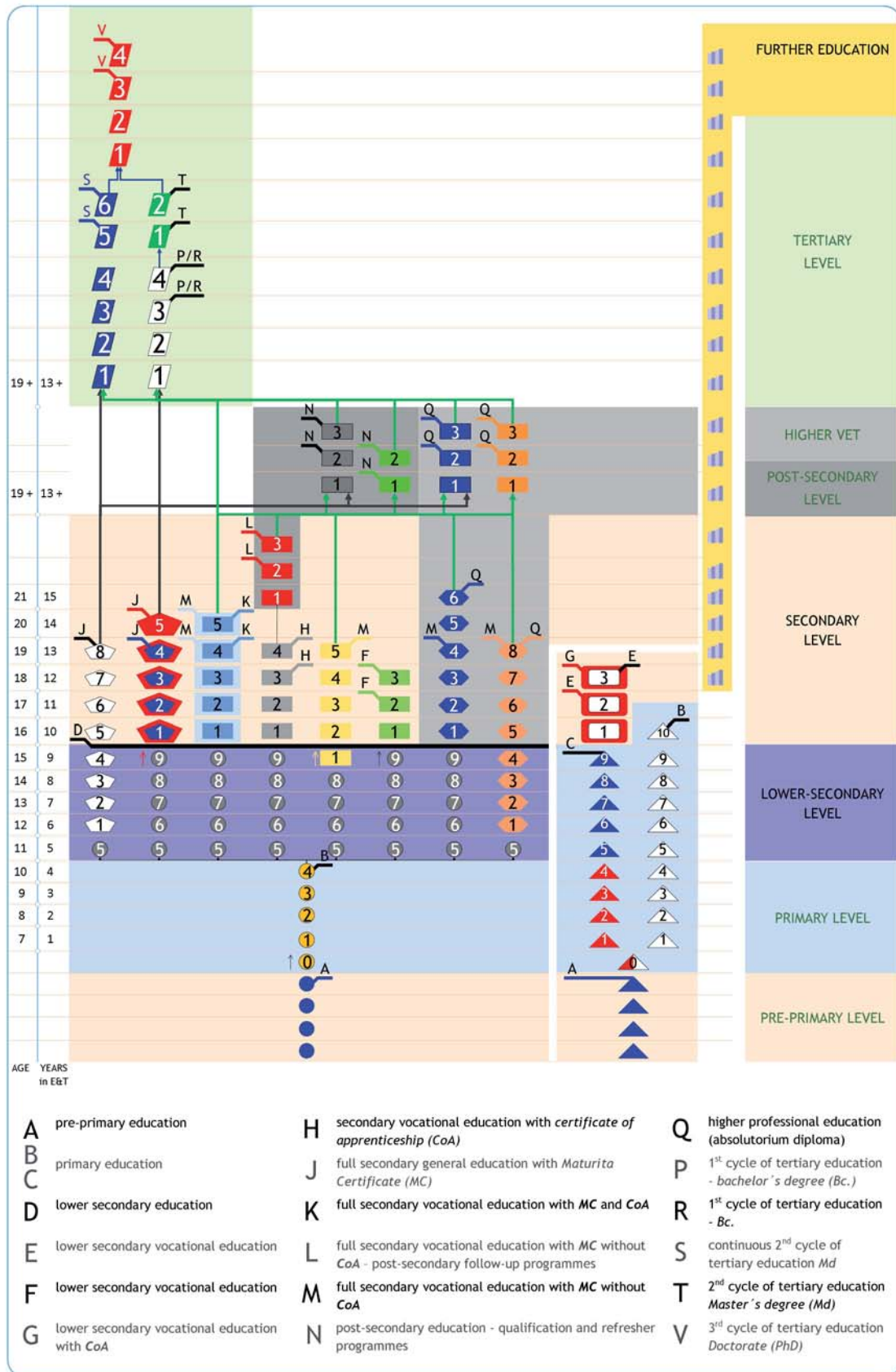
7 National Classification of Education, <https://www.minedu.sk/data/files/3772.pdf>

8 <https://www.minedu.sk/studijne-a-ucebne-odbory-sauo/>

9 <https://www.minedu.sk/sustava-studijnych-odborov-sr/>

10 Decree of the Statistical Office of the Slovak Republic No.243/2012 of Coll., which sets Statistical Classification of Branches of Education

EDUCATION SYSTEM IN SLOVAKIA: LEVELS OF EDUCATION AND EDUCATIONAL ATTAINMENT



Picture No. 1: The structure of the Slovak education system (Source: MESRS)

1. Pre-primary education

Pre-primary education is provided in kindergartens without awarding a qualification. Pre-primary education is not compulsory; children can attend kindergartens from the age of 3 until entry into compulsory education. The last year of pre-primary education is free of charge by law - it offers an *optional* preparation for school attendance.

In 2016, there were 2 955 kindergartens (public, church and private) with 159 081 children and 85 special kindergartens with 1 760 children.¹¹

2. Primary and lower secondary education

There is a compulsory 10-year school attendance in Slovakia. It usually starts at the age of 6 and ends at the age of 16, covering 9 years of primary school and one additional year at secondary school.

Primary education (ISCED 2011:100) (first stage of 9-year primary school, grades 1-4) aims at gradual development of key competences of pupils as a basis for general education.

Primary education is obtained after successful completion of Grade 4 and progresses continuously to the following stage of lower secondary education.

Primary education according to the consensus of responsible bodies involved in the referencing process leads to general education qualification at level 1 of the national qualifications framework - SKKR 1.

General education qualifications have not been established by legislation yet; nevertheless, they will be reflected in the legislation to be amended within the ongoing reform.

Lower secondary education (ISCED 2011:244) equips learners with basic knowledge, skills and competences, which are needed for orientation in life and society, as well as in further education. It covers namely these areas: language and communication, mathematics and work with information, man and nature, man and society, man and values, man and the world of work, art and culture, health and motion and other key transversal competences. It can be obtained:

- after successful completion of the last year of the second stage of primary school (grades 5-9),
- after completion of lower grades of 5-8-year programme of secondary grammar schools and conservatories.

After successful completion of lower secondary education learners receive a certificate with a supplement as evidence of the achieved level of education¹².

The programmes of lower secondary education according to the consensus of responsible bodies involved in the referencing process lead to general education qualification at level 2 of the national qualifications framework - SKKR 2.

¹¹ http://www.cvtisr.sk/cvti-sr-vedecka-kniznica/informacie-o-skolstve/statistiky/statisticka-rocenka-publikacia/statisticka-rocenka-materske-skoly.html?page_id=9602

¹² Annex No. 3

3. Lower secondary vocational education

The training branches of **lower secondary VET (ISCED 2011:253)** offered by secondary vocational schools (*stredná odborná škola*) prepare low-achievers without lower secondary education or to perform simple occupations in industry, agriculture, or services. Curricula include a combination of theoretical (general and vocational) education and practical training. The study usually lasts two or three years and it offers qualifications to perform simple and auxiliary tasks. Graduates are awarded a final exam certificate and in individual cases also a certificate of apprenticeship. Only 0.5% of all learners in formal education enrol into these programmes¹³. Graduates of lower secondary VET can continue their study within secondary or upper secondary education provided they complete a one-year bridging programme.

The programmes of lower secondary vocational education lead to vocational qualifications at level 2 of the national qualifications framework (in individual cases level 3 is also possible) - SKKR 2 (3)¹⁴.

4. Secondary vocational education

To obtain the **secondary VET (ISCED 2011: 353)**, learners must complete three to four years at secondary vocational school. Learners enter secondary vocational education after successful completion of lower secondary education. Secondary vocational education prepares learners mainly for blue-colour worker occupations or crafts. Curricula include a combination of theoretical (general and vocational) education and practical training. After passing a final exam learners receive a certificate of apprenticeship confirming the qualification obtained. Graduates can continue their study in the follow-up programmes in order to achieve a *maturita* certificate and thus access to higher education.

The programmes of secondary vocational education lead to vocational qualifications at level 3 of the national qualifications framework - SKKR 3.

¹³ Vocational education and training in Slovakia, CEDEFOP, 2016, p. 22, <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4150>

¹⁴ The level depends on learning outcomes of an individual qualification. See more in Criterion 2. Similar rule applies also to the qualifications below.

5. Upper secondary education

Learners can enter **upper secondary education** after successful completion of lower secondary education. Admission to certain types of schools requires a talent exam to demonstrate prerequisites for the study in the chosen branch (e.g. artistic, sport fields, bilingual schools, etc.).

Upper secondary education has two main streams: upper secondary general education and upper secondary vocational education. The latter is regulated by the School Act and Act No. 61/2015 Coll. on vocational education and training¹⁵.

Upper secondary general education (ISCED 2011:344) - education in four, five, or eight-year programmes of secondary grammar schools (*gymnázium*) is aimed at obtaining general educational foundation and key competences. It mainly prepares students for the study at higher education institutions, but also for employment, as well as personal and social life.

The study at *gymnázium* is completed by a *maturita* school-leaving exam. Graduates obtain a *maturita* certificate, which confirms achieving *upper secondary general education*.

The programmes of upper secondary general education lead to general education qualifications at level 4 of the national qualifications framework - SKKR 4.

Upper secondary VET (ISCED 2011:354) lasts four or five years. It prepares learners for an occupation, or particular professional activities, and can be obtained in secondary vocational schools. Curricula include a combination of theoretical (general and vocational) education and practical training. Practical training takes place in school workshops, practical training centres, medical facilities, school farms or workplaces in companies. The study is completed by a *maturita* school-leaving exam giving access to higher education. School-leavers receive a *maturita* certificate, in some training branches also a certificate of apprenticeship, as an evidence of a vocational qualification.

The programmes of upper secondary vocational education lead to vocational qualifications at levels 3, 4 of the national qualifications framework - SKKR 3 - 4¹⁶.

In 2015, the Act No. 61/2015 Coll. introduced significant changes in VET. It allowed introduction of elements of dual education and better interconnection of VET and the labour market. The system of dual education established close cooperation between schools and enterprises or professional organisations, especially in practical training of pupils at workplaces. This cooperation includes modification of curricula (both state and school), selection of pupils for dual education, practical training at a workplace, final exam and related documents on study results. The act also introduced tax incentives which apply for entrepreneurs (natural and legal persons) contributing to VET. In contrast to the traditional dual model, learners are regular VET students and not employees. More information related to the dual system with its specific features for Slovakia are described in the Annex 2.

¹⁵ Act No. 61/2015 Coll. on vocational education and training and the amendment of certain acts

¹⁶ In exceptional cases, SKKR 5 is also possible.

Dual VET programmes are currently applied within secondary, upper secondary and post- secondary VET.

Thus, there are 3 parallel models of initial VET in Slovakia:

- dual system with direct involvement of employers - pupils spend the training period at a workplace of practical training in the company and they obtain general and vocational knowledge at schools.
- practical training at school facilities, e. g. workshops, laboratories, simulated companies etc.
- work-based learning - provided at company facilities with the shorter periods of practical training.

Regardless of the VET model of the VET programme, graduates receive the same certificate.

Conservatories

Conservatories are a specific type of secondary schools focused on performing arts. They provide both upper secondary vocational education (*ISCED 2011: 354*) and higher professional education (*ISCED 2011: 554*) in integrated programmes focused on music and drama (six-year programme) or dance (eight-year programme).

The achieved level of upper secondary vocational education is proved by a *maturita* certificate and a higher professional education by an *absolutorium* diploma with the right to use the title “diplomovaný umelec (diploma artist)” (DiS. art).

The programmes of conservatories lead to vocational qualifications at levels 4 (maturita) and 5 (absolutorium) of the national qualifications framework - SKKR 4 - 5.

6. Post-secondary education

Post-secondary education is offered by secondary VET schools. There are five types of post-secondary non-tertiary programmes:

- follow-up programmes (ISCED 454);
- qualification programmes leading to a (second) VET qualification (ISCED 454);
- refresher programmes (ISCED 454);
- specialising programmes (ISCED 554);
- ‘higher’ professional programmes (ISCED 554).

The programmes last from 6 months to 3 years.

Follow-up programmes are intended for secondary vocational education graduates and lead to *maturita* school-leaving certificate. Qualification programmes lead to a second *maturita* certificate with a specific vocational component. Refresher programmes do not lead to a new qualification.

Specialized and higher professional programmes are completed by a graduation exam and graduates receive a certificate of graduation exam, *absolutorium* diploma and the title “diplomovaný špecialista” (DiS).

The programmes of post-secondary education lead to vocational qualifications at levels 4-5 of the national qualifications framework - SKKR4 - 5.

7. Special schools

The education system in Slovakia includes also some other types of schools or programmes that provide specific education from pre-primary education up to post-secondary education.

Special schools (primary and secondary) offer programmes adjusted to pupils and students with special needs. Programmes lead to the qualifications at the same levels as described above.

There are also programmes tailored to the pupils with special needs of mentally challenged ones. ***These programmes lead to vocational qualifications at levels 1-3 of the national qualifications framework - SKKR 1-3.***

8. Tertiary education

The Slovak Republic is a signatory country of the Bologna Declaration adopted in 1999. Tertiary education is governed by the Act No. 131/2002 Coll. on higher education institutions (Higher Education Act)¹⁷. According to the Act, there are the following types of higher education institutions (HEIs):

- *Public* (number in 2016: 20),
- *State* - military, police and medical HEIs (number in 2016: 3)
- *Private* (number in 2016: 12).
- *Foreign higher education institutions* - they are not regulated by the Higher Education Act, but the legislation of the state of residence (number in 2016: 5).

In 2002, higher education institutions were divided into two categories: university and non-university institutions. This serves as a mechanism for further allocation of public resources.

¹⁷ Act No. 131/2002 Coll. on higher education institutions and on the amendment of certain acts, as amended,

HEIs offer:

- **Bachelor study programmes** (first cycle, **ISCED 2011: 665**), with a standard length of study of 3 to 4 years in the full-time form of study (3 to 5 years in the external/part-time form of study). In the full-time form, the standard workload is 60 credits per academic year (180 to 240 credits in total over three or four years of study, respectively).
- **Master, Engineer and Doctor Study Programmes** (second cycle, **ISCED 2011:767, 766**) - the standard length of study is 1 to 3 years in the full-time form of study (2 to 4 years in the external form of study). In the full-time form, the standard workload is 60 credits per academic year (60 to 120 credits in total over one or two years of study, respectively).
- **PhD Study Programmes** (third cycle, **ISCED 2011:864**) with the standard length of study programme of 3 or 4 years, in the external form 4 or 5 years. The total workload necessary to complete a PhD programme lasting three or four years is expressed as 180 or 240 credits, respectively.

In 2008, external evaluation of Slovak higher education institutions (HEIs), based on the methodology of the European Association for Quality Assurance in Higher Education (ENQA), was completed. The focus on quality assurance in HEI continued in 2009 in the frame of external complex accreditation under the ESG regulations by the Accreditation Commission of the Government of the Slovak Republic.

According to the Higher Education Act, the education ministry issues and manages the system of study fields in the Slovak Republic¹⁸. The education ministry may include a new field of study or make changes in the system only based on an opinion of the Accreditation Commission. HEIs can admit students only for accredited study programmes in the study fields enlisted in the system.

The study programme can be offered as full-time or external study while using presence, distance or combined methods of learning.

¹⁸ <http://www.minedu.sk/sustava-studijnych-odborov-sr/>

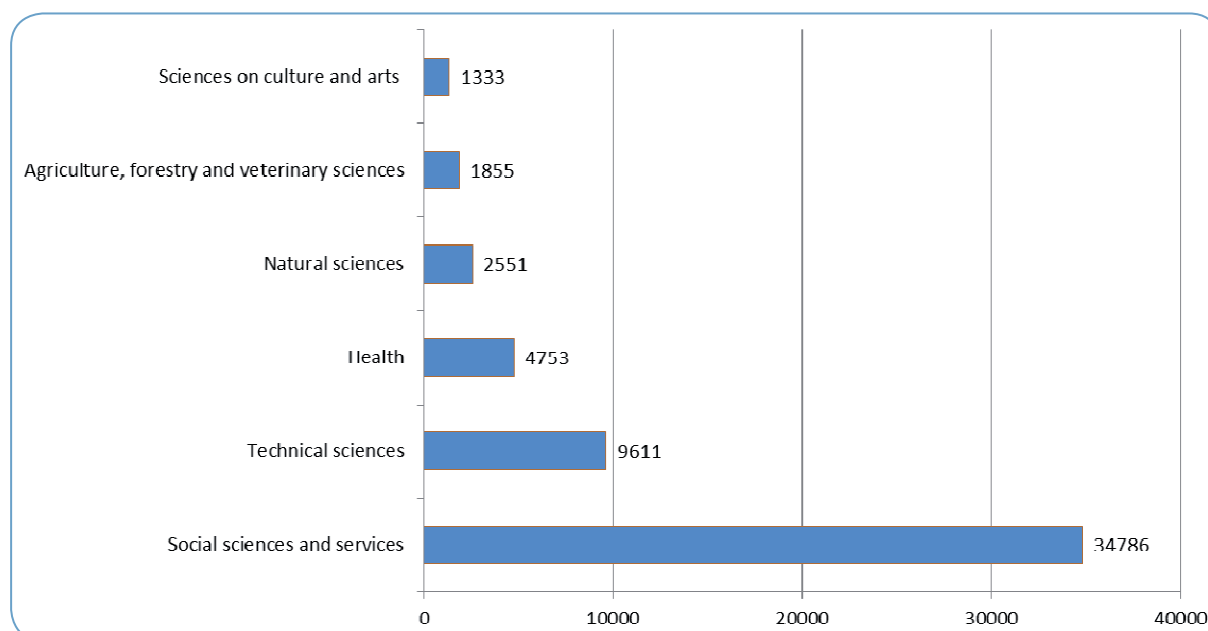
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Higher education institutions award the following degrees¹⁹ (which are at the same time qualifications):

Bachelor study	<p>“bakalár” (Bc.)</p>
Master, Engineer and Doctor study	<ul style="list-style-type: none"> - “magister“ (Mgr.) - “magister umenia“ (Mgr. art.) - in the field of art, - “inžinier“ (Ing.) - engineer programmes; - “inžinier architekt“ (Ing. arch.) - architecture and urban planning, - “doktor všeobecného lekárstva“ (MUDr.) - general humane medicine, - “doktor zubného lekárstva“ (MDDr.) - dental humane medicine - “doktor veterinárskeho lekárstva“ (MVDr.) - veterinary medicine,
graduates of Master study (Mgr.), who completed <i>examina rigorosa</i>	<ul style="list-style-type: none"> - “doktor prírodných vied“ (RNDr.) - natural science study programmes, - “doktor farmácie“ (PharmDr.) - pharmacy study programmes, - “doktor filozofie“ (PhDr.) - social sciences and arts and health-care study programmes, - “doktor práv“ (JUDr.) - law study programmes and security study programmes with law orientation, - “doktor pedagogiky“ (PaedDr.) - teacher training and sports study programmes, - “doktor teológie“ (ThDr.) - theological study programmes except for the study programmes in Catholic Theology
PhD study	<p>„doktor“ („philosophiae doctor“ - PhD.)</p> <p>“doktor umenia“ (“artis doctor” - ArtD) - in artistic study programmes</p> <p>“licenciát teológie” - ThLic.) - in the Catholic theology</p>

¹⁹ <http://www.minedu.sk/system-vysokeho-skolstva-v-sr-sucast-dodatku-k-diplomu/>

From the academic year 2005/2006, HEIs issue Diploma Supplement. It includes information on the system of higher education in the Slovak Republic²⁰, published by the Ministry of Education, Science, Research and Sport SR in both Slovak and English language.²¹



Picture No. 2: Numbers of HE graduates according to the study branches as of 31 December 2016

The tertiary education programmes lead to qualifications at levels 6-7-8 of the national qualifications framework - SKKR 6 (first cycle), SKKR 7 (second cycle, examina rigorosa), SKKR 8 (third cycle). The national legislation for the description of the tertiary education programmes officially uses the term “higher education” in Slovak language.

9. Further education

In the Slovak Republic, there is a very low level of participation in lifelong learning (3.1 % in 2016; Eurostat). Surveys show three main reasons for this low interest: finances, availability, and acceptance of certificates by employers. An equally important factor is a low level of linking further and initial VET.

²⁰ Decree No. 614/2002 Coll. on the credit system

²¹ <http://www.minedu.sk/system-vysokeho-skolstva-v-sr-sucast-dodatku-k-diplomu/>

Courses of further education accredited by the education ministry are concluded by a final exam. A graduate can further apply for validation of his/her professional competence (including an exam) at an authorised institution with an accredited education programme, the graduate is then awarded a *certificate of qualification*. Certificates indicate eligibility of a graduate to run a business in line with *Trade Licencing Act*. The certificates have a nationwide validity, but their acknowledgement depends solely on the employer. Some professional associations created their own evaluation (certification), which applies only within the scope of this association or sector.

The *Act on LLL defines these types of further education*:

- a) continuing VET in an accredited training programme, leading to extension or deepening a qualification,
- b) requalification training in an accredited training programme that leads to a partial or full qualification,
- c) continuing education in educational programmes leading to completing or updating a qualification as a prerequisite for the professional activity,
- d) interest-based education, civic education, education of seniors and other education.

Institutions of further education include schools, HEIs and private bodies. Further education provided by secondary schools and HEIs is usually based on the content of their formal education programmes, transformed into *short courses*.

Certain elements of validation of prior learning have been implemented by the Act No. 568/2009 Coll. on lifelong learning (further as Act on LLL) in 2009²², e. g.:

- courses of further education accredited by the education ministry must comply with quality criteria; the content of accredited programmes is based on qualification and assessment standards,
- recognition of professional competence comprises the recognition of practice (minimum 5 years).

As mentioned above, in further education, there are weak and unstructured links with the initial VET: besides accredited courses governed by the education ministry, the labour ministry regulates labour market training. Substantial part of LLL represents the education provided by companies. An integrated system of validation and recognition of non-formal and informal learning is being prepared to be established by 2018.

In 2013-15, two extensive national projects were implemented as new instruments to support lifelong learning:

- *“Further education and counselling for adults as a tool for better prospects on the labour market”* implemented by the National Institute for Lifelong Learning (NILLL).
- *“The Development of the National Qualifications Register”* - implemented by the State Vocational Education Institute, which revised the Slovak Qualifications Framework (SKKR) and developed the National Qualifications Register.

²² Act No. 568/2009 Coll. on lifelong learning and on the change and supplement to some acts as amended by subsequent provision

In early 2015, the process of amending the Act on LLL started. The aim is to adapt LLL to the current needs and trends of the labour market, terminological unification and above all, enhancement of participation and interest of the adult population in the further education.

Qualifications obtained in further education lead to occupational qualifications at levels 2 - 7 of the national qualifications framework - SKKR 2 - 7.

An overview of all qualifications awarded in Slovakia with a reference to the respective SKKR level is in the Annex 3.

Part II - Slovak Qualifications Framework

1. History of the development of the Slovak Qualifications Framework (SKKR)

The SKKR is governed by the education ministry. It was developed in two phases.

The first phase

The main steps of the SKKR development in the first phase were as follows:

1. The Slovak Government adopted a plan for the development of the National Qualifications Framework of the Slovak Republic in February 2009²³. It resulted from the Recommendation of the European Parliament and Council No. 2008/C 111/EC.
2. The inter-ministerial working group for the implementation of SKKR was composed of representatives of all ministries in March 2009.
3. The National Coordination Point for EQF (NCP) was established at the education ministry in 2009; and in 2011 it moved to the National Institute for Lifelong Learning.
4. In 2011, the working group proposed the first version of SKKR²⁴ where the proposal was to keep the structure of SKKR levels as close as possible to 8 levels of EQF.

The works on the SKKR were backed by the amendment to the *Act on LLL* in 2012, which introduced SKKR and its definition as a framework, which “contains classification levels of qualifications according to a set of criteria for the achievement of knowledge, skills and competences and is referred to the European Qualifications Framework”.

At the time of adopting the first version of SKKR, Slovakia had not had the system of qualifications outlined in the form of a specific register of qualifications. Therefore, the first qualifications framework had a strong affinity to formal education. This resulted later in the need for its revision and involvement of different actors in the process of its development and implementation.

The second phase

The tasks related to creation and implementation of SKKR became a part of the National Reform Programme of the Slovak Republic in 2012²⁵.

²³ Government Resolution No. 105/2009 of 4 February 2009

²⁴ https://www.minedu.sk/data/files/289_Narodny%20kvalifikacny%20ramec%20SR_final.pdf.

²⁵ <http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=20953>

- In 2013, the State Vocational Education Institute became a coordinator of the national project “Development of the National Qualifications Register”²⁶ and in 2014 it also became the national coordination point for EQF - NCP. Analyses and studies²⁷ developed within the project aimed at the conditions for successful implementation of the SKKR.
- In 2013, a new working group of national experts was created to revise the first version of SKKR. To support the work of national experts, several methodologies were developed, including “The Methodology for development of the National qualifications framework”²⁸.
- Within 2014, several consultation meetings with stakeholders and representatives of the Czech NCP took place to discuss the proposal for the revised descriptors of SKKR.
- By the end of 2014, the revision of the SKKR descriptors was completed. The descriptors were considered with regard to the existing system of qualifications in relation to the formal education.
- The Methodology for linking qualifications to SKKR levels²⁹ was drafted. At the beginning of 2015, it was piloted and tested on the first set of qualifications described and included in the register of qualifications.
- In 2015, at the latest stage of the project, several roundtable discussions with stakeholders were organised which helped to identify problems in the SKKR implementation, its anticipated impacts and critical reflections. They involved employers, experts and institutions, as well as representatives of the Sector Councils³⁰.

2. Role and objectives of SKKR

The characteristic features of SKKR are:

- SKKR is a comprehensive framework; it fully covers qualifications awarded in the general education, vocational education, higher education and further education system in Slovakia (formal school education, non-formal /further/ education and informal learning);
- SKKR levels are characterised by descriptors;
- the structure of the SKKR levels is simple, clear, easy to understand and shows clear relationships between qualifications;
- qualifications included into the framework are based on learning outcomes;

²⁶ Information about the project: <http://www.kvalifikacie.sk/zakladne-informacie>

²⁷ <http://kvalifikacie.sk/na-stiahnutie>

²⁸ http://www.kvalifikacie.sk/sites/nsk/files/images/Dokumenty/metodika_na_tvorbu_nkr.pdf; all other methodologies are available at <http://www.kvalifikacie.sk/na-stiahnutie>

²⁹ http://www.kvalifikacie.sk/sites/nsk/files/images/Dokumenty/metodika_priradovania_urovni_nkr.pdf

³⁰ More details on Sector councils can be found in the Criterion 1 and Annex 7.

- qualifications included into the framework are quality assured;
- qualifications are developed in close cooperation of stakeholders (government authorities, employers, NGOs, educational institutions);
- it allows the development of procedures for validation of prior learning leading to a qualification.

The SKKR is described in a **grid** containing **eight reference levels of knowledge, skills and competences** defined by national descriptors (Annex No. 4).

Plans for the future development are described in the chapter *Future roadmap*.

During last years, Slovakia has been undergoing a transformation of VET system in order to create a closer link to the needs of the labour market. The transformation concerns the implementation of dual education, development of two parallel registers - the National Qualifications Register and the National Occupations Register³¹ (NOR) as well as the envisaged changes of LLL. The work on SKKR thus represents only one part of the massive changes that reciprocally affect SKKR and its role in this process.

The roles of SKKR were defined as:

- *communication role*: to inform in a transparent, clear, understandable way about national qualifications, their characteristics and relationships;
- *transformation role*: to contribute to the revision and change of the system of recognition and validation of non-formal and informal learning;
- *regulatory role*: to support monitoring of the process of identification and description of qualifications in the form of standards, levelling to SKKR and monitoring and regulation of the system of recognition and validation of qualifications.

The principal function of SKKR is a classification of qualifications. The qualifications system is divided into hierarchical levels, which are characterised by a certain level of difficulty expressed by reference characteristics - national *descriptors*.

³¹ http://sustavapovolani.sk/o_portali

The objectives of the Slovak Qualifications Framework are:

- better transparency of the education system both in the national and international context;
- increased transparency of qualifications, which are described in terms of learning outcomes;
- easier transfer of labour market and society needs into the content of education and training;
- strengthened relationship and a common approach between all stakeholders involved in education and, at the same time, developing general principles for validation and recognition of qualifications;
- modernisation of education through the application of quality assurance procedures in the process of acquiring qualifications, and
- increased quality of verification and recognition of qualifications.

SKKR is accessible at www.kvalifikacie.sk where a list of qualifications with assigned SKKR level is available.

3. Sub-frameworks of SKKR

In order to overcome the terminological diversity related to the definition of qualification, experts and stakeholders agreed to adopt the definition of the EQF Recommendation³², which defines a qualification as “*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*”.

SKKR serves as a tool to develop a typology of qualifications in the national context. For this purpose, the approach based on four “sub-frameworks” was adopted (Picture No. 3). The structure of SKKR contains information on a learning pathway, authorised institution and evidence of a qualification (e. g. diploma, certificate etc.).

SKKR sub-frameworks correspond to respective parts of the educational system and are characterised by common type of qualification:

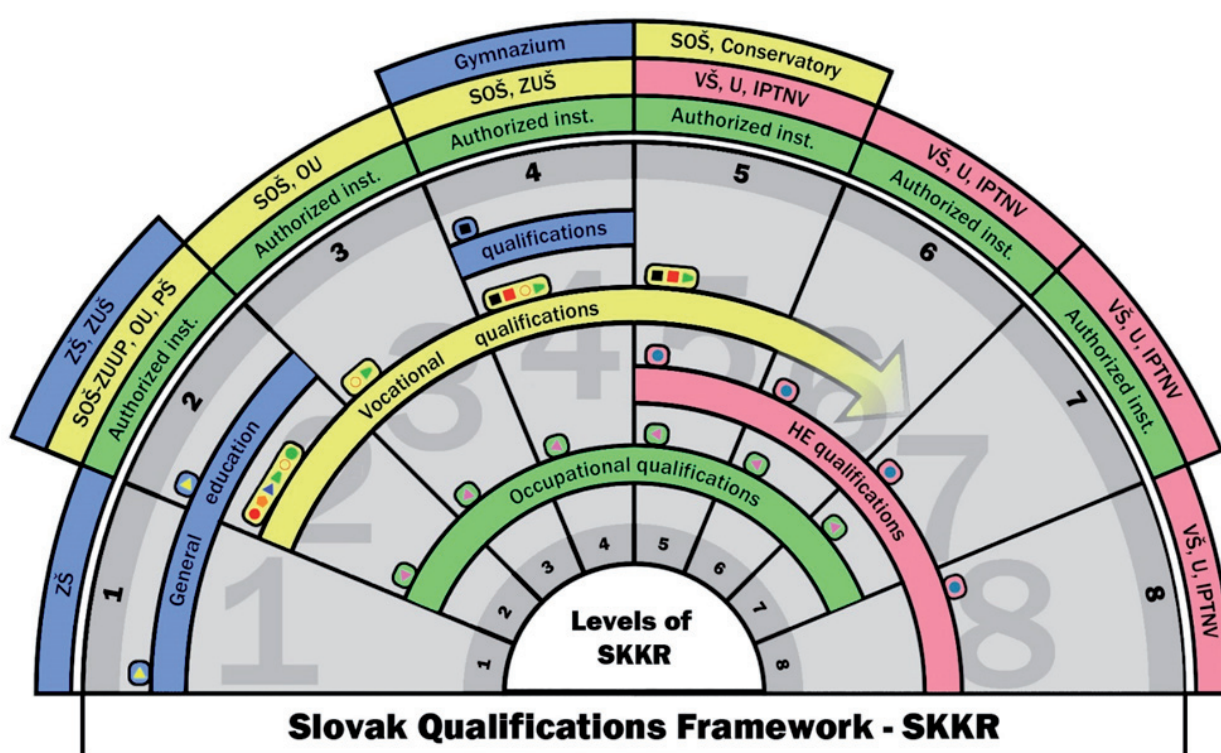
1. General education qualifications’ sub-framework
2. Vocational qualifications’ sub-framework
3. Higher education qualifications’ sub-framework
4. Occupational qualifications’ sub-framework

³² Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning

The general education qualifications' sub-framework as well as the vocational qualifications' sub-framework are governed by the Act No. 245/2008 Coll. on education and training (School Act). The higher education qualifications' sub-framework is governed by the Higher Education Act. These three sub-frameworks reflect a level of qualification as well as a level of achieved education at the end of the completed education programme (as given by the School Act and HE Act).

Occupational qualifications' sub-framework is governed by the Act No. 568/2009 Coll. on lifelong learning. It includes qualifications which can be achieved in the system of non-formal education.

A common feature of all four sub-frameworks is a qualification and assessment standard contained in a card of qualification.



Legend

- Certificate of final exam
- Certificate of apprenticeship
- Diploma
- ▲ Certificate with supplement
- ◆ Certificate of qualification
- Maturita Certificate
- Certificate of final post-secondary exam and absolutorium diploma
- ▲ Certificate of training
- Certificate of learning curve
- Leaving certificate
- Report card

Shortcuts

- ZŠ Primary school
- VŠ Higher education institutions
- IPTNV Tertiary non-university institutions
- SOŠ Secondary VET schools
- U University
- ZUUP Specially adapted curricula
- PŠ Practical school
- ZUŠ Primary art school
- OU Apprentice school
- HE Higher education

Picture No. 3: The structure of SKKR

1. General education qualifications' sub-framework

In general education (primary and lower secondary education, full general secondary education): “*general education qualifications*” are awarded:

SKKR level	General education qualification
1	Primary education certificate with supplement
2	Lower secondary education certificate with supplement
4	Maturita certificate

Qualifications awarded in general education (general education qualifications) are traditionally understood mainly as a proof of achieved level of education.

2. Vocational qualifications' sub-framework

In secondary VET (secondary, post-secondary and non-tertiary): “*VET qualifications*” are awarded within the *formal* VET system of education; they are usually broader and the holder of such qualification is often able to perform several occupations.

SKKR level	Vocational education qualification
2	Certificate of final exam (certificate of apprenticeship*)
3	Certificate of final exam + certificate of apprenticeship
4	Maturita certificate + certificate of apprenticeship*
5	Certificate of final post-secondary exam + absolutorium diploma

* in some training programmes according to the School Act

Qualifications at levels SKKR 3 and above are considered as “skilled - worker” qualifications.

Qualifications awarded within formal secondary (initial) VET (vocational qualifications) are closely linked to level of education and represent the first qualification an individual can achieve in formal education. As seen above (in the Part I - Education system in SR), vocational education qualifications belonging to the same type (e.g. upper secondary VET) are allocated to different SKKR levels depending on a qualification and learning outcomes. In the levelling process, each qualification from the chosen set of 1000 qualifications was treated individually and levelled on the base of “best-fit“ approach.

3. Higher education qualifications' sub-framework

In higher education: “*HE qualifications*” are awarded within the *formal* HE system;

SKKR level	Higher education qualification
6	Diploma+ Certificate of State Exam+ Diploma supplement
7	Diploma + Certificate of State Exam+ Diploma supplement
8	Diploma+ Certificate of State Exam+ Diploma supplement

Tertiary education provides a level of education and a qualification (HE qualifications).

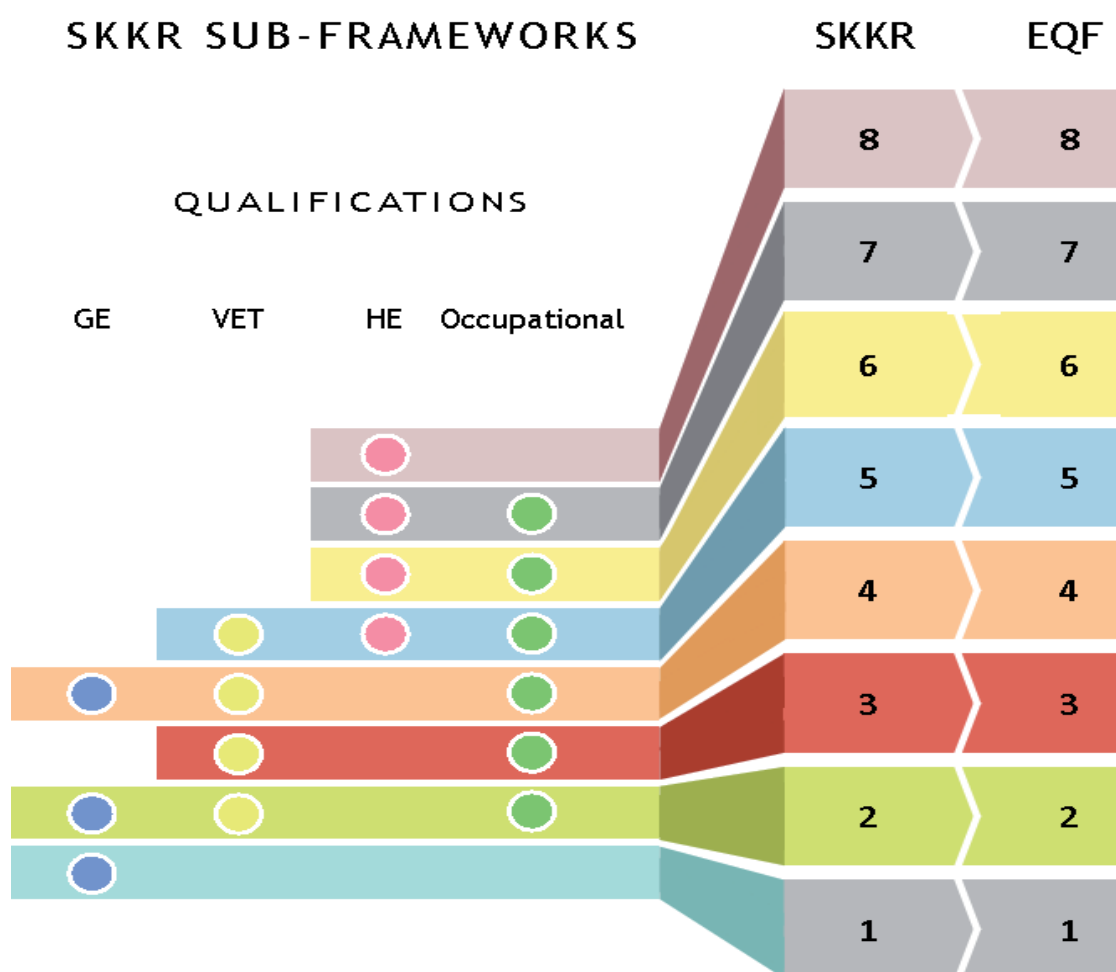
4. Occupational qualifications’ sub-framework

In non-formal learning pathways, “*occupational qualifications*” are awarded (qualifications acquired outside the formal system - adult education, further education or learning outcomes achieved by other ways). They are usually “tailored” to labour market needs.

SKKR level	Occupational qualifications
2	Certificate of qualification
3	Certificate of qualification
4	Certificate of qualification
5	Certificate of qualification
6	Certificate of qualification
7	Certificate of qualification

Occupational qualifications are awarded outside the formal system and they are not directly connected to the level of education.

The following picture shows a relationship between EQF and SKKR and its sub-frameworks:



Picture No. 4: Relationship between the levels of EQF, SKKR and its sub-frameworks

The currently valid legislation recognises *full* and *partial* qualifications in the field of occupational qualifications. The Act on LLL states that a full qualification entitles its holder to perform all tasks within an occupation, whereas a partial qualification allows performance of one or a limited set of tasks within a relevant occupation/specific job position. This concept was used in the development of the register of qualifications, however, further discussions led to the decision to divert from this classification and not to differentiate between full and partial qualifications. Thus, this new approach will allow fragmentation of qualifications into smaller units without using a concept of partial qualification, nevertheless still able to fulfil the labour market requirements for certain occupations. The change will be embodied in the new Act on LLL to be adopted in 2018.

The descriptions of qualifications in the register of national qualifications (NQR) include the following data:

- **full qualification (FQ)** - the code and name of a full qualification, a level of education in case of the qualifications acquired in formal education, SCBE, ISCED-11, a length of training, a certificate of education; all qualifications include a formal evidence of qualification award, a title, SK ISCO-08, SK NACE rev. 2; in case of tertiary education also ECTS points;
- **partial qualification (PQ)** - contains the above mentioned information, as well as a code and name of a full qualification(s) to which it relates (however, there may be cases that PQ will be not assigned to any FQ if it does not exist).
- Full qualification may comprise one or more partial qualification:
- An example of relationship between full and partial qualifications:

An example of relationship between full and partial qualifications		
CODE*	FULL QUALIFICATION	PARTIAL QUALIFICATION
U7132001-00816	Car varnisher	
C7132001-00867		Car varnisher - colourist
C7132001-00870		Car varnisher - painter
C7132002-00868		Car varnisher - preparer
C7132001-00869		Car varnisher - refurbisher

* „U“ stands for „full qualification“, „C“ stands for „partial qualification

All types of qualifications are included in National Qualifications Register in the form of qualification cards. By the end of 2015, the register comprised a set of 1000 selected qualification cards (see Annex 11 - Statistical overview of QC included in the NQR).

4. SKKR and the Dublin descriptors

The need of international comparability of individual degrees and especially quality of HE study programmes led to the development of hierarchical characteristics of the graduates of three cycles of higher education studies.³³ ECTS based on learning outcomes in relation to estimated study load, represents the credit system for the higher education in the European Higher Education Area (EHEA) for countries involved in the Bologna process. The qualifications framework for EHEA have been developed under the Bologna process. It contains so-called „Dublin descriptors³⁴ “:

- *knowledge, understanding,*
- *applying knowledge and understanding,*
- *making judgement,*
- *ability to learn.*

Qualifications from HE were allocated to the HE sub-framework based on linking of relevant levels of SKKR and QF-HE (see Annex 6). It is not the aim of this referencing report to present the fulfilment of self-referencing criteria within the Bologna process; that report is going to be presented at a later stage.

³³ Recently, short cycle” programmes (level SKKR 5) are exceptional.

³⁴ [Dublin descriptors - EHEA](#)

5. National Qualifications Register

SKKR is the core of the qualifications system of the Slovak Republic. It is closely linked to the National Qualifications Register which contains recognised qualification standards and related assessment standards.

The idea of NQR was present already in the Act on LLL adopted in 2009. According to the act, NQR is “*a public register containing descriptions of partial and full qualifications identified and recognised in the Slovak Republic, required for the performance of working activities for a given occupation in the form of qualification standards and assessment standards*”.

Strategy of Lifelong Learning 2011³⁵ and the National Reform Programme of the Slovak Republic 2012 underlined the importance of NQR development. The process started in March 2013 as the national project co-funded from ESF. It was carried out by the State Vocational Education Institute and coordinated by the education ministry.

NQR contains approved qualifications described in the form of “qualification cards” (QC)³⁶. Each qualification card consists of a *qualification standard and assessment standard*.

A qualification card furthermore contains:

- general information on the qualification (learning pathway, relation to an occupation, evidence of certification, SKKR level);
- qualification standard - learning outcomes expressed as knowledge, skills and competences;
- assessment standard containing the information on assessment criteria, methods and tools;
- methodological guidance referring to requirements for exams for validation and certification of a qualification.

National qualifications register enables:

- a complex overview of the Slovak qualifications system, qualifications’ classification, legislation regulating the conditions for awarding qualifications (especially for regulated professions),
- statistical surveys and analyses of needs for the development of qualifications and their recognition,
- continuous monitoring, assessment and recognition (certification) of qualifications already identified and classified in NQR, critical assessment of its adequacy in terms of the actual labour market needs and possible modification or significant changes.

³⁵ <http://www.minedu.sk/data/files/1899.pdf>

³⁶ Examples of qualification cards are in the Annex 13.

In the development of NQR, three categories of standards were taken into account:

- e) *national occupational standards*: they determine the requirements of labour market in terms of “fields of working tasks” and their changes; they have information character only,
- f) *qualification standards*: they are mandatory for shaping the educational content and validation of prior learning in accordance with labour market requirements;
- g) *educational standards*: they express the minimum requirements for completing a topic/grade/level. They include performance and content standards related to a qualification, as well as key and transversal competences for individual needs in order to participate in society, to continue education and/or exercise professional activities. They are mandatory for achieving the qualifications awarded in the formal system of education.

As the 2008 curricular reform preceded the creation of the occupations and qualifications systems, their development should subsequently affect educational and assessment standards that are currently used within formal VET.

The sets of (educational, qualification and occupational) standards are expected to be interlinked with the following systems:

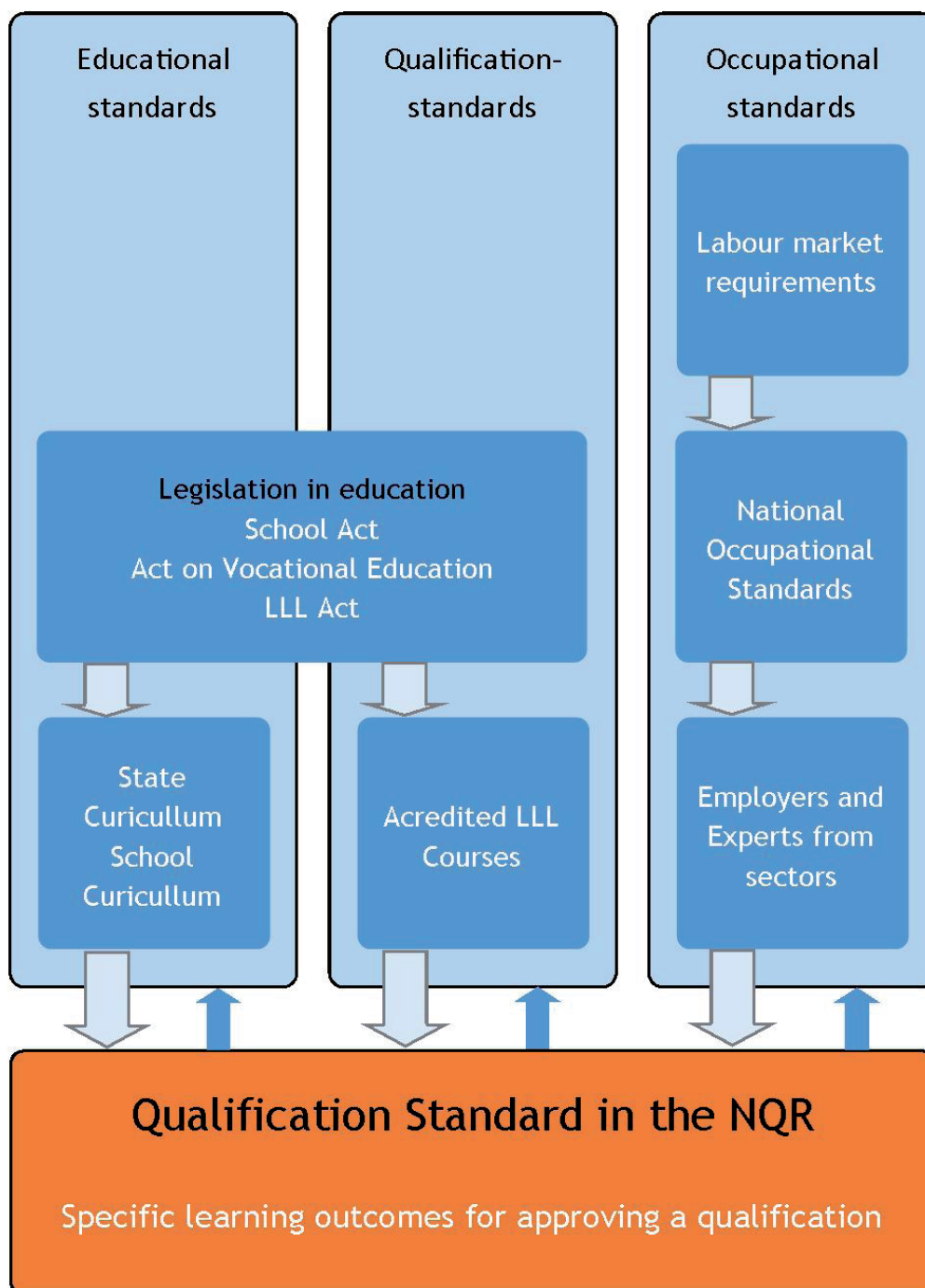
- a) national occupations system reflecting changes in occupations, work organisation and processes driven by new technology and, in turn, informing the national qualifications system;
- h) national qualifications system setting mandatory qualification requirements aligned to labour market needs and informing education systems;
- i) initial VET system and its education standards offering a variety of programmes with an appropriate mix of competences to suit the requirements of the labour market, continuing education and learners’ personal development.³⁷

Qualifications achieved in formal education are determined mainly by educational standards incorporated in the State curricula (sub-frameworks 1-3). These qualifications are broad and the educational standards are usually informed by more than a single occupational standard.

Occupational qualifications (sub-framework 4) are determined by qualification standards that are based on occupational standards described in the National Occupations Register.

³⁷ Based on CEDEFOP: Vocational education and training in Slovakia: <http://www.cedefop.europa.eu/en/publication-s-and-resources/publications/4150>

The relationship between three standards is showed in the Picture No. 5:



Picture No. 5: Relationship between national occupational standards, qualification standards and educational standards

Three standards enable to flexibly translate the labour market requirements (expressed in the description of the performance of a particular occupation) into learning outcomes on two levels: on the “national” level where they are stable, and the “provider” level where they are particularised and specified to support the education and assessment processes.

National Occupations Register

A key element involved in the implementation of SKKR is linking NQR to NOR³⁸. Interconnection of these two systems is set up by two regulations.

The National Occupations Register is defined by the Act on employment services as *“the national, single information system of standard requirements descriptions of the labour market for individual work positions.*

NOR is the basic structure framework for the development of NQR, as stated both in the Act on LLL and Act No. 5/2014 Coll. on employment services (Act on employment services). The reasons for synchronisation of these two tools is close linking of qualification standards in NQR with requirements on professional skills and practical experience necessary for performing work activities in the labour market covered by NOR. The joint actions in this area were highlighted in the Memorandum of Cooperation between education and labour ministries (2014). The aim of the Memorandum is to ensure that the scope and structure of initial VET and further education are based on results of the analysis of labour market needs.

³⁸ <http://sustavapovolani.sk>

Part III - Ten Criteria of the Referencing Process

1. Criterion 1

Competence of a relevant body

The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process, including the National Coordination Point, are clearly determined and published by the competent public authorities.

The body in charge of SKKR is the Ministry of Education, Science, Research and Sport of the Slovak Republic. In 2014, Memorandum on Cooperation was signed with the Ministry of Labour, Social Affairs and Family SR, in order to confirm the need for close cooperation to address harmonisation of the labour market needs and the education system.

National Coordination Point (NCP)

NCP was set up in line with the Resolution No. 105 of 4 February 2009 on a proposal for implementation of the European Qualifications Framework in the Slovak Republic.

- In 2009 - 2011, NCP was a part of the education ministry.
- In 2011 - 2014, NCP was a part of the National Institute for Lifelong Learning. In this period, the EQF Glossary was developed and the idea of SKKR promoted.
- In 2014, NCP moved to the State Vocational Education Institute, which has been also a contact point for other European initiatives (EQAVET, ECVET, ReferNet etc.). NCP fulfils various tasks³⁹, mainly:
 - promotes information on SKKR, EQF and Slovak qualifications and maintains the website www.kvalifikacie.sk;
 - in cooperation with the education ministry manages the process of referencing the SKKR to the EQF,
 - coordinates the work of key stakeholders towards development of the National Qualifications Register;
 - maintains the National Qualifications Register and ensures its linking to the European portals (ESCO, LOQs);
 - provides a technical secretariat for the development of new qualifications;
 - cooperates with the international institutions (European Commission, CEDEFOP, etc.) and the European network of NCPs;

³⁹ <http://www.siov.sk/Clanok.aspx?ArticleID=94>

- provides technical and administrative support for the work of the European Commission and the national bodies in relation to the SKKR.

Within the country-wide project “Development of the National System of Qualifications in the SR” (2013-2015), these structures were involved in the definition and approval of qualifications:

National Board for Education and Qualifications (NBEQ)

The National Board for Education and Qualifications - the highest approving authority composed of representatives of key stakeholders involved in the development of SKKR and National Qualifications Register:

- professional and employers’ organisations,
- all sectoral ministries,
- state and regional administration and associations of schools.

Its main task was the assessment and approval of qualifications and their levelling to SKKR.

National Group of Experts

To fulfil its tasks, NCP established the National Group of Experts which is composed of representatives from:

- education ministry and institutions involved in education policies, and
- representatives of social partners and sector councils.

The work of experts was carried out in several working groups (WG):

- *WG for the development of the National Qualifications Framework.* It included 23 representatives of educational institutions and employers who revised SKKR, national descriptors and worked on the levelling methodology.
- *WG for the analysis of school curricula and HEI study programmes.* It included 53 representatives of educational institutions, representatives of employers and trade unions. Its main task was to assess described qualifications before approval of NBEQ.
- *The working group for the analysis of the completion of education.* It included 38 members and focused on the methods of validation and verification of acquired learning outcomes.
- *Expert guarantors.* The working group involved 15 experts, who provided opinions on qualifications with assigned levels of SKKR. Their opinions were the main indicator, based on which NBEQ approved or disapproved submitted qualifications. Two experts from the Czech Republic - M. Stalker (a former member of the Czech NCP) and M. Sycha (expert in the Czech NQR) were also the members of the working group.

Sector Councils

The main role of Sector Councils is to reflect up-to-date labour market needs and requirements in qualifications standards and propose their allocation to SKKR levels. Sector Councils include representatives of all stakeholders, i.e. authorities at central and regional levels, employers' associations, representatives of trade unions, municipalities and pedagogical employees. Their establishment is under the responsibility of the *Alliance of Sector Councils*⁴⁰, in line with the Act on employment services. Recently, there have been 24 sector councils⁴¹ established. To ensure quality of the developed qualification standards, the Sector Councils established sectorial groups of experts from the respective area.

The total number of persons involved in the process of the implementation of SKKR and National Qualifications Register was about 1000. In 2014-2015, the work of the above mentioned structures was carried out within the ESF national project "Development of NQR".

The list of the governmental institutions, Sector Councils and other institutions which took part in the SKKR development and the referencing process is in the Annex 7.

Since 2016, a new governing structure for qualifications was defined by the education ministry. The structure was simplified and now it includes the following institutions:

- **the State Vocational Education Institute**, which serves as the first contact point as well as technical and methodological support in the further development of the qualification system. EQF NCP is a part of the Institute.
- **The education ministry** is the highest approval body for qualifications/qualification register.
- **Sector councils** are a key element of the qualifications system development /consultation process.

40 <http://www.kvalifikacie.sk/aliancia-sektorovych-rad-nsk>

41 <http://www.kvalifikacie.sk/sektorove-rady-nsk>

2. Criterion 2

Linking between SKKR and EQF

There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.

As mentioned above (Part II, History of the development of SKKR), SKKR was developed as a comprehensive framework with 8 levels corresponding with EQF levels. Contrary to EQF, categories of SKKR were further divided into subcategories, based on the definitions of knowledge and skills in the Recommendation on EQF⁴² as well as the research paper of CEDEFOP Vocational education and training at higher qualification levels⁴³:

Framework	Categories		
EQF	Knowledge	Skills	Competences
SKKR	Knowledge: <ul style="list-style-type: none"> ▪ general ▪ vocational 	Skills: <ul style="list-style-type: none"> ▪ cognitive ▪ practical 	Responsibility and autonomy Social competences

The categories descriptors represent:

- **knowledge**
 - familiarity of facts (declarative knowledge) as well as deep understanding and ability of explaining and reasoning (operational knowledge). This category is divided to:
 - a) **general knowledge** (theoretical and factual),
 - b) **vocational knowledge** (theoretical and factual).
- **skills**
 - based on knowledge and developed by the application of knowledge. They are manifested by a particular (manual) performance or by presentation of intellectual activities. Therefore, this category is divided to:
 - a) **cognitive skills** (e.g. logical, creative and intuitive thinking, reflection);
 - b) **practical skills** (e.g. material selection, clinical examination, quality assessment, manufacture of products, organizational skills and time management, communication skills and self-presentation, management skills, etc.).

⁴² [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32008H0506(01)&from=EN)

⁴³ http://www.cedefop.europa.eu/files/5515_en.pdf

- **competences**

- an individual's potential for satisfactory performance of tasks. Along with the categories of responsibility and autonomy, values, attitudes and social interaction of individuals were taken into account. Therefore, they are divided in line with the EQF recommendation into these categories:
 - a) **responsibility** (e. g. taking responsibility for the performance of tasks, for decisions; responsibility for oneself, co-workers, for own and joint work, product quality, responsibility for social and common values, responsibility for carrying out duties; protection of life, health, safety and hygiene at work; responsibility for environmental protection, etc.).
 - b) **autonomy** (e. g. independence of judgment, critical thinking, autonomy of decisions in problem solving, autonomy in respect of employment, the implementation of projects, product manufacturing, etc.)
 - c) **social competences** (e. g. the ability to work in a team, cooperative attitude, ability to face conflict situations, communication skills, building one's own independence / autonomy as a member of the group, etc.).

The table of 8 levels of SKKR descriptors is in the Annex 4. The SKKR levels descriptors follow the hierarchical principle, i.e. each level expresses the increase of requirements stemming from the lower level and includes the descriptions of the lower level. Full understanding of a specific level requires “**horizontal and vertical reading**”⁴⁴. An increase of learning outcomes requirements described by descriptors at particular levels relates to:

- complexity, scope and deepness of knowledge and their understanding ;
- the degree of necessary support for performing activities or during learning;
- the degree of required integration, independency and creativity;
- the range and complexity of application of knowledge or practice;
- the degree of transparency and dynamics of situations within the practice or during learning.

⁴⁴ Methodology of the development of the National Qualifications Framework of the Slovak Republic (http://tvorbansk.sk/files/metodiky/Metodika_na_tvorbunkr.pdf)



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The SKKR descriptors reflect increase of the mentioned characteristics from the lowest (1) to the highest level (8):

- *the dimension of knowledge* increases from factual, declarative level to conceptual level. In other words, it represents the increase from a simple reproduction of facts to understanding of relationships between elements, ability of flexible association and plasticity of knowledge;
- *the dimension of skills* takes into account simple imitation of activities at the lowest level, mechanical performance and adaptation to concrete conditions. The highest levels of SKKR represent individualised, creative activities.
- *the dimension of competences* comprises receiving impulses, passive reaction to impulses up to creation of own attitude system and involvement in the development of a value system of others.

Linking EQF and SKKR - comparison of level descriptors

Level 1			
EQF		SKKR	
Category		Subcategory	
Knowledge	<ul style="list-style-type: none"> basic general knowledge 	General	<ul style="list-style-type: none"> basic general knowledge at the level of remembering
		Vocational	
Skills	<ul style="list-style-type: none"> basic skills required to carry out simple tasks 	Cognitive	<ul style="list-style-type: none"> reproduce basic knowledge
		Practical	<ul style="list-style-type: none"> perform simple repetitive tasks
Competences	<ul style="list-style-type: none"> work or study under direct supervision in a structured context 	Autonomy Responsibility Social competences	<ul style="list-style-type: none"> performance of simple working tasks under supervision in known and stable conditions
<p>Explanation of the SKKR level: The context of learning is simple and stable. Attention is focused on mastering basic general knowledge and its simple reproduction as well as acquisition of basic skills. Performances include the simplest, repetitive activities carried out under the direct supervision in non-changing conditions. Learning is usually acquired during compulsory primary education.</p> <p>Comparison with EQF level: Descriptors of both frameworks match.</p>			

Level 2			
EQF		SKKR	
Category		Subcategory	
Knowledge	<ul style="list-style-type: none"> basic factual knowledge in work or study 	General	<ul style="list-style-type: none"> basic general knowledge at the level of understanding
		Vocational	<ul style="list-style-type: none"> basic professional knowledge at the level of remembering
Skills	<ul style="list-style-type: none"> basic cognitive and practical skills required for using relevant information with the aim to accomplish tasks and solve routine problems by using simple rules and tools 	Cognitive	<ul style="list-style-type: none"> practically use information in specific situations
		Practical	<ul style="list-style-type: none"> perform more complex repetitive tasks use simple methods, tools and materials in known conditions
Competences	<ul style="list-style-type: none"> work or study under supervision with a certain degree of autonomy 	Autonomy Responsibility Social competences	<ul style="list-style-type: none"> performance of simple working activities under supervision with a certain degree of autonomy perception of own share of responsibility

Explanation:
The context of learning or work is simple and stable. Attention is focused on mastering basic working skills including key competences. Performances are more complex, they do not involve continuous supervision. This level is the entrance into LLL. Education is usually obtained during compulsory lower secondary education. This level can also be achieved through non-formal and informal learning.

Comparison with EQF level:
SKKR level 2 expresses the growth in the category general knowledge from remembering to understanding. Both levels indicate stable conditions and work or study under substantial supervision. The holder of a qualification shows understanding of his/her responsibility but does not assume it.

Level 3			
EQF		SKKR	
Category		Subcategory	
Knowledge	<ul style="list-style-type: none"> knowledge of facts, rules, procedures and general concepts in work or study 	General	<ul style="list-style-type: none"> deepened general knowledge and understanding
		Vocational	<ul style="list-style-type: none"> professional knowledge in concepts, methods, procedures and standards
Skills	<ul style="list-style-type: none"> a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information 	Cognitive	<ul style="list-style-type: none"> use common technical, non-technical and technological documentation, standards and standards of a respective field
		Practical	<ul style="list-style-type: none"> apply general and professional knowledge to solve simple problem tasks use common procedures, methods, tools and materials when carrying out activities in the field
Competences	<ul style="list-style-type: none"> take responsibility for completion of tasks in work or study; adapt his/her behaviour to circumstances while solving problems 	Autonomy Responsibility Social competences	<ul style="list-style-type: none"> autonomy and creative work in standard, rarely changing conditions responsibility for one's own performance evaluation of own work

Explanation:

The contexts of learning or work are relatively stable and known. The attention is focused on mastering vocational skills. An individual is capable of self-reflection and self-assessment and takes responsibility for own performance. At this level, he/she is able to solve problem tasks in a known environment, based on previous experience. People with this qualification have some experience in the field in which they work or study.

Comparison with EQF level:

SKKR level 3 expresses the growth in the category general knowledge from understanding the simple concepts to deeper understanding the relationships between the concepts. Slovak descriptors underline the changing conditions and the basic autonomy at work or study. SKKR descriptors comprise mastering the standards etc. We consider this part to be just further elaboration of the relevant EQF descriptor. Contrary to the EQF level descriptors, this SKKR level brings out the creativity and ability of self-reflection. As such, we do not consider this approach to contradict the overall similarity of this level.

Level 4			
EQF		SKKR	
Category		Subcategory	
Knowledge	<ul style="list-style-type: none"> practical and theoretical knowledge in broad contexts within a field of work or study 	General	<ul style="list-style-type: none"> deepened general knowledge at the level of application
		Vocational	<ul style="list-style-type: none"> knowledge of regularities, principles, processes, standards and general concepts in a broader context
Skills	<ul style="list-style-type: none"> a range of cognitive and practical skills required to generate solutions of specific problems in a field of work or study 	Cognitive	<ul style="list-style-type: none"> practically apply information of general nature
		Practical	<ul style="list-style-type: none"> apply deepened general and vocational knowledge use technical documentation apply complex procedures, methods, tools and materials when carrying out activities in the field
Competences	<ul style="list-style-type: none"> exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change; supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities 	Autonomy Responsibility Social competences	<ul style="list-style-type: none"> independent solving of problem tasks in predictably changing conditions responsibility for work in predictably changing conditions responsibility for management of a smaller team evaluation of the results of one's own work and the work of others

Explanation:

The contexts for the development and demonstration of knowledge, skills and competences are changing but predictable. This level indicates completion of secondary education and some formal training. Education is achieved during compulsory education as general or vocational.

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.

Comparison with EQF level:

Both SKKR and EQF levels signal substantial change in competences in terms of autonomy, responsibility from “self” to “team”. The demarcated differences represent only detailed information on the content of descriptor that does not influence an overall understanding of the level.

Level 5			
EQF		SKKR	
Category		Subcategory	
Knowledge	<ul style="list-style-type: none"> comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge 	General	<ul style="list-style-type: none"> deepened general knowledge at the level of analysis
		Vocational	<ul style="list-style-type: none"> specialized vocational knowledge in the field of work or education
Skills	<ul style="list-style-type: none"> a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems 	Cognitive	<ul style="list-style-type: none"> monitor, analyse, plan, organize and evaluate specific working procedures
		Practical	<ul style="list-style-type: none"> implement specific working procedures identify what constitutes a problem in the application of a chosen procedure propose specific working procedures and solutions
Competences	<ul style="list-style-type: none"> exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others 	Autonomy Responsibility Social competences	<ul style="list-style-type: none"> a high level of autonomy creative work taking responsibility for the management, evaluation and development of activities in changing conditions the ability to transfer information and skills to others

Explanation:

The context for the acquisition and demonstration of knowledge, skills and competences at this level is usually unpredictable. A holder of a qualification at this level solves tasks in a predetermined process. He/she can anticipate problem situations and propose effective solutions. He/she will have broad experience of work or study in the area, which is often specialised. He/she can analyse information and transfer them to others. A qualification at this level requires substantial level of autonomy.

Comparison with EQF level:

Both SKKR and EQF levels emphasise specialisation and ability to find and to propose and evaluate problem solving. Contrary to EQF, SKKR descriptors bring out the ability of information transfer.

Level 6			
EQF		SKKR	
Category		Subcategory	
Knowledge	<ul style="list-style-type: none"> advanced knowledge of a field of work or study, involving a critical understanding of theories and principles 	General	<ul style="list-style-type: none"> general knowledge at the level of synthesis
		Vocational	<ul style="list-style-type: none"> practical and methodological knowledge of key areas in the field, which serve as the basis for practice, research or artistic creation
Skills	<ul style="list-style-type: none"> advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study 	Cognitive	<ul style="list-style-type: none"> propose solutions to methodical, technical, artistic or practical problems modify general and vocational knowledge to solve specific professional problems
		Practical	<ul style="list-style-type: none"> implement solutions to methodical, professional, artistic or practical problems use creative methods, tools, equipment and materials
Competences	<ul style="list-style-type: none"> manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups 	Autonomy Responsibility Social competences	<ul style="list-style-type: none"> autonomy in solving specific problems in changing environment planning one's own education autonomy and responsibility in decision-making ability to present own opinions appropriately and professionally creative and flexible thinking

Explanation:

The contexts for the development and demonstration of knowledge, skills and competences at this level are unpredictable, unstable and require complex problem solving. An individual at this level of qualifications will solve complex tasks in a predetermined process with the ability to design also less standard solutions; he/she will have experience of work or study in the field, which is often highly specialized.

A holder of such qualification is required to show substantial level of autonomy, critical and analytical thinking.

Comparison with EQF level:

Both SKKR and EQF levels emphasise a shift to decision-making, unpredictability of the situation and field-specific problem solving. SKKR includes the artistic field and emphasises creativity. Furthermore, it 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). The overall understanding of both EQF and SKKR levels remain unaffected.

Level 7			
EQF		SKKR	
Category		Subcategory	
Knowledge	<ul style="list-style-type: none"> highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research; critical awareness of knowledge issues in a field and at the interface between different fields 	General	<ul style="list-style-type: none"> highly advanced knowledge at the level of evaluation
		Vocational	<ul style="list-style-type: none"> vocational and methodological knowledge in several areas of the field or practice, serving as a basis for innovation and originality in practice, research or arts
Skills	<ul style="list-style-type: none"> specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields 	Cognitive	<ul style="list-style-type: none"> propose and evaluate solutions for methodical, vocational, artistic, practical or scientific problems in various areas of the field or practice formulate recommendations for the development of a given scientific work or artistic field establish scientific or practical assumptions for problem-solving
		Practical	<ul style="list-style-type: none"> implement and evaluate solutions for methodical, professional, artistic, practical or scientific problems in various areas of the field or practice create tutorials, projects of implementation and evaluation procedures for activities in the field

<p><i>Competences</i></p>	<ul style="list-style-type: none"> • manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; • take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams 	<p><i>Autonomy Responsibility Social competences</i></p>	<ul style="list-style-type: none"> • a high level of autonomy and predictability in known and unknown environments • initiative and responsibility for managing work of a work team • innovative, creative thinking • professional presentation of the results of one's own study or practice
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Explanation:

A typical situation within learning is unknown and requires solving tasks in which many related factors occur. Learning is highly specialised. Qualifications relate to an independent work with other people and provide space for development of work and education according to individual interest.

Comparison with EQF level:

Both SKKR and EQF levels emphasise specialisation and innovative approaches to 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.

Level 8			
EQF		SKKR	
Category		Subcategory	
Knowledge	<ul style="list-style-type: none"> knowledge at the most advanced frontier of a field of work or study and at the interface between fields 	General	<ul style="list-style-type: none"> the most advanced knowledge at the level of evaluation knowledge of the priorities necessary for the development of the society
		Vocational	<ul style="list-style-type: none"> vocational 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 development for professional practice
Skills	<ul style="list-style-type: none"> the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice 	Cognitive	<ul style="list-style-type: none"> create and formulate new hypotheses, judgments and strategies for further development of science or field of work evaluate theories, concepts and innovations
		Practical	<ul style="list-style-type: none"> apply one's own findings based on theoretical analysis and scientific research of comprehensive and/or interdisciplinary nature design, validate and implement new research and working procedures

<i>Competences</i>	<ul style="list-style-type: none"> demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research 	<i>Autonomy</i>	<ul style="list-style-type: none"> planning one's own development and development of the society in the context of scientific and technical progress
		<i>Responsibility</i>	<ul style="list-style-type: none"> responsibility for leadership in a given scientific or professional field
		<i>Social competences</i>	<ul style="list-style-type: none"> critical, autonomous and analytical thinking in unpredictable, changing conditions taking into account social, scientific and ethical aspects in the direction of further development of the society the ability to present results of research and development to professional community

Explanation:

A typical situation within learning is unknown and requires solving non-standard tasks in which many related unforeseeable factors occur and lead to the development of theories and hypotheses. Education and/or practice are highly specialised. 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.

Comparison with EQF level:

Both SKKR and EQF levels emphasise the highest level of mastering the knowledge and skills, interdisciplinary character and leadership competences of a holder of such qualification. Contrary to EQF, the concept of synthesis appears at the level 6 of SKKR. It results from the analysis of taxonomy where the growth of demandingness starts at passive remembering through understanding, application, *analysis, synthesis and evaluation*. However, 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.

The table above was a base for a semantic analysis and confirmed our assumption about the relation of EQF and SKKR to be 1:1. Further explanation of individual levels of SKKR and minor differences from EQF are shown in a table in the Annex 5.

3. Criterion 3

The Principle of Learning Outcomes

The national qualifications framework or system and its qualifications are based on the principle and objective of learning outcomes and linked to arrangements for validation of non-formal and informal learning and, where these exist, to credit systems.

Learning outcomes approach - from primary to post-secondary education

In 2008, the methodology for the development of school curricula for secondary vocational schools, supporting the new School Act, introduced the definition of learning outcomes embedded in the key competences framework⁴⁵:

“Learning outcomes are statements on what a pupil knows, understands and is able to do by the end of the learning process. They are structured description of competences (vocational, general, key) required for the performance of a certain working task, activity or set of activities.”⁴⁶

The same methodology introduced also the definition of a “competence”:

“The competence is a demonstrated ability to use knowledge, skills, attitude, value orientation and other abilities for showing and performing functions according to given standards in work, study, in private and professional development of an individual and in his/her active participation in a society, in further application in working and non-working life and for his/her further education.”

The state curriculum has defined **performance standard**⁴⁷ as:

“... a fundamental criterion for the level of mastering knowledge, skills and abilities. It defines the level of significant knowledge, skills and competences a student is expected to demonstrate after the completion of his/her education.”

Each educational programme divides performance standards into:

- *Cognitive field* - knowledge (theory, principles, rules, content etc.),
- *Psycho-motor field* - skills (manual performance, methods usage, materials usage, means, tools and devices etc.),
- *Affective field* - competence (attitudes, emotions, value orientations, socio-communicative skills).

⁴⁵ <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=LEGISSUM:c11090&from=EN>

⁴⁶ <http://www9.siov.sk/metodika-tvorby-skolskych-vzdelavacich-programov-pre-sos/10692s>

⁴⁷ Ibid.

Development of performance standards is governed by certain rules⁴⁸:

- Each determination begins with an active verb in the infinitive form.
- In one determination, only one verb should be used.
- An activity must be expressed by an active verb, which is measurable and observable.
- The performance standard represents a product or activity, not a process.
- Setting the performance standards must be reasonably simple, consistent, clearly formulated, concise, unambiguous and understandable to be well understood by all actors of the training process (teacher, student, parent, employer).

The revised taxonomy of educational objectives by B. S. Bloom is recommended for the development of performance standards.

Development of learning outcomes is in the responsibility of:

- State Pedagogical Institute on the level of *state curricula for general education*,
- State Vocational Education Institute on the level of *state curricula for VET*,
- Board for development and assessment of state curricula for **medical study fields** at secondary medical schools⁴⁹
- individual education providers on the level of *school curricula*.

Approval of learning outcomes is provided by:

- Ministry of Education, Science, Research and Sport SR (also for learning outcomes included in the state curricula under responsibility of other ministries⁵⁰),
- Ministry of Health of SR (for medical study branches)

An essential part of each school curriculum is a “graduate profile“. It includes specific requirements for vocational knowledge and practical skills, as well as requirements at the level of general knowledge and key competences.

48 Ibid.

49 <http://www.health.gov.sk/?rada-mz-sr-pre-tvorbu-a-hodnotenie-statnych-vzdelavacich-programov-odbornej-pripravy-vzdelavania-pre-zdravotnicke-studijne-odbory-na-strednych-zdravotnickych-skolach-1>

50 School Act, § 6

Learning outcomes approach in HE

Learning outcomes approach is firmly embedded in the Criteria for accreditation of study programmes of HE⁵¹: “The definition of graduate’s profile comprises the most important knowledge, competences and skills which the graduate of the study programme within the relevant field of study should acquire.”

Learning outcomes in HE are defined in the Decree of the education ministry on the credit system as the “statements on what a student knows, understands and is able to do by the end of a learning process”⁵².

ECTS - European Credit transfer System - is used by all higher education institutions in Slovakia. It provides a way of measuring and comparing learning achievements, and transferring them from one institution to another.

The Slovak University of Technology in Bratislava, for example, publishes the ECTS Information Package/ Catalogue according to faculties, qualification awarded as well as all programmes or all courses level selection⁵³.

In the information on the study programme Applied Mechanics and Mechatronics (taught in the English language) at the bachelor level, the key learning outcomes are described as follows: “acquisition of knowledge in field of fundamental principles of the integration of applied mechanics, electronics and information technology as the modelling of mechanical systems, sensors, actuators, microprocessors, communication and mechatronic systems. Acquisition of knowledge in the field of design mechanical, control and mechatronic systems”⁵⁴.

The same study programme at the master level is also described by the principle of learning outcomes including the level of course units.

The learning outcomes are stated in *graduate’s profile* in the categories “theoretical knowledge”, “practical abilities and skills” and “complementary knowledge, skills and competences”.

The principles of learning outcomes within HE projects follow the same rules and the taxonomy as were mentioned above:

- each learning outcome must contain a verb expressing an “activity” and “object” to which the verb relies (e. g. area of knowledge, skills) and required level and scope of achievement
- learning outcomes must be measurable
- learning outcomes must be understandable.

51 <http://www.minedu.sk/kriteria-pouzivane-pri-vyjadrovani-sa-akreditacnej-komisie/>

52 Decree of the Ministry of Education, Science, Research and Sport SR No. 614/2002 Coll. on credit system <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2002/614/20130901>

53 http://www.stuba.sk/english/ects/ects-information-package/information-on-degree-programmes.html?page_id=5435

54 http://www.stuba.sk/english/ects/ects-information-package/information-on-degree-programmes/all-programmes.html?page_id=5552

Learning outcomes approach in qualification standards

The same principles including the use of taxonomy of learning domains has become the basis for the development of the **qualification standard**⁵⁵:

“The fundamental components of NQR are learning outcomes. If NQR should be an understandable and usable system allowing comparability of learning outcomes, the learning outcomes have to be described in a standard way, using the simplest structure and by elements that can be easily changed in case of adjustment and update.”

In this case, the methodology adopts the definition of learning outcomes of the Recommendation on the establishment of EQF⁵⁶:

“Learning outcomes means statements of what a learner knows, understands and is able to do on completion of a learning process which are defined in terms of knowledge, skills and competence ... necessary for the performance of a certain working task, activity or set of activities in a given profession or a group of related occupations.”

Comparison of using learning outcomes in state curricula and study programmes in line with SKKR level descriptors

Each qualification included in NQR is described by *measurable and assessable* learning outcomes. In this regard, SKKR does not make any distinction between qualifications acquired through formal education (academic, initial vocational) and through non-formal education and informal learning, but it allows comparing their levels by comparing learning outcomes.

⁵⁵ Methodology for setting up the qualification standards (http://www.tvorbansk.sk/files/metodiky/Methodika_tvorbansk.pdf)

⁵⁶ Recommendation 2008/C 111/ES https://ec.europa.eu/ploteus/sites/eac-efq/files/journal_sk.pdf

Area	Learning outcome category	SKKR level descriptor
State Curriculum** : Competence profile of graduate	Key competences: a) ability to act independently in social and working life <i>Example:</i> to identify direct and indirect impacts of his/her activities (identifikovať priame a nepriame dôsledky svojej činnosti)	<i>evaluation of the results of one's own work and the work of others</i> (SKKR 4)
	b) ability to interactively use knowledge, ICT, communication in mother and foreign tongue <i>Example:</i> to solve common mathematical problems and different situations (riešiť bežné matematické príklady a rôzne situácie)	<i>deepened general knowledge at the level of application</i> (SKKR 4)
	c) ability to work in diverse groups <i>Example:</i> to work independently in a small group (samostatne pracovať v menšom kolektíve)	<i>responsibility for management of a smaller team</i> (SKKR 4)
	General competences: basic cognitive competences, e. g. literacy, numeracy, problem solving, social, interpersonal and communication skills	<i>deepened general knowledge at the level of application</i> (SKKR 4)
	Vocational competences <i>Example:</i> to understand the code letters of wires and cables (rozumie písmenovému značeniu vodičov a káblov) to draw and outline single- and double-pole scheme of electric installations independently (samostatne kresliť a rysovať jedнопólové a viacpólové schéma elektrických zariadení)	<i>use technical documentation apply deepened general and vocational knowledge</i> (SKKR 4)

** State curriculum for a group of study and training branches - Electrotechnics, http://www.siov.sk/Documents/08-11-2016/%C5%A0VP_26%20Elektrotechnika.pdf

Study programme ^{***} : Graduate's professional profile	Theoretical knowledge <i>Example:</i> to master the essential legal regulations related to social work (Ovláda základné právne predpisy súvisiace so sociálnou prácou)	<i>practical and methodological knowledge of key areas in the field, which serve as the basis for practice, research or artistic creation</i> (SKKR 6)
	Practical abilities and skills <i>Example:</i> monitoring of social needs within the scope of the entrusted position (Monitoring sociálnych potrieb v rámci zverenej funkcie)	<i>use creative methods, tools, equipment and materials</i> (SKKR 6)
	Complementary knowledge, skills and abilities <i>Example:</i> to think independently and react promptly, implement changes flexibly and bear responsibility (Samostatne myslieť a pohotovo reagovať, flexibilne vykonávať zmeny a niesť zodpovednosť)	<i>autonomy in solving specific problems in changing environment</i> <i>autonomy and responsibility in decision-making</i> <i>creative and flexible thinking</i> (SKKR 6)

*** Graduate's profile for the 1st cycle study programme Social work <https://www.vssvalzbety.sk/userfiles/REKTORAT/ProfilBCSP.pdf>

State (and school) curricula, study programmes and qualification standards use the same concepts of knowledge and skills. On the other hand, the term competences, differs. In state curricula, the competences represent an “umbrella” concept comprising knowledge and skills and other categories: approach, attitude, value, social interaction etc. These together with key competences describe an integral picture of the graduate. In such way a general competence in the area of maths covers not only the familiarity with mathematical formulas (knowledge), autonomy in selecting the specific formula (competence) and its application under the specific circumstance (skill) etc.

Therefore, it is necessary to “unscramble” the performance standard of a specific school curriculum into categories of SKKR when comparing the state/school curriculum with a relevant qualification.

The developments, which started within the national project the Development of the National Qualifications System, recently continue and the discussions focus mainly on the areas of:

- *Terminology* related to defining and understanding the terms “competence” and “ability” as they are used in the Slovak language as equivalents. Further steps of the implementation of SKKR will lead to the terminological solution (also in the context of the new LLL Act preparation).
- *Typology* of learning outcomes originated in different sources:
 - The performance standards in the education programmes are formulated mainly by pedagogical and

professional employees of an educational institution - learning outcomes are thus detailed and deeply specify study areas. They require continuous updating in case of any change (e.g. in technology).

- The formulation of learning outcomes in the qualification standards can be considered as reduced and more general in order to be valid and applicable also in case of technological changes.

Conclusion

The methodologies and rules for the development of learning outcomes in qualification standards, curricula, as well as study programmes have common features:

- **Stability** - each qualification standard should be valid for several years;
- **Complexity** - each qualification standard should cover a wide range of knowledge, skills and competences of a relevant qualification;
- **Fundamentality** - learning outcomes must focus mainly on the labour market requirements and needs (learning outcomes related to the general education part of a qualification are considered to be embedded in the qualification automatically);
- **Objective controllability** according to defined criteria (validity, accuracy, practicality, range, etc.).

Apart from the above mentioned features of learning outcomes, **education in general** reflects transversally values of democracy, humanism and tolerance; support of creative and independent thinking of students, respect to national values and intercultural contexts.

Validation of non-formal and informal learning in Slovakia

As mentioned above (part Further education) in Slovakia, there is no systemic approach to validation of non-formal and informal learning. There are certain elements of the national model for validation which is possible according to the LLL Act. The relevant article of this act (§ 17 Verification and assessment of the professional competence) refers to assessment and also recognition of results of further education (as a result of an accredited programme and at least five years of professional experience), and/or verification of a professional competence necessary for running a business regulated by the Trade Licensing Act No. 455/1991 Coll.

Recently, validation of non-formal and informal learning leads to a certificate confirming compliance with the related qualification standards. Certificates verifying professional competence are not equivalent to those from formal education, they substitute a certificate of apprenticeship for the purpose of starting a business only. National validation arrangements covering four well-designed stages - identification, documentation, assessment and certification - and tools are needed to be developed and promoted, as exams are currently the main validation instrument⁵⁷.

In November 2015, a working group was created to prepare a new Lifelong Learning Act. A follow-up to the ESF project (Development of the National Qualification System), aiming to develop the system of qualifications validation will be implemented by the end of 2017. It will be an instrument for the development of processes, tools and methodologies in validation, creation of an institutional framework and support adoption or amendments of related legislation.

⁵⁷ Country Report: Slovakia, 2016, https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016_validate_SK.pdf

4. Criterion 4

The referencing process is transparent

The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.

Institutional responsibilities

Ministry of Education, Science, Research and Sport SR bears the sole responsibility for approval, maintenance and further development of SKKR and NQR, as well as for validity of qualifications and their legislative framework.

SKKR and NQR are managed by the State Vocational Education Institute (a directly governed institution of the ministry).

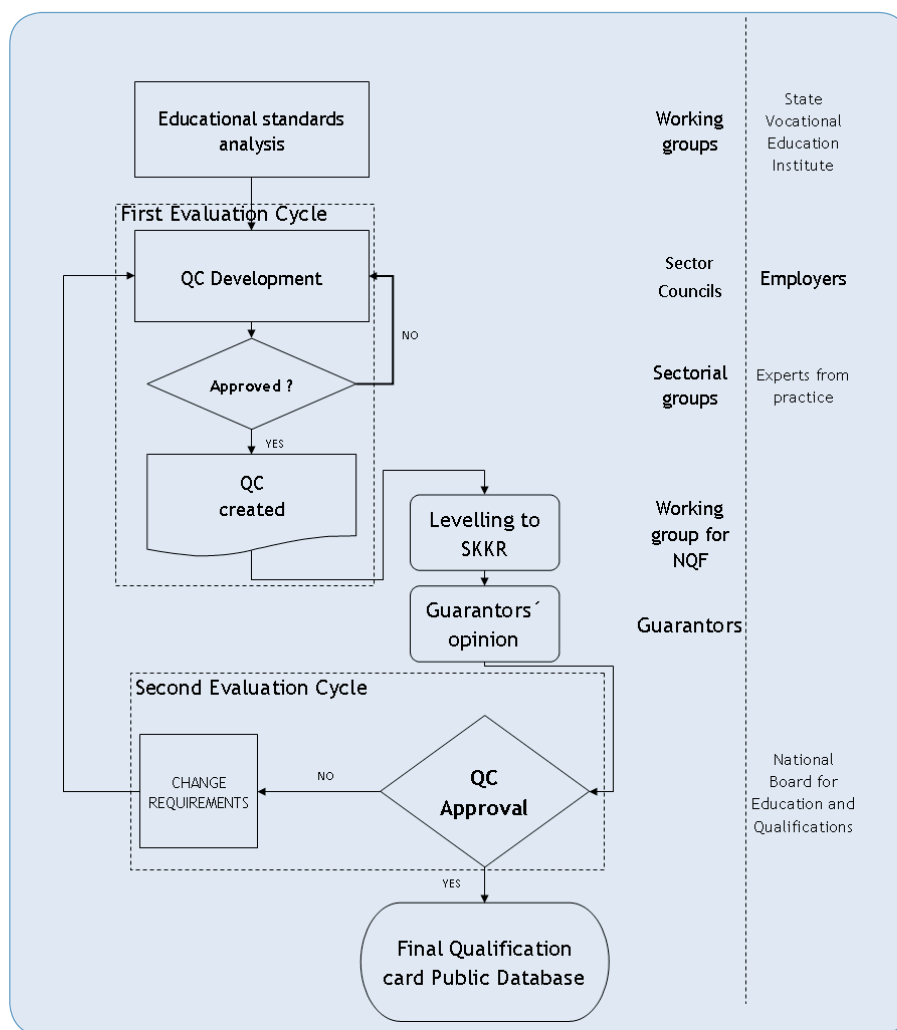
There are 5 bodies eligible to propose a new qualification:

- Ministry of Education, Science, Research and Sport of the Slovak Republic for all qualifications awarded in formal (primary, secondary and tertiary education) and further education;
- Ministry of Health of the Slovak Republic for all qualifications awarded in the healthcare sector;
- Ministry of Internal Affairs for qualifications awarded in the relevant sectors (firefighters and rescuers, police force);
- Ministry of Defence of the Slovak Republic for qualifications awarded for military forces;
- Sector Councils, mainly occupational qualifications.

All qualifications included in NQR were described in the form of **qualification cards**. Their development was a responsibility of working groups established by Sector Councils. The first task of Sector Councils was to analyse labour market units (national occupations standard, if available, position, jobs, etc.) and to develop a qualification's *birth certificate*. Its purpose was to justify the development of a qualification in terms of its demand by the labour market, a possibility to develop a missing education programme or an accredited further education course, as well as identify validation procedures of authorised bodies, etc.

If a Sector Council justified the need for a new qualification, the working group drafted qualification and assessment standards. Subsequently, the Sector Council was the first approving body in the lifecycle of a qualification card.

In the next step, the Working group for SKKR assigned the SKKR level to the qualification. In case of disagreement, other working groups (WG for analysis of school curricula, HE study programmes and WG for the completion of education) and expert guarantors examined the qualification card. The Sector Council also approved placing of a qualification to SKKR. The final approval of each qualification card was done by the National Board for Education and Qualifications (see picture No. 6).



Picture No. 6: Cycle of development, approval and levelling of qualifications to SKKR in 2013-2015 - institutions and bodies involved

All qualifications included in the NQR and placed on the levels of SKKR have to meet the following requirements⁵⁸:

- the qualification in any sub-framework is required by the labour market (based on a consent from stakeholders and initial analysis of the qualification’s applicability on the labour market),
- qualifications are based on learning outcomes-based standards (state curriculum, qualification standard, HE programme),

⁵⁸ Before the SKKR implementation, qualifications were awarded according to the School Act and HE Act in the formal system of education.

- the qualification fulfils the quality requirements stipulated by the relevant legal regulation (e. g. it meets the requirements for accreditation determined in the School Act, Act on HE, Act on LLL etc.).

Since 2016, until the establishment of the national system of validation and adoption of the new LLL Act (end of 2018), the above mentioned procedures were modified and are in place as follows:

- if the above mentioned requirements related to qualifications are met, a new qualification card is developed and analysed by a group of national experts including a proposal for its levelling into SKKR (technical preparation),
- based on the proposal, consultation process with a respective Sector Council and other stakeholders begins,
- the final approval of the qualification is based on the education ministry decision following the fine-tuning process,
- the qualification is included to the National Qualifications Register.

To ensure transparency of the **levelling process**, key stages include:

- a semantic analysis of the descriptors of a given qualification,
- completing a table with statistic data related to the number of learning outcomes used,
- applying a best-fit principle,
- assigning a SKKR level,
- approval by competent authorities.

The starting points for assigning SKKR level are learning outcomes⁵⁹ and their analysis against the level descriptors.

In 2014, a set of methodologies was drafted and piloted on the first set of approved qualifications⁶⁰. Its purpose was to set up a transparent and simple method for the analysis of learning outcomes defined in a qualification standard and their comparison with national descriptors. The methodology is based on the best-fit approach: all learning outcomes within the qualifications standard are reviewed individually, compared with national descriptors, and the most fitting level is assigned to the qualification.

59 The methodology of the development of the National Qualifications Framework of the Slovak Republic http://www.kvalifikacie.sk/sites/nsk/files/images/Dokumenty/metodika_na_tvorbu_nkr.pdf

60 <http://www.kvalifikacie.sk/na-stiahnutie>

For the need of comparing national descriptors with learning outcomes of a qualification standard, individual descriptors were denoted by a specific *alphanumeric* code⁶¹:

- First digit - SKKR level;
- First letter - category (v - knowledge, z - skills, k - competences);
- Second letter - sub-category (v - general, o - professional, k - cognitive, p - practical, s - self-reliance, z - responsibility, c - social competences);
- Last digit - the descriptor sequence within a given sub-category.

To search in standards and work processes in metal industry	3zk1	
To operate electric furnaces plants and separation plants for continuous steel casting		3zp2
To operate separation plants of steel slag, vibrating feeders, pig iron active mixers and other technological plants of still plant		3zp2
To operate oxygen blowing mode into the converter during steel manufacturing		3zp2
To use information technologies in metal manufacturing processes		3zp2

Picture No. 7: The example of levelling qualification skills of Metallurgist steelworker to a SKKR level

The methodology builds on the following principles:

- an interpretation of descriptors is *contextual* (i.e. the context of VET or academic education, theoretical preparation or working experience);
- learning outcomes in a qualification do not have to refer to every single descriptor (e.g. academic qualification cards can contain more knowledge or cognitive skills, manual work oriented qualification cards contain more descriptions of practical skills, etc.);
- a qualification card may contain learning outcomes at various levels, while:
 - a a difference within the sub-category *must not* exceed more than 2 levels (e.g. skills at levels 3 and 6);
 - b a difference between categories *must not* exceed more than 1 level (e.g. knowledge at level 3, skills at level 5);

⁶¹ Levelling of the Slovak Qualifications Framework, 2015

Furthermore, it is necessary to take into account also:

- complexity and demandingness of a learning outcome (deepness of knowledge, difficulty of application in practice, etc.);
- work- (study-) load (duration of learning, required practice, etc.);
- dynamics and transparency of the situation;
- level of autonomy and/or team work;
- level of support and leadership.

Descriptors are in the first place indications, not “directives”. In case of a dispute or ambiguity of levelling, it is necessary to:

- consult an assessment standard and consider the difficulty of an assessment;
- consult the description of the national occupational standard where available and consider the difficulty and complexity of performing activities;
- other.

The methodology *must not* be understood mechanically. There are several impacts of the methodology:

- it enables to look back at the quality of a qualification card, e.g. in term of its comprehensiveness and consistency;
- it enables to look at the overall character of a particular level of SKKR;
- it enables data collection. Levelling of qualifications provides a realistic picture of their composition and structure, statistics of used learning outcomes for categories and subcategories of the SKKR descriptors;
- it enables retrospective increase of the quality of new qualifications descriptions (also curricula) in term of their composition and structure.

All approved qualifications are included in the National Qualifications Register in the form of qualification cards. By the end of 2015, the register comprised a detailed analysis of 1000 qualification cards awarded in Slovakia.

Qualification standards should be stable but open to reflect up-to-date requirements of the labour market development. Sector Councils continuously monitor qualifications and propose their revision as soon as they see the need for their change. In addition, they have to monitor the qualification validation and recognition processes in terms of quality, transparency and relevance. Changes in the description of the qualifications might have an impact on levelling process as well.

The following table offers the overview of qualifications related to respective levels of SKKR. List of qualifications placed on the levels of SKKR with their further explanation is also included in Annex 3.

SKKR level	Qualification	
	English title	Slovak title
1	Primary education certificate with supplement	Vysvedčenie s doložkou
2	Lower secondary education certificate with supplement	Vysvedčenie s doložkou
	Certificate of qualification	Osvedčenie o kvalifikácii
	Certificate of final exam and Certificate of apprenticeship	Vysvedčenie o záverečnej skúške a výučný list
3	Certificate of final exam and Certificate of apprenticeship	Vysvedčenie o záverečnej skúške a výučný list
	Certificate of qualification	Osvedčenie o kvalifikácii
4	<i>Maturita</i> Certificate + Certificate of apprenticeship	Vysvedčenie o maturitnej skúške a výučný list
	<i>Maturita</i> Certificate	Vysvedčenie o maturitnej skúške
	Certificate of qualification	Osvedčenie o kvalifikácii
5	<i>Maturita</i> Certificate + Certificate of apprenticeship	Vysvedčenie o maturitnej skúške + Výučný list
	<i>Maturita</i> Certificate	Vysvedčenie o maturitnej skúške
	Certificate of final post-secondary exam + Absolutorium diploma	Vysvedčenie o absolventskej skúške + absolventský diplom
	Certificate of qualification	Osvedčenie o kvalifikácii
6	Diploma + Certificate of State Exam + Diploma Supplement	Diplom + Vysvedčenie o štátnej skúške + Dodatok k diplomu
	Certificate of qualification	Osvedčenie o kvalifikácii
7	Diploma + Certificate of State Exam + Diploma Supplement	Diplom + Vysvedčenie o štátnej skúške + Dodatok k diplomu
	Certificate of qualification	Osvedčenie o kvalifikácii
8	Diploma + Certificate of State Exam + Diploma Supplement	Diplom + Vysvedčenie o štátnej skúške + Dodatok k diplomu

5. Criterion 5

Quality Assurance in education and compliance with the European principles

The national quality assurance system(s) for education and training refer(s) to the national qualifications framework or system and are consistent with the relevant European principles and guidelines (as indicated in annex 3 of the Recommendation).

Quality assurance - national level

Quality assessment is carried out at all levels of the Slovak education system. “Effectively functioning regional education providing quality education and training”, as well as “efficient higher education as a permanent component of the European Higher Education Area and the European Research Area” are the strategic objectives of the Slovak government⁶².

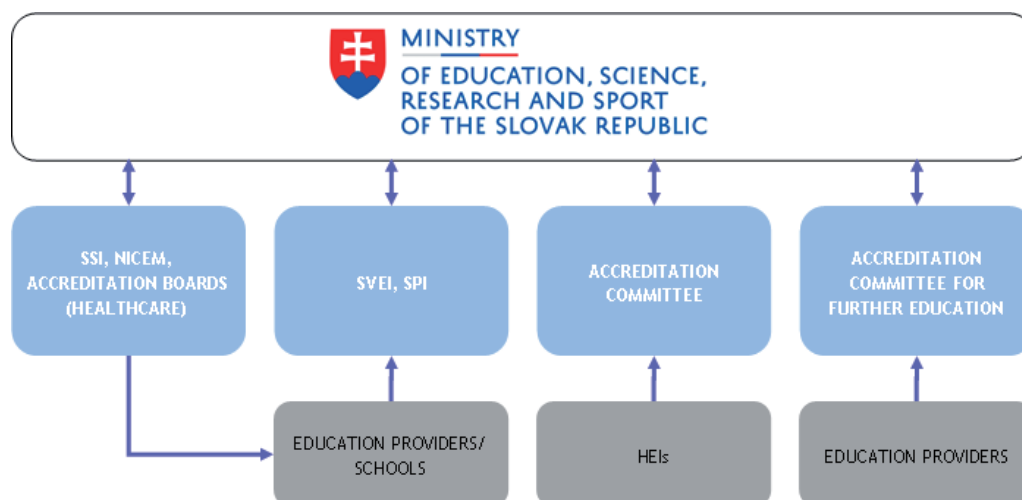
Ministry of Education, Science, Research and Sport SR is responsible for the development of legislation framework at the national level and through directly managed organisations for the coordination of national and international testing (Testing 9⁶³, the external part of *maturita* exam, international studies of OECD and IEA, as e.g. PIRLS, TIMSS, PISA). The preparation and realisation of the testing is in the competence of National Institute of Certified Measurement of Education (NICME).

Another body involved in evaluation of quality of education in Slovakia, is the *Government Council for vocational education and training*. One of the most important indicators monitored by this body is employment of VET graduates. On its base, the lists of study and training programmes with low number of graduates and the lists of study and training programmes the graduates of which are above the labour market needs are discussed. The mechanism is supposed to ensure the regulation of required graduates and decrease the numbers of graduates who directly go to the labour offices as unemployed.

On the regional level, municipalities monitor compliance with generally binding legislation in the field of education and training, with the exception of control entrusted to State School Inspectorate by law.

⁶² Manifesto of the Government of the Slovak Republic 2016-2020, <https://www.minedu.sk/data/att/10890.pdf>

⁶³ External testing of the pupils of the 9th grade (lower secondary education).



Picture No. 8: Quality assurance relationship - national level

In the last decade, several projects implement by national institutions focused on quality assurance:

- *The summary report on the evaluation of the school system, schools, teacher and pupils in the Slovak Republic was prepared within the international project Overview of the assessment and evaluation frameworks for the improvement of learning outcomes in 2011 and 2012 by the National Institute of Certified Measurements of Education (NICME);*
- Quality indicators in education were developed during implementation of the national project “*The development of the secondary vocational education*”. Within the project, so-called “passporting” of secondary vocational schools with the assessment of quality of education⁶⁴ took place.

Quality assurance - pre-primary, primary, secondary and post-secondary education

The quality assurance measures have been included in all the legislative norms related to education on all levels.

The School Act defines that monitoring and assessment of the quality of education is carried out by:

- a school or a school facility,
- State School Inspectorate,
- Ministry of Health for the training component in medical fields at secondary medical schools.

The NICME carries out monitoring and assessment of the quality of education in the field of evaluation of acquired learning outcomes.

⁶⁴ http://potrebyovp.sk/top_skoly

The State School Inspectorate (SSI) in line with the law carries out the external evaluation of education and conditions of education and management in primary and secondary education. According to the law on the state administration in education and school self-government, the State School Inspectorate assesses the validity of objections to the content of the report on educational activity, its results and conditions.

Schools of all kinds and types, as well as school facilities providing educational or training activities, have to carry out self-evaluation on regular base under the Act No. 596/2003 Coll. on state administration in school education and school self-government, as well as in line with the provisions of the School Act. One of the evaluation tools is already mentioned school curriculum that contains the description of internal system of control mechanisms, the method of evaluation of children and pupils, as well as school employees. The duty of education providers is to assess annually, mainly:

- The conceptual plan of the development of a school or school facility at least for two years,
- Educational activity, its results and conditions.

Schools and school facilities submit the reports for comments to the school councils (school self-governance authorities) and to their establishing bodies for approval.

School self-evaluation was a central idea of the national project *External school quality assessment supporting self-assessment processes and the school development* realised by SSI (2009 - 2013)⁶⁵. The purpose of the project was to define the methodological procedure and to specify criteria, standards and indicators for quality assessment in its complex form and development of the model of self-evaluation of the schoolwork.

The proposal of the new reform programme of the education ministry (Learning Slovakia - The National Programme of the Development of Education and Upbringing, March 2017)⁶⁶ emphasizes further institutional development of the bodies involved in quality assurance, more transparency in quality assurance implementation and recommends support mechanisms for self-evaluation of schools and strengthening culture of quality in schools.

In 2016, the education ministry published the Report on quality implementation in vocational education and training in relation to the EQAVET Recommendation. The report draws not only from EQAVET, but also from the experience with the practical application of tools to assess the quality of educational institutions⁶⁷. It analyses the current state of quality assurance in vocational education and training at secondary vocational schools in light of legislative changes and project activities at the level of vocational education and training system. An overview of the state of implementation of EQAVET indicators in initial VET is in the Annex 12.

65 <http://www.ssiba.sk/Default.aspx?text=g&id=25&lang=sk>

66 https://www.minedu.sk/data/files/6987_uciace_sa_slovensko.pdf

67 Report on Quality Assurance Implementation in relation to EQAVET Recommendation <https://www.minedu.sk/data/att/9671.pdf>

Quality assurance in HE

Bologna process

The Slovak Republic belongs to countries which in 1999 signed the Bologna Declaration. The Bologna process plays an important role in the reform of Slovak HE, which began in 1990 by adoption of the new HE Act. The reform efforts undertaken since the adoption of the Bologna Declaration have built directly on the principles of the Bologna Process.

Several stages marked the implementation of Bologna process:

In 2004, the project “National Team of Bologna Promoters” was launched. Its activities were related to:

- handbook “Guide on the Bologna Process: Slovak higher education institutions and the Bologna Process”
- information campaign in the form of seminars

The activities continued during 2007 - 2009, but the scope of the activities changed towards:

- HEIs quality assessment
- Students’ mobility, recognition of learning
- ECTS/DS label
- three cycles of HE
- Alignment with the ESG of EHEA.

The national team of Bologna experts was formed in 2011 - 2013 to support the implementation of the Bologna process⁶⁸. The national team was composed of representatives of universities - experts in fields related to the Bologna process. Long-term strategy in the area of HE declares a number of priorities. The activities of the team comprised some of them:

- HEIs quality assessment⁶⁹,
- Development of national QF-HE/implementation of learning outcomes approach,
- Internationalisation/common study programmes,
- Information/dissemination campaign.

Currently, a representative of the ministry is a member of the Bologna Follow-Up Group (BFUG) and regularly participates at the meetings of the BFUG.

⁶⁸ http://web.saaic.sk/llp/sk/_main.cfm?obsah=m_bolonsky_narodny_tim.cfm&sw_prog=3

⁶⁹ Survey aimed at graduates’ employability: http://web.saaic.sk/llp/sk/doc/rozne/survey_employability.pdf

Since 2013, HE institutions are responsible for quality assurance by law, when ESG criteria were adopted in the amendment of the Higher Education Act⁷⁰. It also strengthened the measures related to the internal quality assurance system.

According to the HE Act, external evaluation of the quality of education is carried out by the *Accreditation Commission* as an advisory body of the Government of the Slovak Republic. Based on the proposed criteria, the Commission fulfils the following tasks:

- Assessment of capability to realise a study programme authorising to grant an academic degree to its graduates,
- Assessment of capability of a non-university institution to participate in the realisation of doctoral study programmes,
- Assessment of capability to realise the habilitation procedure and the procedure of appointment of professors,
- Evaluation of the quality of research, development, art and other creative activities within the complex accreditation of the higher education institution activity,
- Commenting on the internal quality assurance system⁷¹.

It also issues recommendations on improving the work of HEIs. Another task of the Accreditation Commission is to propose criteria on quality monitoring⁷² (including the internal quality assurance system). In 2015, a complex accreditation of the 22 largest higher education institutions was completed. It was conducted in accordance with the *Criteria for the accreditation of higher education study programmes*⁷³ for the purpose of the accreditation of the study programmes of the first, second and third cycles of HE. Similarly, the criteria for capability of HEI to conduct the habilitation process, criteria for appointment of professors and criteria for accreditation of non-university institutions have been developed.

Following the *Standards and guidelines for quality assurance in the European Higher Education Area* (ESG) arising from the requirements of the ministerial conference in Bergen and the proposal for the cyclical evaluation of the agencies for quality assurance, the Accreditation Commission underwent the expert evaluation, so-called the Panel of ENQA (European Association for Quality Assurance in Higher Education) in 2012. Based on this assessment, the ENQA Panel recommended the Accreditation Commission a status of an *affiliate member* (2013).

The higher education act requires that HEIs define the process of involving students in the internal system for quality assurance. The Students' Council for Higher Education, the highest representative body of HE students, is also active in this respect and is an advisory body of the education ministry.

⁷⁰ Act. No. 131/2002 Coll. on Higher Education and on Changes and Supplements to Some Laws, par. 87a

<https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2002/131/20160101>

⁷¹ http://www.minedu.sk/data/files/3433_kriteria-vnutor-system-kvality_zverejnenie.pdf

⁷² <https://www.minedu.sk/schvalenie-kriterii-hodnotenia-vnutorneho-systemu-zabezpecovania-kvality-vysokoskolske-ho-vzdelavania/>

⁷³ <http://www.minedu.sk/kriteria-pouzivane-pri-vyjadrovani-sa-akreditacnej-komisie/>

Principles and details of evaluation of students' performance during their studies are set out in the study regulations of HE institutions. The common element is the fact that the organisation of all degrees and forms of higher education studies in the Slovak Republic is based on the credit system. The Decree of the Ministry of Education No.614 / 2002 Coll. on the credit system, effective from 1 November 2002, is fully compatible with ECTS. The credit system allows to evaluate the student's study load through credits relating to completion of the study programme in accordance with the rules contained in the study program. The standard study load per academic year is 60 credits, 30 credits per semester and 20 credits per trimester.

The recent Higher Education Act reflects ESG criteria from 2008. However, Slovakia was represented in the Ministerial Conference in 2015, which adopted new standards and which are generally accepted in the Slovak HE, and these will be incorporated in the renewed act.

In November 2016, the education ministry has started the process of public consultations on future programme of reforms in the Slovak education. The document Learning Slovakia, the National programme for the development of education⁷⁴ is based on the goals of the Manifesto of the Government for 2016 - 2020. The part related to the higher education emphasizes Slovakia's full and active participation in the European Higher Education Area (EHEA) and European Research Area (ERA) and promotion of their common values, as well as shift from a declarative approach to their implementation, mainly in the terms of quality of work and active response to the needs of the society. The main goals in higher education focus on the quality assurance, flexible response to the labour market needs, internationalisation and accessibility of university studies for all.

Quality assurance in HE is stressed as a priority of the Slovak HE and as a responsibility of each HEI. The new internal system of QA of HEI must be consistent with the European standards and recommendations in this area⁷⁵. A new law on quality assurance in HE has been recently prepared by the ministry and is currently under the public discussion⁷⁶. It will include provisions on both internal and external quality assurance and a new accreditation authority. The accreditation process will be based on the review of the internal quality systems of HEIs, the assessment of the self-evaluation report of the institution, and the opinion of a panel of experts. The law addresses the following issues in relation to the national qualifications framework, which should apply to all HEIs:

- internal quality assurance system: learning outcomes of graduates should reflect the given level of SKKR;
- standards of the study programmes and standards of the intended learning outcomes have to be aligned with a respective level of SKKR;
- accreditation process of a study programme should be in line with general principles of SKKR.

These new principles should replace the current system of complex accreditation.

A goal for the new accreditation authority is to obtain a full membership in the European Association for Quality Assurance in Higher Education (ENQA). HEIs will to a certain extent also be able to be evaluated by international accreditation bodies.

74 <https://www.minedu.sk/data/att/10640.pdf>

75 <http://www.enqa.eu/index.php/home/esg/>

76 <https://www.slov-lex.sk/legislativne-procesy/SK/LP/2017/157>

The System of study fields will be revised in line with the approach of learning outcomes and reduced in number in order to raise their flexibility in line with SKKR.

Quality assurance in further education

Accreditation Commission for further education bears responsibility, besides accreditation of the programmes of further education, for:

- monitoring of the compliance with the requirements on quality assurance of provided programmes of further education, including the compliance of these programmes with qualification and assessment standards;
- on-site checks of the above mentioned;
- statistical data in further education.

SKKR and NQR aim at the improvement of quality assurance at all levels of LLL by introducing the objective procedures of validation and recognition of adult learning, its relation to initial VET, and transparency of development of qualifications. The governance and the responsibilities of various bodies were described in previous chapters.

The national project *Further education and guidance for adults as a tool for better placement at labour market* implemented by NILL aimed to define the quality standards of adult education. Its activities resulted in the following recommendations:

- *To establish an independent institution* (national authority) the responsibility of which will be also the evaluation of quality of educational institutions and, at the same time, the quality of the process of adult education itself;
- To introduce *quality indicators* in line with the principles of the European criteria of quality assessment (EQAVET) and principles of the Slovak technical norm the Quality Management System (STN ISO 9001: 2008).

External evaluation

External evaluation of the quality of education, especially its outcomes, contains important requirements. The *Maturita* exam, consisting of national tests (the external part) and essays and oral exams (both the internal part) is monitored and supervised by pedagogical employees who are not employees of the school where the exam is carried out. National tests and centrally given topics for essays are developed by NICME. Employers have also an opportunity to participate in the final exam/*maturita* (it is compulsory within the dual system of education). SSI controls the realisation of final as well as *maturita* exams.

Another type of external evaluation is carried out in the form of various tests. The main type of external evaluation consists of output tests at the level of lower secondary education (Testing 9) and higher secondary education (external part of *maturita* exam). Both types of testing are carried out by NICME. Tests are developed and tailored for normative interpretation. Their result can have an impact on further education of pupils (i.e. in case a student reaches great results in the test, the result can serve as acceptance of the student application for a further study degree without an entrance exam).

SSI, NICME and the Accreditation Commission regularly submit reports on their activities. The main school inspector annually submits the *Report on the status and level of education in schools and school facilities in the Slovak Republic for the respective school year on base of inspection findings and other findings* to the Minister of Education. The report of SSI includes the analysis of findings with recommendations and suggestions of the education ministry, its directly managed organisations, heads and founders of schools and school facilities. The reports are available on the website of SSI⁷⁷.

⁷⁷ <http://www.ssiba.sk/Default.aspx?text=g&id=2&lang=sk>

6. Criterion 6

Approval of Quality Assurance Bodies

The referencing process shall include the stated agreement of the relevant quality assurance bodies.

Both the first version of the Referencing Report and its amendment were submitted to all departments and sections of the Ministry of Education, Science, Research and Sport SR responsible for the quality assurance in the Slovak Republic, as well as other subjects:

- State School Inspection,
- Accreditation Commission for HE,
- Accreditation Commission for further education,
- ENIC/NARIC, Europass,
- Ministry of Labour, Social Affairs and Family of SR (as the subject responsible for implementation of the National Occupations Registers).

The representatives of these authorities submitted their comments. On the basis of this, the preliminary report was prepared, agreed and submitted to the government of the Slovak Republic.

The amended version was again submitted to the above mentioned bodies. The changes were agreed at the national meetings during 2016 and early 2017. Updated version of the referencing report is planned to be submitted to the Government in November 2017.

The statements of quality assurance bodies mentioned above are in the Annex 9.

7. Criterion 7

The referencing procedure has to involve international experts

The referencing process shall involve international experts.

On base of informal discussion, the following experts have accepted our invitation to the working group:

- **Ms. Ewa Chmielecka**, a member of the EC Advisory group for EQF for Poland, was a member of the Bologna expert team. She is a professor at the Warsaw School of Economics, a director of the Unit of Education Politics at WSE. She was a head of the working group for the development of the Polish NQF. Recently she works as an expert in the national and international projects on the development of the national qualifications framework.

As the Polish educational system is very close to the Slovak one, the expertise of Ms. Chmielecka is a great contribution to the work of the working group and for the preparation of the final version of the *Referencing report of SKKR to EQF*.

- **Ms. Sabine Schüller**, a member of the EC Advisory group for EQF for Germany, works in the strategy department of the Federal Ministry of Education and Research. She actively participated in the development and implementation of the German Qualification Framework for Lifelong Learning and in its presentation to the EC Advisory group for EQF. As a critical friend, Ms. Schüller shared her expertise with us in the preparation of the Referencing Report.

Comments of the two key international experts are included in the Annex 9.

In addition to the two foreign experts, the working group team for the creation of SKKR, within the project the Development of NQR and in NCP for EQF has begun cooperation with experts from the neighbouring countries within the “round-table discussions“. During the discussions, the main difficulties of the referencing procedure, or the development of NQF, were discussed.

- The first meeting was held in Prague in June 2013 with the participation of experts in the development of NQF/NQR from Slovakia, the Czech Republic, Poland, Hungary and Slovenia.
- In September 2013, the workshop on the descriptors of the national qualifications frameworks took place, with the participation of Ms. Chmielecka (PL) and Ms. Milada Stalker (CR).
- In November 2013, the Development of NQR launching conference included the presentation of the Polish Qualifications Framework (Mr. Horacy Debowski) and the Dutch Qualifications Framework (Mr. Rob van Wezel), and the colleagues from the Czech Republic presented “Experience with the development of NQR in the Czech Republic.”

- Ms. Andrina Wafer from the *Quality and Qualifications Ireland (QQI)* joined the round-table discussion on quality assurance in Bratislava.
- In 2013, the conference “With a qualification towards a job” was held in Košice. The foreign guests from Poland, Hungary and the Netherlands presented specific areas relating to qualifications and their linking to particular levels of NQF and the cooperation with NCP for EQF in the Netherlands continued in validation of non-formal learning, and criteria of levelling educational programme.
- The Slovak national team of experts participated in a peer learning activities (PLA)⁷⁸ in Warsaw at the end of 2014 and in Prague in June 2015. At the same time, Ms. S. Schüller and Ms. E. Chmielecka participated in the meeting of the national team of experts. They provided valuable comments to the draft of the progress report being drafted by SVEI, instructions for further progress and a „checklist“ of our readiness for explanation of currently ongoing processes and a future vision.
- Within the project *Development of NQR*, the revision of the SKKR descriptors and levelling of qualifications to NQF was tested. The seminars on individual aspects of referencing process were carried out after the completion of the revision of the NQF descriptors in the period of September 2014 - March 2015.
- In September 2015, another meeting with foreign experts took place, which was aimed at the update of the progress report and its preparation for the presentation to the AG EQF.
- In September 2016, the discussions supporting the update of the Referencing Report including the foreign experts and representatives of relevant departments of the education ministry took place.
- In January 2017, a consultation meeting with Ms. Slava Pevec-Grm took place in Bratislava. The discussion focused on the final amendments of the report, based on the recommendations of CEDEFOP.

⁷⁸ PLA (peer learning activity)

8. Criterion 8

A competent body must approve the referencing and prepare the referencing report

The competent national body or bodies shall certify the referencing of the national qualifications framework or system with the EQF. One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies, including the National Coordination Point, and shall address separately each of the criteria.

Referencing report as the material evaluating the procedure of referencing SKKR to EQF had to be approved by the Government of SR before its presentation to AG EQF. The Slovak Government approved the first version of the *Referencing Report* at its meeting on 7 October 2015⁷⁹. An updated version of the report will be submitted to the Government in November 2017.

9. Criterion 9

Publishing the list of countries involved in EQF together with their referencing reports at the EQF official platform

The official EQF platform shall maintain a public listing of member states that have confirmed that they have completed the referencing process, including links to completed referencing reports.

After the final approval by EQF Advisory Group, the *Referencing Report* will be published and available to general public at:

- the official EQF platform Learning Opportunities and Qualifications portal;
- the website of the Slovak education ministry, part Lifelong Learning - Documents and regulations⁸⁰,
- the website of the National Qualifications Register,⁸¹
- and at the website of SVEI, part dedicated to NCP for EQF⁸².

⁷⁹ <http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=25016>

⁸⁰ <http://www.minedu.sk/9772-sk/dokumenty-a-predpisy/>

⁸¹ <http://www.kvalifikacie.sk>

⁸² <http://www.siov.sk/MedzinarodnaSpolupraca/EQF.aspx>

10. Criterion 10

Certificates, Diplomas and Europass must contain the information on the EQF level

Following the referencing process, and in line with the timelines set in the Recommendation, all new qualification certificates, diplomas and Europass documents issued by the competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate European Qualifications Framework level.

The Resolution of the Government of the Slovak Republic No. 105 of 4 February 2009 on the implementation of the European Qualifications Framework in the Slovak Republic⁸³ imposed the task B.4. “to ensure that all new evidence on achieved education contain the reference to an appropriate level of the European Qualifications Framework“. Following this and other task of the resolution, the management of the education ministry, on its meeting on 2 December 2012, determined several steps aimed at the successful implementation of SKKR, including:

- ...“to ensure that all evidences on achieved education contain the reference to an appropriate level of the SKKR by 30 September 2015”. Due to the implementation of the national project The Development of NQR, as well as the recommendations of the foreign experts, deadlines were postponed to a later stage.

The precise timeframe for referring the level of SKKR/EQF relates to the prepared legislative changes by 2018 and a new programme of reforms. The final date for this task was changed towards the end of 2018.

⁸³ <http://www.rokovanie.sk/File.aspx/ViewDocumentHtml/Uznesenie-5819?prefixFile=u>

Future roadmap

In 2016, the new Slovak government proclaimed a plan for a comprehensive reform of the education system in the Slovak Republic, the “National Programme of the Development of Education and Upbringing - Learning Slovakia”⁸⁴ for the horizon of 10 years. The planned reform aims at the quality of education and improvement of the status of teachers and trainers. A substantial part of the reform relates to qualifications and validation of non-formal and informal learning.

By the end of 2016, a proposal of expected changes in higher education were presented within the programme of reform⁸⁵. The key objectives of the reform are:

1. Quality and accessible higher education open to internationalisation and practice.
2. Quality research forming the core of the research potential of Slovakia.
3. High involvement of universities in specific services supporting the development of society and regions of Slovakia.
4. Effective functioning of the higher education system.

These objectives are further specified in ten areas of proposed changes to be obtained by the reform. Certain aspects of the reform programme for higher education are reflected in the proposed Act on Quality Assurance in Higher Education. In line with the legislative changes, further amendments of some legal acts are planned, e.g. the Act no. 422/2015 Coll. on recognition of diplomas and professional qualifications.

In the area of LLL and further education, a new act on validation of non-formal and informal learning, as well as an amendment of the act on LLL will be prepared by the end of 2018. It is expected that the planned processes of validation procedures will be piloted in the new national project.

In 2016, further development of the national qualifications system included elaboration of comprehensive analyses of levelling methodology of qualifications (horizontal and vertical check). Other two analyses dealt with existing measures in validation of prior learning and an overview of existing sectoral and international sectoral qualifications in Slovakia.

Furthermore, the processes of linking NQR to ESCO launched in 2016 and these activities will continue also in the next period.

⁸⁴ <https://www.minedu.sk/uciace-sa-slovensko/>

⁸⁵ <https://www.minedu.sk/ciele-narodneho-programu-rozvoja-vychovy-a-vzdelavania-pre-oblast-vysokeho-skolstva/>

An equally important task is to eliminate terminological inconsistency pointed out by foreign experts after submitting a proposal of the *Preliminary Referencing Report* in 2015. This inconsistency will be eliminated within the national ESF-funded project introducing the system of qualifications validation in Slovakia (2017-2021) and by the amendment of the Act on LLL. Preparation of the amendment by the education ministry includes creation of a working group to examine the concepts and definitions currently used and, if necessary, re-define, extend or explain the problem or disputed area.

Further, it will be necessary to address the question of learning outcomes and issues identified by the working group for analysis (reductionism, granularity and standardization)⁸⁶. In this area, we welcome some synchronisation with the CEDEFOP activities.

These steps imply the need for uninterrupted and synchronised work on NQR and NOR in the coming years. In this respect, the Slovak Government will continue monitoring of the above-mentioned steps in the form of regular reports whenever relevant⁸⁷.

86 Vantuch, J. a kol. 2013. Analysis on national qualifications systems in selected EU countries. Bratislava: State Vocational Education Institute (<http://www.kvalifikacie.sk/sites/nsk/files/images/Dokumenty/analyzansk.pdf>)

87 This proposal is in line with the New Proposal of the Council Recommendation on EQF

Conclusion

Development of the Slovak Qualifications Framework is a process that started very slowly, with some doubts to begin „something new”. A strong tradition and links to formal education involving a firmly established structure of education and training branches supported this reluctance in the initial phase. That period, however, had brought a catalyst, which intensified the SKKR development in a remarkable extent. It included the post-crisis labour market transformation that pointed out the gap between labour market requirements and the knowledge and skills of graduates, as well as different understanding of the term “qualification” by the labour market and education system.

The work on SKKR opened many dimensions that are considered strategic but not fully implemented in our region: reliability and trust of LLL, quality of education - not only the delivery, but also evaluation and vision for the future.

Based on the recent experience and acquired knowledge in this field, we can confidently state that the work on SKKR does not end. The system of qualifications must respond sensitively to the changes brought along with the development of science, labour market and demography of the society. It will also reflect recent developments related to implementation of the New Skills Agenda for Europe and the actions and measures supporting transparency and intelligibility of qualifications.

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