

SLOVAKIA

European inventory on NQF 2018

Introduction and context

Slovakia has a high rate of employment of recent graduates and a relatively low rate of early leavers from education and training (81.5% and, respectively, 9.3% in 2017) although the latter has been increasing. According to several other key indicators, the Slovakian education and training system performs less well compared to EU averages. A current challenge is the need to improve educational outcomes, to increase the quality and equity of education, particularly for the Roma population. Achievement of 15-year-olds in reading, mathematics and science basic skills has worsened over the past years, especially among pupils from disadvantaged backgrounds, with a high proportion of low achievers in all three fields. Improving the attractiveness of the teaching profession and the education of teachers, as well as strengthening early childhood education and care, are seen as key aspects in tackling this challenge. While still below the EU average, the tertiary education attainment rate has increased in recent years (34.3% in 2017, compared to the EU average of 39.9%). The new 10-year education strategy, the *National programme for the development of education and training 2018-27* ⁽¹⁾, was adopted in June 2018. It offers an agenda for comprehensive long-term reform at all levels of the education and training system. In higher education, the aim is to increase flexibility, strengthen quality assurance and align the system to European guidelines for accreditation. An amendment to the Higher Education Act and a new law on quality assurance in higher education were approved in 2018 ⁽²⁾. The introduction of short-cycle professionally-oriented degrees and professional bachelor programmes is advocated by labour market representatives. Figures for the participation of

⁽¹⁾ Available in Slovak at: <http://www.minedu.sk/17786-sk/narodny-program-rozvoja-vychovy-a-vzdelavania/>

⁽²⁾ Law no. 269/2018 on the quality assurance of higher education and on amendments to Act No 343/2015 Coll. on public procurement and on amendments to certain laws and Law no. 270/2018, amending Act no. 131/2002 Coll. on higher education institutions and on amendments to certain acts. The text of the laws is available in Slovak at: <https://www.minedu.sk/12284-sk/zakony/>

adults in lifelong learning vary depending on the survey used ⁽³⁾. There is evidence of a shortage of skilled workers. Participation in vocational education and training (VET) is significantly above the EU average. The Act on VET adopted in 2015 ⁽⁴⁾ introduced elements of 'dual education' inspired by the German system, but adapted to the Slovak context, with involvement of employers in VET provision and in teacher training. Amendments to this Act, in force since September 2018, further support school-company cooperation (European Commission, 2018).

Work on the Slovak qualifications framework (SKKR) started with a 2009 government decision on the European qualifications framework (EQF) implementation ⁽⁵⁾. The 2009 Act on lifelong learning and its amendment in 2012 ⁽⁶⁾, stipulated the legal background for development of a national qualifications system and framework. In 2011, level descriptors for a comprehensive NQF for lifelong learning were approved by the Ministry of Education, Science, Research and Sports, encompassing qualifications from all subsystems of formal education and training (VET, general education and higher education). This initial NQF proposal was deemed to be too much shaped around the formal education system and requiring revision.

Post-crisis labour market transformation highlighted the gap between labour market requirements and the knowledge and skills of graduates (State Vocational Education Institute, 2017). The tasks related to the development of the SKKR became a part of the national reform programme between 2012 and 2015, a crucial phase in the development of the framework and the national qualification system. In 2013 strategies for revision were proposed, along with involvement of employers, employers' associations grouped in sector councils, and other social partners. Part of a national project under the auspices of the Ministry of Education, Science, Research and Sport, the State Vocational Education Institute

⁽³⁾ 3.4% in 2017, and below the EU average, according to the Labour Force Survey, while the Adult Education Survey indicates that 46.1% of adults participated in education and training against the EU average of 45.1% in 2016.

⁽⁴⁾ Act No 61/2015 Coll. on vocational education and training.

⁽⁵⁾ Government Decision No 105/2009, available in Slovak at: http://www.rokovania.sk/File.aspx/ViewDocumentHtml/Uznesenie-5819?prefixFile=u_

⁽⁶⁾ Act No 568/2009 on lifelong learning and modifying and supplementing certain laws is available in Slovak at: http://isdv.iedu.sk/Documents/Zakon_568_2009.pdf

Act No 315/2012 Coll. amending and supplementing Act No 568/2009 on lifelong learning and amendments to certain laws, in force since 1 January 2013.

(*Štátny inštitút odborného vzdelávania, ŠIOV*) started to develop the national qualifications register (NQR) and revised the SKKR grid of level descriptors; this work, together with the methodology for linking qualifications to the SKKR levels, was completed by the end of 2014 and piloted in 2015 on the first set of qualifications described and included in the register.

The Slovak system of qualifications now consists of two closely related pillars: the national qualifications register, where qualifications are described in terms of qualifications standards, with related assessment standards; and the SKKR, where qualifications are assigned to levels. The SKKR has eight learning-outcomes-based levels and consists of four sub-frameworks: for general education, VET, higher education, and occupational qualifications (awarded outside the formal system, as a result of courses and work experience).

The SKKR was referenced to the EQF in October 2017.

Policy objectives

Development of the NQF in Slovakia has been part of a broader process of reform in VET and lifelong learning ⁽⁷⁾. The framework is linked to the *National programme for the development of education and training 2018-27*, a substantial part of which addresses qualifications and validation of non-formal and informal learning. A link between the national qualifications system in the context of lifelong learning and the national system of occupations is stipulated in Act No 5/2004 on employment services and on amending and supplementing certain other laws (European Commission and Cedefop, 2018).

Apart from its main function of classifying qualifications, resulting from the hierarchical division of the qualifications system into levels, the SKKR is seen as having a threefold role:

- (a) communication: to provide transparent information on national qualifications, their characteristics and relationships;
- (b) transformation: gradually revising the system for recognition and validation of non-formal and informal learning, acting as a tool for quality assurance and leading to better coordination of lifelong learning;

⁽⁷⁾ This concerns the implementation of dual education, as well as reform of the national qualifications system in the context of lifelong learning, development of the national occupation and qualifications registers.

- (c) regulation: to monitor and regulate the description of qualifications in terms of standards and their levelling, as well as the system of recognition and validation of qualifications.

There is general consensus in the country about the role of the framework in promoting lifelong learning, improving the quality of education at all levels, and promoting student and workforce mobility. Further discussion at national level on the use and function of the SKKR is, however, considered necessary (European Commission and Cedefop, 2018).

The specific objectives of SKKR implementation are (State Vocational Education Institute, 2017):

- (a) increased education system transparency, both for individuals and employers, as well as for international comparison;
- (b) increased transparency of qualifications, through their description in terms of learning outcomes rather than inputs;
- (c) better match between education and training and the needs of the labour market through a more demand-oriented education system;
- (d) strengthened relationships between all stakeholders involved in education, and developing general principles for validation and recognition of qualifications;
- (e) modernisation of education through the application of quality principles in the process of acquiring qualifications;
- (f) increased quality in the processes of verification and recognition of qualifications.

Levels and use of learning outcomes

The revised SKKR ⁽⁸⁾ is a comprehensive framework that includes qualifications from all subsystems of education and training: general education, VET, higher education, and further education. The SKKR served as a tool to develop a typology of qualifications in the national context. As a result, it consists of four different sub-frameworks, each characterised by a common type of qualification, reflecting the education and qualifications subsystems and pathways:

⁽⁸⁾ The website of the national qualifications system, including the SKKR, is available at: <http://www.kvalifikacie.sk>.

Information on the SKKR and the national qualifications register is also available at: <http://www.minedu.sk/slovensky-kvalifikacny-ramec-a-narodna-sustava-kvalifikacii/>.

- (a) general education qualifications, governed by the Act No 245/2008 Coll. on education and training (the School Act), assigned to SKKR levels 1, 2 and 4;
- (b) vocational qualifications, also governed by the Act No 245/2008 Coll. on education and training (the School Act), awarded in formal VET (secondary and post-secondary), assigned to SKKR levels 2, 3, 4 and 5;
- (c) higher education qualifications, governed by the Higher Education Act, assigned to SKKR levels 6, 7 and 8;
- (d) occupational qualifications, governed by Act no. 568/2009 Coll. on lifelong learning, awarded outside the formal system, as a result of further education, adult education and validation of non-formal learning, assigned to SKKR levels 2 to 7.

Qualifications in the first three sub-frameworks (general, VET and higher education) reflect both a level of qualification and a level of achieved education at the end of an education programme. Occupational qualifications are usually in response to the needs of the labour market and are not connected to an education level. So far, a distinction has been made between full and partial occupational qualifications, as reflected in the national qualifications register: a full qualification entitling the holder to perform all tasks within an occupation, and a partial qualification allowing performance of one or a limited set of tasks within that occupation. The new Act on lifelong learning, expected to be adopted in July 2019, will no longer make this distinction, and a new approach based on fragmentation of qualifications into smaller units will be adopted (State Vocational Education Institute, 2017).

The SKKR is an eight-level framework, with level descriptors defined in learning outcomes, covering knowledge (general and vocational), skills (cognitive and practical) and competences (responsibility, autonomy and social competences). Qualifications were assigned to SKKR levels following analysis of the learning outcomes set in the qualification standards, and their comparison with the national descriptors. Qualifications issued by conservatories posed a challenge in terms of levelling. Conservatories 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 programmes of conservatories lead to vocational qualifications at SKKR levels 4 (*maturita*) and 5 (*absolutorium*).

All qualifications are included in the national qualifications register, which has qualification cards: each consists of general information on the qualification (learning pathway, relation to an occupation, evidence of certification, SKKR level), a qualification standard expressed in learning outcomes, related

assessment standard (assessment criteria, methods and tools), and methodological guidance for validation and certification of learning outcomes. The basic framework for the development of NQR was the national occupations register (NOR); synchronising the two tools is a key element in the implementation of the SKKR. The NQR also has a role in quality assurance at all levels of lifelong learning.

The learning outcomes approach has been recognised as part of the reform agenda and taken up in national discourse. A major development in the shift to learning outcomes was marked by the 2008 School Act. This strengthened quality assurance measures, introduced performance standards defined in knowledge, skills and competences, and introduced a two-level model of curriculum for both general education and VET: State curricula and school curricula. The revised Bloom taxonomy of educational objectives is recommended for defining performance standards (State Vocational Education Institute, 2017).

General education (primary and secondary) programmes have been revised to strengthen performance standards. However, substantial changes in programming and curriculum development will need more time and deeper discourse about the learning outcomes approach, and engagement at the level of education providers and teachers (Cedefop, 2016). The learning outcomes approach has been reinforced in VET through the VET Act of 2009 ⁽⁹⁾ and the new 2015 Act on VET. Between 2013 and 2015, qualifications standards were elaborated in the frame of the European Social Fund (ESF) project *Development of the national qualifications system* by sector councils, with involvement of different stakeholders from education and the labour market (educators, employers, chambers).

In 2013, the Ministry of Education adopted the *Criteria for the accreditation of higher education study programmes* ⁽¹⁰⁾ and other documents related to the performance of higher education institutions; the learning outcomes approach is now part of the criteria for assessing the quality of higher education institutions and for obtaining study programme accreditation. In 2014, the Higher Education

⁽⁹⁾ Act of 23 April 2009 on VET and amendments to certain acts (Ministry of Education, Science, Research and Sport of the Slovak Republic).

http://www.tnuni.sk/fileadmin/dokumenty/univerzita/dolezite_dokumenty/Zakon_184_2009_o_odbornom_vzdelavani.pdf

⁽¹⁰⁾ Available in Slovak at: <http://www.minedu.sk/kriteria-pouzivane-pri-vyjadrovani-sa-akreditacnej-komisie/>

Act defined a field of study based on the extent of knowledge, skills and competences forming the graduate's profile. Learning outcomes in higher education are linked to the use of the European credit transfer and accumulation system (ECTS). Important points of current and future discussion are around the use of terminology (which may be clarified with the adoption of the new Act on lifelong learning), the typology of learning outcomes originating in different sources, the formulation of performance standards in education programmes, and the formulation of learning outcomes in qualification standards. The importance of finding a balance between stability, complexity, fundamentality and objectivity in how learning outcomes are defined in qualification standards, curricula and study programmes has been recognised and reflected in the methodologies developed (State Vocational Education Institute, 2017).

Stakeholder involvement and institutional arrangements

Work on the initial NQF was started following Government Decision No 105/2009 on a proposal for implementation of the EQF; it was coordinated by the Ministry of Education, Science, Research and Sports of the Slovak Republic. The national coordination point for EQF (EQF NCP) was created at that time and, until 2011, was under the direct responsibility of the Ministry of Education. An inter-ministerial group for the implementation of the EQF was set up to develop the NQF grid, and cooperation with the national team of Bologna experts was established to ensure coordination between the NQF and Bologna implementation.

The legal basis was reinforced by Act No 568/2009 on lifelong learning, and its 2012 amendment (Act No 315/2012 Coll., in force since 1 January 2013) ⁽¹¹⁾, which introduced the SKKR and its definition as a framework. Revision of the initial NQF was closely linked to development of the national qualifications system. Stakeholder involvement from the world of work was vital, including employers' chambers, unions, confederations and other professional associations. While the Ministry of Education maintains overall competence and responsibility for SKKR development and implementation, a Memorandum of cooperation was signed in 2014 with the Ministry of Labour, Social Affairs and

⁽¹¹⁾ Act No 568/2009 on lifelong learning and modifying and supplementing certain laws is available in Slovak at: <https://www.minedu.sk/data/att/4125.pdf>

Act No 315/2012 Coll. amending and supplementing Act No 568/2009 on lifelong learning and amendments to certain laws, in force since 1 January 2013.

Family, aiming for better alignment between labour market needs and the education system (State Vocational Education Institute, 2017). Between 2011 and 2014, the EQF NCP moved to the National Institute for Lifelong Learning; since February 2014 it has been within the State Vocational Education Institute (ŠIOV), which is also the contact point for other EU initiatives (EQAVET, ECVET). The functions of the EQF NCP include (State Vocational Education Institute, 2017):

- (a) promoting the SKKR, EQF and Slovak qualifications;
- (b) managing the process of referencing the SKKR to the EQF;
- (c) coordinating the work of key stakeholders in developing the national qualifications register;
- (d) maintaining the national qualifications register and its links to European portals;
- (e) technical advice for developing new qualifications;
- (f) European and international cooperation on NQF-related issues.

Besides the State Vocational Education Institute, which was the coordinating body of the national project for the development of the national qualifications system, several other structures were involved in the development of the SKKR, and in the definition and approval of qualifications between 2013 and 2015:

- (a) the National Board for Education and Qualifications (NBEQ), a supra-sectoral national authority composed of representatives of all sectoral ministries, professional and employers' organisations, State and regional administration, and associations of schools;
- (b) a national group of experts, comprising representatives of the Ministry of Education, other institutions involved in education policies ⁽¹²⁾, social partners ⁽¹³⁾ and sector councils; this carried out its activity in several working groups, including one for the development of the national qualifications framework, comprising representatives of educational institutions and employers, who revised the SKKR and the national descriptors, and worked on the levelling methodology ⁽¹⁴⁾;

⁽¹²⁾ The National Institute of Lifelong Learning, the State School Inspection, the National Institute of Education and the National Institute of Certified Measurement of Education.

⁽¹³⁾ The Federation of Employers' Associations, the National Union of Employers and the Confederation of Trade Unions.

⁽¹⁴⁾ Other working groups were formed within the national group of experts: a working group for the analysis of school curricula and higher education study programmes; a working group for the analysis of the completion of education; and a working group of

- (c) sector councils, composed of representatives of all stakeholders (national and regional authorities, employers, representatives of trade unions, and educators).

Since 2016, the governance structure of the SKKR has been simplified and now consists of:

- (a) the State Vocational Education Institute, hosting the EQF NCP and providing technical and methodological support in the further development of the qualification system;
- (b) the Ministry of Education, the highest approval body for qualifications and the national qualifications register;
- (c) sector councils ⁽¹⁵⁾; there are currently 24 sector councils in Slovakia, with a key role in developing, monitoring and updating national occupation and qualification standards and proposing their allocation to SKKR levels, developing and monitoring the national occupations register and the national qualifications register, communication between the labour market and the world of education ⁽¹⁶⁾, and establishing partnerships for validating and recognising non-formal and informal learning.

The main strength of the current governance structure of the Slovak NQF is the active participation of stakeholders, though this requires effective communication strategies yet to be developed. Activities related to the introduction and implementation of the SKKR were mainly project-based but, in 2016, ŠIOV was provided with a budget from the Ministry of Education, ensuring sustainability and continuity of work on issues related to the further development of SKKR and the qualifications system.

expert guarantors whose opinions were the main basis for approval of qualifications by the NBEQ.

⁽¹⁵⁾ The role of the sector councils is defined by Act No 5/2004 on employment services and on amendment of certain laws: <https://www.slov-lex.sk/pravne-predpisy/SK/ZZ/2004/5>).

⁽¹⁶⁾ In VET, cooperation between education and training and the labour market has been recently stipulated in the Act on vocational education and training No 209/2018 Coll. Employers and employers' associations participate in the development of graduate profiles, assessment of teaching materials, participate in or give their opinions on final exams, create lists of study and training branches with insufficient numbers of graduates. (European Commission and Cedefop (2018)).

Recognising and validating non-formal and informal learning and learning pathways ⁽¹⁷⁾

There is currently no systemic approach to validation of non-formal and informal learning (VNFIL) in Slovakia. However, certain elements of a national model for validation have been introduced through the 2009 Act on lifelong learning, creating some of the conditions for gradual development of a validation system. These include the introduction of the national qualifications system, with a new approach to the description of qualifications based on learning outcomes, and the development of the Slovak qualifications framework (SKKR) itself. Although no direct SKKR impact on VNFIL is expected in the short term, the completion of the referencing process in 2017, the description of 1 000 qualifications aligned to the SKKR, with their related qualification standards defined in learning outcomes, and their inclusion in the national qualifications register, are completed preconditions for the development of a VNFIL system. Qualifications required on the labour market and contained in the NQR are expected to be gradually placed into the information system of further education (ISDV) and made eligible for validation.

Current validation practices within the frame of the act on lifelong learning (2009) ⁽¹⁸⁾ refer to:

- (a) recognition of results of further education based on assessment of knowledge, skills and competences acquired through accredited programmes leading to a full or partial qualification, corresponding to all requirements of a profession or to only some of the requirements; however, individuals with five years of practice, but without prior completion of the accredited programme, can apply for the examination in the accredited institution and receive a certificate confirming compliance with qualification standards;
- (b) verification of professional competence necessary for running a business regulated by the Trade Licensing Act No 455/1991 Coll. based on assessing compliance with standards, for which a formal certificate of apprenticeship is required.

⁽¹⁷⁾ This section draws mainly on input from the 2018 update to the *European inventory on validation of non-formal and informal learning* (European Commission et al., forthcoming).

⁽¹⁸⁾ Article 17 on the verification and assessment of professional competence.

The first of these mainly refers to examinations of learning outcomes achieved in accredited programmes and is only partly linked to non-formal learning: individuals with five years of workplace practice can apply to have their non-formal learning validated, assessed and certified without prior completion of a programme. In the second case, this certificate is not equivalent to the qualification certificate obtained through formal education; it aids access to the labour market, though not to continuing formal education. 439 qualifications from the national qualifications register (the occupational qualifications pillar) are labelled as belonging to non-formal education; this is partly due to inclusion of full and partial qualifications obtained through further learning accredited programmes being included under the umbrella of ‘non-formal education’.

Four sets of standards that have been developed independently are currently used in Slovakia; those used for validation are qualification standards (and assessment standards) introduced for further education by the act on lifelong learning (Act No 568/2009 Coll.); they are registered and maintained in the Ministry of Education’s information system of further education ⁽¹⁹⁾ and will be replaced by NQR standards in the future.

A new lifelong learning strategy, to be presented by the end of 2019 ⁽²⁰⁾, and the ESF-funded project *System of verifying qualifications* (SOK), initiated in 2018, which contains a VNFIL-related component, are expected to support the development and implementation of validation in Slovakia. The SOK project follows the recommendation of the *Learning Slovakia* strategy paper to develop assessment manuals to complement existing qualification (and assessment) standards. The *National programme for the development of education and training 2018-27*, based on the strategy, includes an explicit commitment to implement VNFIL. New legislation introducing a clear conceptual framework is expected in 2020 and a new deadline for implementing VNFIL has been set for 2022.

A background study conducted in 2016 ⁽²¹⁾ explored the conditions for implementation of VNFIL in Slovakia and offers a solid basis for understanding

⁽¹⁹⁾ <http://isdv.iedu.sk/Default.aspx>

⁽²⁰⁾ The lifelong learning agenda has been transferred from the National Lifelong Learning Institute to other institutions and the Slovak Academy of Sciences has been appointed to prepare a first draft of a new lifelong learning strategy for public discussion.

⁽²¹⁾ Detko J . et al (2016) *Validácia výsledkov neformálneho vzdelávania a informálneho učenia sa v SR* [Validation of non-formal and informal learning in the Slovak

the necessary systemic changes. Areas that require attention include the establishment of robust quality assurance procedures, to avoid the risk of overreliance on self-testing using online tools, as well as the development of substantial provision of guidance and counselling to individuals interested in validation of their learning. Progress has been visible in the labour sector, where methodology based on the concept of *bilan de compétences* has been implemented by public employment services, and labour office counsellors serving the unemployed have received training in the first two stages of validation (identification and documentation). Extending this methodology to the education sector is under discussion. Vocational qualifications in Slovakia are currently not based on units and a credit system is not used. However, a unit-based approach to designing qualifications, also introducing modularised provision of VET, has been advocated in ESF-funded analytical studies ⁽²²⁾ and is expected to materialise within the next phases of development of the national qualifications system; this is also supported by the SOK project. The development of the VNFIL system is expected to increase parity of esteem between the different education and training subsystems and different types of qualification.

NQF implementation

NQF development in Slovakia has been a lengthy process that involved a range of different stakeholders and was carried out within wider reforms aimed at the creation of a national system of qualifications. This system consists of two pillars, the SKKR and the national qualifications register (NQR) ⁽²³⁾; development of the two was closely related. In addition, a national occupations register (NOR) ⁽²⁴⁾ has been under development in parallel. The framework has been designed to be comprehensive, with clearly defined objectives. It has now reached an early operational stage.

Republic]. Bratislava: ŠIOV. Available in Slovak at:
<http://www.erasmusplus.sk/index.php?sw=31>

⁽²²⁾ For example: Vantuch, J. et al. (2014): *Analýza Európskeho kvalifikačného rámca a Národných kvalifikačných rámcov vo vybraných krajinách EÚ [Analysis of EQF and NQFs in selected EU countries]*.

⁽²³⁾ National qualifications system can be found at: www.kvalifikacie.sk

⁽²⁴⁾ Available at: http://sustavapovolani.sk/o_portali

Development of the SKKR grid of level descriptors was completed by the end of 2014, and a methodology for linking qualifications to SKKR levels ⁽²⁵⁾ was tested on a first set of qualifications, then revised and approved by the National Council for Education and Qualifications in 2015. Qualifications were levelled to SKKR based on the ‘best fit’ principle, following analysis of learning outcomes defined in qualification standards and their comparison with national descriptors. This methodology was also used by the sector council members and their sectoral working groups as a tool for defining learning outcomes and better understanding of the whole process. By November 2015, one thousand qualifications aligned to the SKKR were described and included in the NQR ⁽²⁶⁾. Further work on expansion of the register and refinement of the standards in place is expected to be achieved through the new ESF-funded project *System of verifying qualifications (SOK)*.

As the SKKR consists of four different sub-frameworks (for general education, vocational, higher education, and occupational qualifications), the key challenge so far in implementing the NQF has been in setting adequate links and communication between these sub-frameworks. A national database of qualifications has been set up ⁽²⁷⁾, organised following the logic of the four sub-frameworks. So far, it contains qualifications from general education, VET and higher education. The system for the occupational qualifications sub-framework has been prepared and will include international, non-formal and private qualifications. Inclusion in the SKKR of qualifications from non-formal education is the current priority.

With the referencing of the SKKR to the EQF now completed, all qualification documents that have been assigned to SKKR levels, from all education and training subsystems, as well as the Europass certificate and diploma supplements, are expected to indicate the corresponding NQF and EQF level by 2019. NQF and EQF levels are stated on secondary school leaving certificates beginning with the 2018/19 school year. The lengthy process of changing the national legislation that relates to this (the School Act, the Higher Education Act, and the Act on lifelong learning) has been a challenge.

⁽²⁵⁾ Available at <https://www.kvalifikacie.sk/na-stiahnutie>

⁽²⁶⁾ The number of qualifications distributed by levels of SKKR is: SKKR Level 2, 34 qualifications; SKKR Level 3, 310 qualifications; SKKR Level 4, 262 qualifications; SKKR Level 5, 72 qualifications; SKKR Level 6, 139 qualifications; SKKR Level 7, 181 qualifications; SKKR Level 8, 2 qualifications.

⁽²⁷⁾ Available at: www.kvalifikacie.sk

Other key future challenges include a strengthening of the learning outcomes approach across all levels of the education and training system, further discussion among experts and end-users on the use of the SKKR, and specification of its functions and promotion of the SKKR to the main target groups: learners, teachers/trainers and employers (European Commission and Cedefop, 2018).

Evaluation of the functionality of the SKKR, the national qualifications database, and of the levelling process started at the end of 2015, conducted by an EQF NCP working group. A comprehensive analysis of the methodology for levelling qualifications (horizontal and vertical check) was elaborated ⁽²⁸⁾. This analysed 586 qualifications from the SKKR and compared the Slovak system of levelling with the systems in Denmark, Estonia, the Netherlands, Norway, Slovenia and UK-Scotland. Results were presented by the NCP working group in November 2016. They included various recommendations: to redefine terminology; to abandon the distinction between 'partial' and 'full qualification'; to set clear rules for levelling qualifications in the SKKR and differentiating in levelling occupational qualifications and those from formal education; to apply international standards strictly in tertiary education, mainly for consistent use of learning outcomes; and to fulfil consistently the communication function of SKKR. An analysis of existing measures in validation of prior learning and an overview of existing sectoral and international sectoral qualifications in Slovakia were also carried out. These recommendations, along with national level expert discussions, have been taken into account in the preparation of new legislation on lifelong learning and validation.

The EQF NCP has been disseminating information about the framework to increase its visibility. The main communication channels include sector councils, seminars and conferences for stakeholders, training courses for teachers, other national and international events, information materials, the SKKR webpage ⁽²⁹⁾ and social media. Employers and education staff are the main target groups. The NCP has established cooperation with the Euroguidance centre, mainly in relation to the *System of verifying* qualifications (SOK) project. Education and training institutions, and providers and recognition authorities and bodies, are already fully aware of the framework; so are labour market stakeholders related

⁽²⁸⁾ State Vocational Education Institute (2016). *Comparative analysis of levelling qualifications to SKKR levels and national qualifications frameworks in selected EU countries* [unpublished].

⁽²⁹⁾ www.kvalifikacie.sk

to sector councils, professional associations, and other organisations that have been engaged in its development. The SKKR is only partly known to other labour market stakeholders and to guidance and counselling practitioners. The next step to make the framework better known among students, parents, and other target groups will be the indication of NQF and EQF levels on certificates and diplomas.

Referencing to the EQF

A draft referencing report of the Slovak qualifications framework to the European qualifications framework was presented in December 2015. Following recommendations from the EQF advisory group, the final referencing report was presented and approved in October 2017, covering developments between 2009 and 2017. It was approved by the Slovak government in November 2017. The report on the fulfilment of self-certification criteria against QF-EHEA will be presented at a later stage.

Important lessons and future plans

Important progress has been achieved in developing the SKKR in recent years. A comprehensive framework with a clear structure and ambitious objectives has been put in place and reached an early operational stage. A national register of qualifications has also been developed. One thousand qualifications, ranging from levels 2 to 8, have been described, assigned to NQF levels and included in the register. The inclusion of the first stage of primary education at SKKR level 1 has also been decided. The referencing of the SKKR to the EQF has also been completed.

However, a clearer conceptual framework is necessary, as well as better clarification of the links between different tools and systems used in the country (SKKR, NQR, NOR, different standards, full and partial qualifications). More time is needed to implement quality assurance procedures appropriately and better address higher education qualifications, with stronger involvement of higher education stakeholders. In 2018, the Ministry of Education, Science, Research and Sport and the State Vocational Education Institute have taken steps that will lead to improved methodologies for developing new qualifications and reviewing the existing database, simplifying the processes. They are based on existing methodologies and take into account the quality assurance principles laid down in the referencing criteria (European Commission and Cedefop, 2018).

One of the key challenges in developing and implementing the SKKR is its fragmentation into four sub-frameworks (for general education, VET, higher education and occupational qualifications). Establishing adequate relationships between them would help minimise any barriers that might occur between the different parts of education and training (European Commission and Cedefop, 2018).

The further development and implementation of the SKKR is seen not only as an opportunity to unify terminology and find a common language between the different subsystems, but also to systematise the classification of qualifications, and to achieve separation between recognition and validation processes, on the one hand, and education attainment, on the other. Some of the challenges lying ahead are to establish effective links between formal, non-formal and informal pathways to qualifications, and to develop a trustworthy system for validation of non-formal and informal learning. This is supported by recent developments related to the SKKR, the inclusion of qualifications and related standards in the register, and by the new ESF-funded SOK project. A conceptual framework is expected in 2020 and the VNFIL system should be implemented by 2022 (European Commission et al., forthcoming).

Since the SKKR has become operational only recently, no studies on the impact and use of the framework have yet been conducted. Verification of the levelling of qualifications to the SKKR and revision of the functionality of the framework were carried out. Further discussions with experts and stakeholders on the functions and use of the SKKR are considered necessary. An updated Act on lifelong learning is expected to be adopted in 2019, taking into account the results of this evaluation and wider discussions at national level. It will address terminological and conceptual issues, replace the distinction between full and partial occupational qualifications with a new approach based on fragmentation of qualifications into smaller units, and help set up the procedures for the VNFIL system.

Conditions in Slovakia are favourable for the implementation of the learning outcomes approach, and the philosophy is widely accepted. The main barriers are related to identification of learning outcomes and translation into practice. Deeper understanding is needed of the impact of learning outcomes on learner performance, as well as establishing correct assessment procedures. Adequate expertise, teaching materials and professional assistance are required. There is a lack of experts from the world of work able to translate workplace requirements into the language of education, and capacity-building for employers is crucial to securing relevance of learning outcomes for the labour market (Cedefop, 2016). Strengthening the learning outcomes approach across all levels of the education

system is a key challenge in the implementation of the SKKR. The EQF NCP has been preparing a translation of the *European handbook on defining, writing and applying learning outcomes* ⁽³⁰⁾ and is supporting accredited courses for teachers (European Commission and Cedefop, 2018).

Main sources of information:

- The State Vocational Education Institute (ŠIOV) is the EQF NCP: <http://www.siov.sk/>
- Website of the national qualifications system: <http://www.kvalifikacie.sk/>
- National qualifications register (NQR): <http://www.kvalifikacie.sk/kartoteka-kariet-kvalifikaci/#/>
- State Vocational Education Institute (2017). *Referencing report of the Slovak qualifications framework towards the European qualifications framework* <https://ec.europa.eu/ploteus/en/referencing-reports-and-contacts>

⁽³⁰⁾ Cedefop (2017). *Defining, writing and applying learning outcomes: a European handbook*. Luxembourg: Publications Office. <http://dx.doi.org/10.2801/566770>

Slovak national qualifications framework (SKKR)

SKKR levels	Qualification types	EQF levels
8	Diploma (<i>Vysokoškolský diplom</i>) + Certificate of State exam (<i>Vysvedčenie o štátnej skúške</i>) + Diploma supplement (<i>Dodatok k diplomu</i>)	8
7	Diploma (<i>Vysokoškolský diplom</i>) + Certificate of State exam (<i>Vysvedčenie o štátnej skúške</i>) + Diploma supplement (<i>Dodatok k diplomu</i>) Certificate of qualification (<i>Osvedčenie o kvalifikácii</i>)	7
6	Diploma (<i>Vysokoškolský diplom</i>) + Certificate of State exam (<i>Vysvedčenie o štátnej skúške</i>) + Diploma supplement (<i>Dodatok k diplomu</i>) Certificate of qualification (<i>Osvedčenie o kvalifikácii</i>)	6
5	<i>Maturita</i> certificate (<i>Vysvedčenie o maturitnej skúške</i>) + Certificate of apprenticeship (<i>Výučný list</i>) <i>Maturita</i> certificate (<i>Vysvedčenie o maturitnej skúške</i>) Certificate of final post-secondary exam (<i>Vysvečenie o absolventskej skúške</i>) + <i>Absolutorium diploma</i> (<i>Absolventský diplom</i>) Certificate of qualification (<i>Osvedčenie o kvalifikácii</i>)	5
4	<i>Maturita</i> certificate (<i>Vysvedčenie o maturitnej skúške</i>) + Certificate of apprenticeship (<i>Výučný list</i>) <i>Maturita</i> certificate (<i>Vysvedčenie o maturitnej skúške</i>) Certificate of qualification (<i>Osvedčenie o kvalifikácii</i>)	4
3	Certificate of final exam (<i>Vysvedčenie o záverečnej skúške</i>) + Certificate of apprenticeship (<i>Výučný list</i>)	3

SKKR levels	Qualification types	EQF levels
	Certificate of qualification (<i>Osvedčenie o kvalifikácii</i>)	
2	Lower secondary education certificate with supplement (<i>Vysvedčenie s doložkou</i>) Certificate of final exam (<i>Vysvedčenie o záverečnej skúške</i>) + Certificate of apprenticeship (<i>Výučný list</i>) Certificate of qualification (<i>Osvedčenie o kvalifikácii</i>)	2
1	Primary education certificate with supplement (<i>Vysvedčenie s doložkou</i>)	1

Source: Adapted from Annex 2 of the *Referencing report of the Slovak qualifications framework towards the European qualifications framework* (State Vocational Education Institute, 2017).

Abbreviations

EQF	European qualifications framework
ESF	European Social Fund
ISDV	information system of further education
NBEQ	National Board for Education and Qualifications
NCEQ	National Council for Education and Qualifications
NFIL	non-formal and informal learning
NOR	national occupations register
NQR	national qualifications register
NQF	national qualifications framework
QF-EHEA	qualifications framework in the European higher education area
ŠIOV	State Vocational Education Institute [<i>Štátny inštitút odborného vzdelávania</i>]
SKKR	Slovak qualifications framework [<i>Slovenský kvalifikačný rámec</i>]
SOK	the ESF-funded project <i>System of verifying qualifications</i> [<i>Systém overovania kvalifikácií</i>]
VET	vocational education and training
VNFIL	validation of non-formal and informal learning

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- State Vocational Education Institute (2017). *Referencing report of the Slovak qualifications framework to the European qualifications framework*. <https://ec.europa.eu/ploteus/en/referencing-reports-and-contacts>