SLOVENSKO OGRODJE KVALIFIKACIJ

European Qualifications Framework

Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area

FINAL REPORT · Slovenia

Co-funded by the Erasmus+ Programme of the European Union

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

Naložba v vašo prihodnost
Operacijo delno financira Evropska unija
Evropski socialni sklad

Center Republike Slovenije za poklicno izobraževanje
CPI

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA DELO, DRUŽINO, SOCIALNE ZADEVE IN ENAKE MOŽNOSTI

Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area

FINAL REPORT · Slovenia

Authors:
Dr Vinko Logaj,
Dr Klara Skubic Ermenc,
Dr Roberto Biloslavo,
Dr Meta Dobnikar,
Urška Marentič,
Borut Mikulec

Editors:
Borut Mikulec and
Dr Klara Skubic Ermenc

Translation into English:
Amidas d.o.o.

Concept and design:
Kofein dizajn d.o.o.

Press: Cicero d.o.o.
Circulation: 400
2nd edition

Publisher:
Institute of the Republic of Slovenia
for Vocational Education and Training (CPI)

Ljubljana, October 2014

The report was approved on the 30th September 2014 by the Interdepartmental Working Group for the preparation of a national qualifications framework, consisting of:

Dr Vinko Logaj, The National Education Institute of the Republic of Slovenia, *chairman*

Urška Marentič, CPI, *vice-chairman*

Dr Meta Dobnikar, Ministry of Education, Science and Sport

Renata Zupanc-Grom, Ministry of Education, Science and Sport

Irena Kuntarič Hribar, Ministry of Labour, Family, Social Affairs and Equal Opportunities

Bojana Sever, Chamber of Commerce and Industry of Slovenia, Business Training Centre

Barbara Vrhovnik, Chamber of Crafts and Small Business of Slovenia

Tanja Domijan, Statistical Office of the Republic of Slovenia

Marjan Urbanč, Federation of Free Trade Unions of Slovenia

Alen Brkič, National Union of Students of Slovenia

Tadej Zajmi, Secondary School Students Union

Igor Antauer, Association of Employers in Crafts and Small Business of Slovenia

---

CIP - Kataložni zapis o publikaciji
Narodna in univerzitetna knjižnica, Ljubljana

37.014(497.4)
374.7(497.4)

REFERENCING the Slovenian qualifications framework to the European qualifications framework for lifelong learning and the qualifications framework for the European higher education area : final report, Slovenia / [authors Vinko Logaj ... [et al.] ; editors Borut Mikulec and Klara Skubic Ermenc ; translation into English Amidas]. - 2nd ed. - Ljubljana : Institute of the Republic of Slovenia for vocational Education and Training (CPI), 2014

Izv. nasl.: Umeščanje slovenskega ogrodja kvalifikacij v evropsko ogrodje kvalifikacij za vseživljenjsko učenje in evropsko ogrodje visokošolskih kvalifikacij

ISBN 978-961-6904-43-8
1. Logaj, Vinko 2. Mikulec, Borut
275997952

The contents of the material and integrated graphic image were developed in the course of the project entitled the Slovenian Qualifications Framework which was partly funded by the European Union, i.e. the European Social Fund. The design and printing of the material was part of the *European Qualifications Frameworks - National Coordination Point (NCP-EQF) 2014* project financed by the European Commission and the Ministry of Education, Science and Sport.

ABBREVIATIONS USED

ACS	Slovenian Institute for Adult Education
CPI	Institute of the Republic of Slovenia for Vocational Education and Training
ECTS	European Credit Transfer and Accumulation System
ECVET	European Credit System for Vocational Education and Training
EQF	Qualifications Framework for Lifelong Learning
EQAVET	European Quality Assurance Reference Framework for Vocational Education and Training
ESF	European Social Fund
IWG	interdepartmental working group for the preparation of a national qualifications framework
KLASIUS	Classification System for Education and Training
NAKVIS	Slovenian Quality Assurance Agency for Higher Education
NCP EQF	national coordination point for the European Qualifications Framework
NEC	National Examination Centre
NVQ	national vocational qualification
OJ	Official Journal of the European Union
QF–EHEA	European Higher Education Area Qualifications Framework
ReNPIO	Resolution on the National Programme of Adult Education
SQF	Slovenian Qualifications Framework
SURS	Statistical Office of the Republic of Slovenia
UL RS	*Uradni list Republike Slovenije* (official journal)
VET	vocational education and training
ZRSŠ	National Education Institute of the Republic of Slovenia

TABLE OF CONTENTS

01 SUMMARY

This Final Report represents the formal referencing of the **Slovenian Qualifications Framework** to the **European Qualifications Framework for lifelong learning** and the **Qualifications Framework of the European Higher Education Area**. It also confirms the compatibility of the Slovenian Qualifications Framework with the two European frameworks. With it, Slovenia begins the process of implementation of the Recommendation of the European Parliament and of the Council of 23 April 2008, which encourages Member States to link their national qualifications frameworks to the European Qualifications Framework for lifelong learning, and follows the decision of European ministers responsible for higher education, who committed themselves, in the Leuven Communiqué, to the implementation of national qualifications frameworks and preparation for self-certification against the Qualifications Framework for the European Higher Education Area by 2012.

The Final Report on Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area has been approved by the Interdepartmental Working Group for the preparation of a national qualifications framework, appointed by the government of the Republic of Slovenia on 14 January 2010.

The report is divided into six chapters.

Chapter 2 aims to present the **entire education system in Slovenia**: it includes a general description of the education system from preschool to the tertiary level, a description of tertiary education, and a description of the system of non-formal vocational qualifications. The emphasis is on describing the types of programmes and methods of conclusion and certification, accreditation procedures, quality systems and individual achievements of the system.

Chapter 3 describes the **Slovenian Qualifications Framework**. It contains descriptions of the process of its creation; responsible institutions and bodies; its purpose, role and aims; its structure and conceptual basis; SQF quality assurance, linking SQF and the system of recognising non-formally and informally acquired knowledge, and a presentation of the register of SQF qualifications.

In Chapter 4 we describe how Slovenia has applied the **10 EQF referencing criteria**. The result of referencing SQF levels to the EQF establishes a clear and demonstrable connection between SQF and EQF level descriptors in the following manner:

- SQF level 1 and EQF level 1
- SQF level 2 and EQF level 2
- SQF level 3 and EQF level 3
- SQF level 4 and EQF level 4

- SQF level 5 and EQF level 4
- SQF level 6 and EQF level 5
- SQF level 7 and EQF level 6
- SQF level 8 and EQF level 7
- SQF level 9 and EQF level 8
- SQF level 10 and EQF level 8

Chapter 5 shows how we have applied the **QF-EHEA criteria**. The result of self-certification shows that SQF levels 6–10 are compatible with QF-EHEA levels in the following manner:

- SQF level 6 and the QF-EHEA short cycle
- SQF level 7 and the QF-EHEA first cycle
- SQF level 8 and the QF-EHEA second cycle
- SQF levels 9 and 10 and the QF-EHEA third cycle

Chapter 6 looks at the **future challenges** we are facing in Slovenia at the current level of development of the SQF.

Chapter 7 offers **additional clarifications** with regard to the first presentation of the Referencing Report by Slovenia to the EQF Advisory Group[1].

Attached to the Final Report are annexes that will either shed further light on the content of the main body of the report, or offer evidence supporting specific assertions and decisions. Annex 1 sets out the key SQF concepts; Annex 2 provides the SQF level descriptors; in Annex 3 the reader will find a precise comparison of SQF and EQF descriptors, and in Annex 4 descriptions of the individual types of qualifications with examples of individual qualifications. Annex 5 contains the opinions of external experts.

1 Slovenia presented its report 'Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area' (2013) for the first time at a meeting of the EQF Advisory Group on 29 and 30 May 2013. On 20 September 2013 Slovenia received a written opinion on the Referencing Report from the European Commission, the Council of Europe and CEDEFOP. The present publication additionally clarifies questions raised in the note of the European commission and in this way endeavours to increase confidence in the process of referencing the SQF to the EQF and QF-EHEA.

02 DESCRIPTION OF THE EDUCATION SYSTEM

This section sets out briefly the essential features of the entire education system in Slovenia: first the school system (including higher education) and then the system of national vocational qualifications.

The primary principles on which the Slovenian education system is based are written into the Slovenian Constitution,[2] the Convention on the Rights of the Child[3] and the White Paper on Education in the Republic of Slovenia (1995).

The legal framework for education in Slovenia is provided by laws and rules published in the official journal (*Uradni list Republike Slovenije*; UL RS). The fundamental law in the field of basic and upper secondary education is the *Organisation and Financing of Education Act*.[4] Individual fields are regulated by sectoral laws. The area of basic education is regulated by the *Basic School Act*,[5] and upper secondary general education by the *Gimnazije Act*,[6] while vocational education and training is regulated by the *Vocational Education and Training Act*,[7] short-cycle higher vocational education is regulated by the *Short-cycle Higher Vocational Education Act*[8] and adult education by the *Adult Education Act*.[9] Higher education itself is regulated by the *Higher Education Act*,[10] and national vocational qualifications by the *National Vocational Qualifications Act*.[11]

The *Ministry of Education, Science and Sport* is responsible for the quality and development of the education system in Slovenia. In this it cooperates with other ministries (Ministry of the Interior, Ministry of Health, Ministry of Agriculture, Ministry of Infrastructure and Spatial Planning). Particularly in areas relating to the labour market and adult education, it collaborates intensively with the Ministry of labour, Family and Social Affairs. Verifying quality in tertiary education and the accreditation of higher education programmes is the responsibility of the *Slovenian Quality Assurance Agency for Higher Education* (NAKVIS).[12]

In 1999 Slovenia adopted the act ratifying the *Convention on the Recognition of Qualifications concerning Higher Education in the European Region*,[13] and in 2004, pursuant to amendments to the Higher Education

2 Constitution of the Republic of Slovenia (UL RS 33/91-I, 42/97, 66/2000, 24/03 and 69/04).

3 The Convention on the Rights of the Child was adopted by the United Nations General Assembly in Resolution 44/25 of 20 November 1989.

4 Organisation and Financing of Education Act. UL RS 12/1996 (23/1996 as amended), 101/1999 Constitutional Court Decision: U-I-215/96, 22/2000-ZJS, 64/2001, 101/2001 Constitutional Court Decision: U-I-68/98-42, 108/2002, 14/2003-UPB1, 34/2003, 55/2003-UPB2, 79/2003, 115/2003-UPB3, 65/2005, 98/2005-UPB4, 117/2005 Constitutional Court Decision: U-I-240/04-11, 129/2006, 16/2007-UPB5, 101/2007 Constitutional Court Decision, 36/2008, 22/2009 Constitutional Court Decision: U-I-205/07-10, 55/2009 Constitutional Court Ruling: U-I-356/07-13, 58/2009 (64/2009 as amended, 65/2009as amended), 16/2010 Constitutional Court Decision: U-I-256/08-27, 47/2010 Constitutional Court Decision: U-I-312/08-31, 20/2011, 34/2011 Constitutional Court Decision: U-I-205/10-23.

5 Basic School Act (consolidated text) (ZOsn-UPB1). UL RS 12/1996, 23/2005-UPB2, 81/2006-UPB3

6 The Gimnazije Act (ZGim). UL RS 12/1996, 1/2007-UPB1.

7 The Vocational Education and Training Act (ZPSI). UL RS 12/1996. Amendments: UL RS 44/2000, 86/2004-ZVSI, 79/2006-ZPSI-1.

8 The Higher Vocational Education Act (ZVSI). UL RS 86/2004, 100/13.

9 The Adult Education Act (ZIO). UL RS 12/1996, no. 86/2004-ZVSI, 69/2006, 110/2006-UPB1.

10 The Higher Education Act (ZVis). UL RS 67/1993, UL RS no. 39/1995 Constitutional Court Decision: U-I-22/94-15, 18/1998 Constitutional Court Decision: U-I-34/94, 35/1998 Constitutional Court Decision: U-I-243/95-13, 99/1999, 64/2001, 100/2003, 134/2003-UPB1, 63/2004, 100/2004-UPB2, 94/2006, 119/2006-UPB3, 59/2007-ZŠtip (63/2007 as amended), 15/2008 Constitutional Court Decision: U-I-370/06-20, 64/2008, 86/2009, 62/2010-ZUPJS, 34/2011 Constitutional Court Decision: U-I-156/08-16, 78/2011, 32/2012-UPB7, 40/2012-ZUJF, 57/2012-ZPCP-2D.

11 The National Vocational Qualifications Act (ZNPK). UL RS 81/2000, UL RS 55/2003, 83/2003-UPB1, 118/2006, 1/2007- UPB2, 85/2009.

12 NAKVIS holds substantive and formal responsibility and provides guidance to all stakeholders and participants in tertiary education, in line with European and world development guidelines (http://test.nakvis.si/).

13 The Act Ratifying the Convention on the Recognition of Qualifications concerning Higher Education in the European Region (MPVKE) (UL RS-International Treaties 14/99). Through this act Slovenia ratified the Convention on the Recognition of Qualifications concerning Higher Education in the European Region, which was drawn up in Lisbon on 11 April 1997 (the Lisbon Convention).

Act (UL RS 100/04) it adopted and implemented the *Criteria for credit evaluation of study programmes*[14] *under the European Credit Transfer System* (ECTS), while in 2005 it established the *National Europass Centre*. Slovenian vocational schools issue their students with a certificate supplement and universities graduates a diploma supplement in the form recommended by the EU, UNESCO and the Council of Europe. The system of education in Slovenia has thus already been closely linked to development at the European scale for a number of years.

In 2007 Slovenia received an invitation at the OECD Ministerial Council Meeting to enter negotiations on becoming a member of the organisation. In November 2007 the OECD Council adopted an accession programme, which laid down in detail the substantive elements of the inclusion and accession of Slovenia to the OECD, in 2008 Slovenia submitted its Initial Memorandum for the Accession of the Republic of Slovenia to the OECD, and since July 2010 Slovenia has been an OECD member. In the area of education Slovenia is involved in the following OECD international research: PISA, TIMSS and PIRLS, and since 2012 also PIAC.

Slovenia's accession to the EU in 2004 represents merely an expansion of its cooperation in the European region. In 2007, based on a ministerial decision,[15] and as part of the realisation of the European Union programme Education and Training 2010, Slovenia adopted the *Lifelong Learning Strategy*.[16] The year 2011 saw the adoption of the *Resolution on the National Programme of Higher Education 2011-2020*.[17]

The orientation towards lifelong learning in Slovenia contributes to the easier transition between the education and employment in the labour market, and enables students to acquire the same qualifications and competences by different routes.

2.1. Slovenian school system

The type of education by level, duration of education and age of participants in the formal system of education are shown in Figure 1. This also shows the vertical and horizontal mobility inherent in the Slovenian school system.

The education system in Slovenia, which is based on the principle of lifelong learning, is divided roughly into:

- **preschool education**,
- **basic education**, including the obligatory 9-year education,
- **upper secondary education**, which is divided into:
  - upper secondary general education (ending in the general matura), provided by *gimnazije* (grammar schools)
  - vocational education (three-year education ending with a final examination, four years ending with a vocational matura), provided by secondary vocational schools,
- **tertiary education**, which includes a wide spectrum of programmes (a matura certificate is required for transition to tertiary education). Tertiary education is provided by:
  - short-cycle higher vocational colleges that operate independently or as part of education centres providing secondary education,
  - universities and higher education institutions which perform undergraduate and postgraduate education,
- **adult education**.

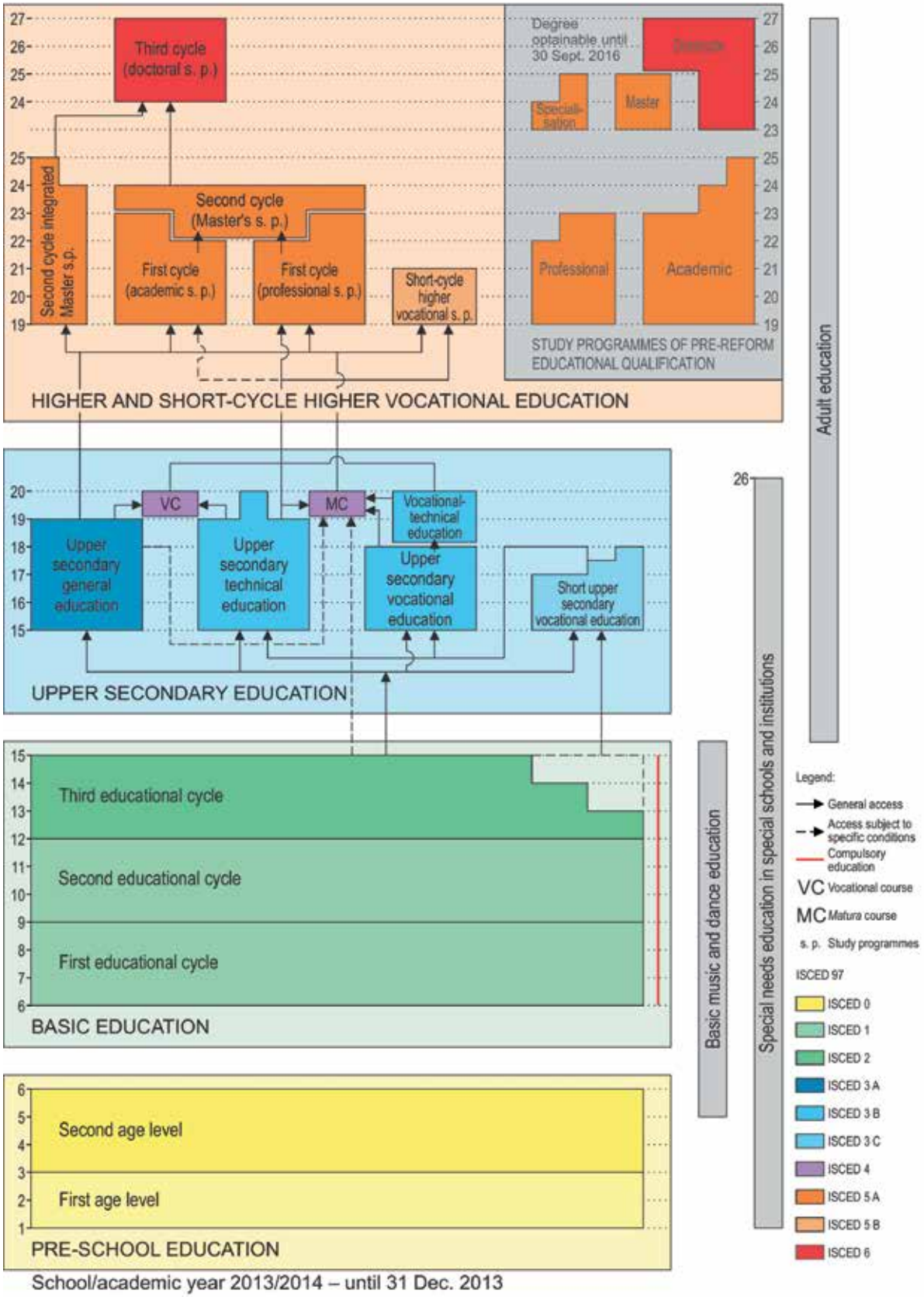
14 The Criteria for credit evaluation of study programmes under the ECTS were adopted by the Slovenian Higher Education Council on 12 November 2004 (number: 011-03-63/2004). The system for accumulating and transferring credits improves the transparency and comparability of systems and study programmes, and facilitates the mobility of students and mutual recognition of fulfilled academic obligations.

15 Ministerial decision No 108-129/205 of 9 December 2005.

16 The Lifelong Learning Strategy. 2007. http://www.mss.gov.si/fileadmin/mss.gov.si/pageuploads/podrocje/razvoj_solstva/IU2010/Strategija_VZU.pdf. (obtained 20 November 2012).

17 UL RS 41/2011.

Figure 1: **The structure of education in Slovenia** (ISCED 1997).



2.2. Preschool and elementary education

2.2.1. Preschool education

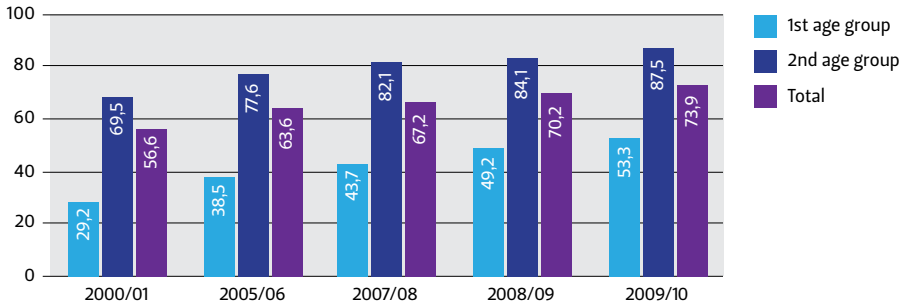
The system of preschool education (ISCED level 0) is organised uniformly in Slovenia for all children aged one to six, i.e. up until children enter basic school. Preschool education is a component part of the education system. Since 1993 this has been the responsibility of the ministry responsible for education, which ensures continuity between preschool education and education in obligatory basic schools. The state provides the national policy, legal framework and the nursery school curriculum in the area of preschool education. Municipalities establish nursery schools and a re responsible for implementing programmes for preschool children.

Nursery schools are intended for all children from the age of one year to their entry into school. Entitlement to enrol is universal for all preschool children. Through the implementation of systemic and institutional measures, nursery schools create the conditions and possibilities whereby unequal starting opportunities for children are reduced and optimal development is thus enabled, along with the successful inclusion of all children in the school system (irrespective of the parents' education, their social and economic status and their ethnicity). Attendance at nursery school is not compulsory, and parents are free to decide.

The conceptual, systemic and substantive elements of nursery schools were defined n the *White Paper* (1995) and adopted in the *Nursery School Act*[18] in 1996. The Nursery School Act established the norms required to ensure high-quality preschool education in nursery schools (number of children in a classroom, ratio of children to adults in the classroom, education level of teacher and teaching assistant, regulations regarding the premises). The adoption of the *Curriculum for Nursery Schools (1999)* signalled the establishing of a preschool system that has an internal systemic and substantive division into two age groups: ages 1 to 3 and age 3 to entry into basic school. The proportion of children attending nursery schools has grown in the past decade.

In the 2004/05 academic year, according to data from the Statistical Office of the Republic of Slovenia, on average 60% of children attended nursery schools, and in 2009/10 this share had grown to 74%.[19]

Graph 1: **Enrolment of children in nursery schools**



2.2.2. Basic education

Obligatory basic education (ISCED level 2) is organised in Slovenia as part of the standardised nine-year basic schools attended by students aged 6 to 15. Public basic schools are established by municipalities. Basic education is financed from municipal and national budgets.

Students enter the first year of basic school in the calendar year in which their sixth birthday falls. Basic schooling comprises three organisationally and didactically linked periods (3+3+3) – the first triad (ages 6–8), second triad (ages 9–11) and third triad (ages 12–14) – and covers an obligatory and expanded pro-

18 UL RS 12/1996, 44/2000, 78/2003, 113/2003-UPB1, 72/2005, 100/2005-UPB2, 25/2008, 98/2009-ZIUZGK, 36/2010, 62/2010-ZUPJS, 94/2010-ZIU, 40/2012-ZUJF.

19 http://www.stat.si/obcinevstevilkah/Vsebina.aspx?leto=2011&ClanekNaslov=IzobrazevanjeOtroci (obtained 30 November 2012).

gramme. The annual and weekly number of lesson hours for individual subjects or subject fields is set out in the syllabus. The syllabuses set out the content of the subject fields, the standards of knowledge and the lesson targets for subjects and subject fields.

The main objectives of basic education are: ensuring that students acquire knowledge and skills in line with their abilities and interests; promoting personal development; gaining the capacity for lifelong learning and further education; developing an awareness of national affiliation, national identity and cultural tradition, as well as education for general cultural values; education to foster respect of human rights, acceptance of differences and tolerance; developing the capacity to be understood in Slovene and also foreign languages; education in support of sustainable development, a responsible attitude towards oneself, one's health, towards other people and the environment; and developing enterprise, innovativeness and creativity.

Basic education programmes are drawn up and designed by the competent professional service (Slovenian Board of Education). The national Expert Council for General Education confirms the proposal and refers the education programme to the ministry responsible for education for adoption. The minister adopts the education programme and publishes it with a set of rules in the official journal.

Basic education is provided by basic schools, basic schools with an adapted programme,[20] music schools and centres for the education of children with special needs.[21] Basic education in Slovenia also includes programmes for the Italian and Hungarian national minorities.[22] Basic education is generally provided in public education institutions, and education under special pedagogical principles in private institutions. Basic education for adults is organised in basic schools for adults and adult education centres. The entire basic education system is regulated in the *Basic School Act*,[23] which also prescribes the national assessment of knowledge.

National assessment of knowledge is carried out at the end of the second (ISCED level 1) and third triads of basic school (ISCED level 2). At the end of the second triad (year 6) the schools themselves, following the prescribed procedure, carry out an assessment of mathematics, Slovene (Italian or Hungarian in the respective ethnically mixed areas) and a foreign language. National assessment of knowledge at the end of the 6th year is voluntary. At the end of the third triad (year 9) there is an assessment of Slovene (Italian or Hungarian in the respective ethnically mixed areas), mathematics and a third subject determined each year by the minister responsible for education. Testing at the end of year the 9th year of basic school is compulsory for all students (except students in adapted programmes with lower educational criteria, since the tests are voluntary for these students).

In the event of limited admission to upper secondary schools, achievements in national testing of knowledge may also be considered as one of the criteria for enrolment, on the basis of the prior agreement of students and their parents.

One of the ways in which the state tests the quality of basic education is through involvement in international research. Since 1999 Slovenia has participated in the international TIMSS research in the field of mathematics and natural sciences, since 2001 in the reading literacy survey PIRLS and since 2006 in the PISA study for the area of reading literacy, mathematics and natural sciences. Results from the PISA studies in 2006 and 2009 show that the achievements of Slovenian students on the international scale are relatively high (natural sciences) or slightly above the average for OECD countries (with the exception of reading literacy in 2009).[24]

20 Providing education programmes for children with minor mental development disorders.

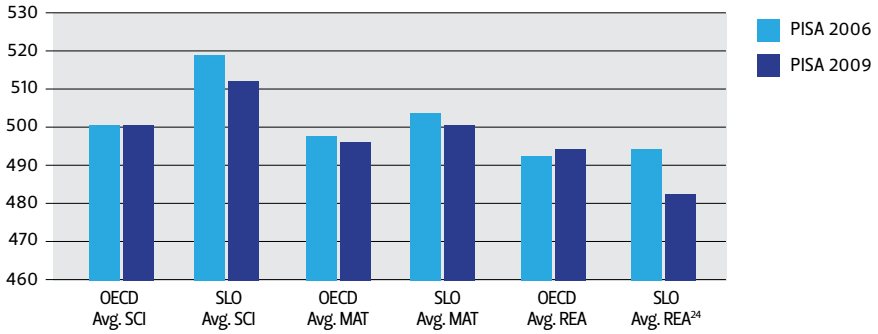
21 Providing education programmes for children and youth with minor, moderate and severe mental development disorders; for deaf and hard of hearing children and youth; for blind and partially sighted children and youth and children with motor impairment.

22 In ethnically mixed areas we provide education programmes in Italian and bilingual Slovene/Hungarian programmes.

23 UL RS 12/1996, 33/1997, 54/2000 Constitutional Court Decision: U-I-72/96, 59/2001, 71/2004, 23/2005-UPB1, 53/2005, 70/2005-UPB2, 60/2006 (63/2006 as amended), 81/2006-UPB3, 102/2007, 107/2010, 87/2011, 40/2012-ZUJF.

24 PISA 2006 National Report: Achievements of Slovenian Students in Science, Reading and Mathematics. Štraus, M., Repež, M. and Štigl, S. (eds.) (2007). Ljubljana: National PISA Centre, Educational Research Institute. PISA 2009. OECD PISA 2009: initial results (2010). Ljubljana: Educational Research Institute.

Graph 2: **Comparison of average scores in the PISA 2006 and PISA 2009 studies**



Upon successful completion of basic education, students receive a final *basic school leaving certificate* and can continue on to upper education. Where students do not complete the entire basic curriculum but have successfully completed at least the 7th year, they receive a *certificate of completing grade 7 or 8 of basic school*, and can continue on to short upper secondary vocational education.

2.3. Upper secondary education

Upper secondary education in Slovenia is divided into GENERAL EDUCATION, which is provided in **general and technical gimnazija programmes** (ISCED level 3A) and **matura courses** (ISCED level 4A), and VOCATIONAL EDUCATION AND TRAINING, which is provided in programmes of **short vocational education** (ISCED level 3C), **vocational education** (ISCED level 3C), **technical education** (ISCED level 3B), **vocational-technical education** (ISCED level 3B) and **vocational courses** (ISCED level 4B).

The upper secondary education system is centralised. The founding and financing of schools and the adoption and deployment of education programmes are decided on the national level. Schools and teachers are autonomous in the specific application of syllabus content, selection of teaching methods, human resources recruitment, employment relations and fresh enrolment.

Upper secondary education builds upon the knowledge, skills and competence acquired in basic education. Vocational education and training lasts from two to five years, depending on the complexity and type of the education programme. Formal forms of upper secondary education involve students aged 15–18. Upper secondary education for adults is provided in various forms (courses, distance learning, e-education) and takes account of knowledge, skills and competences acquired at work (recognising non-formally acquired knowledge). Quality assurance is enshrined in law in the *Vocational Education and Training Act*.[26] At the national level, the *matura* has been introduced in general education (gimnazija) and vocational/technical education as a form of external testing of knowledge.

Over the past 10 years there has been a significant decline in enrolment in programmes of short and vocational education (more than 50%), while enrolment in general education (gimnazija) and technical education programmes has been balanced and stable.

Upper secondary education programmes are prepared and designed by the competent expert service (gimnazija programmes by the Board of Education; vocational, technical and short-cycle higher vocational programmes by the CPI), but may also be designed by the competent ministry, trade chamber, professional association and so forth. The competent expert councils – the *Expert Council of the Republic of Slovenia for General Education,* which is competent for gimnazija education programmes, and the *Expert Council for Vocational Education and Training*, which is competent for vocational, technical and short-cycle higher vocational education programmes – confirm the proposed programme and refer it to the minister responsible for education for adoption. The minister adopts the education programme and publishes it with a set of rules in the official journal.

25 SCI = science; MAT = mathematics; REA = reading.

26 UL RS 12/1996, 44/2000, 86/2004-ZVSI, 79/2006-ZPSI-1.

Upper secondary and short-cycle higher vocational education programmes are created on the basis of *occupational standards*. These standards are confirmed by the competent Expert Council and are referred to the minister responsible for labour for adoption.

2.3.1. Upper secondary general education

Upper secondary general education (gimnazija) lasts four years and ends in the general matura as a form of external testing of knowledge. Gimnazija prepares students for further education, promotes creativity and develops knowledge, ability, skills and other personal qualities necessary for later success in one's occupation and life. Gimnazija provides a broad general education and establishes knowledge that serves as a common foundation for all university courses. Gimnazija is characterised by a global, comprehensive approach to education, based on the complexity of the world, the interdependence and synthesis of knowledge in various fields and the development of disciplinarity as a precondition for an interdisciplinary and transdisciplinary understanding of the world. It promotes development in all areas of the personality (balancing physical, cognitive, emotional, social, moral and aesthetic development) and development of the personality as a whole. This is tied to knowledge, skills and viewpoints acquired in basic school, and the education already attained is systematically developed.

Successful completion of gimnazija, which ends with the matura and the *general matura certificate*, enables students to enrol in programmes of short-cycle higher vocational education, professional higher education and academic higher education.

The content of the general matura, the rights and obligations of candidates, the composition and competence of matura authorities and the procedure and method of taking the matura are set out in the *Matura Examination Act*.[27] Gimnazija students take the matura examination in five subjects, three of which are common subjects and two elective. Candidates can also opt for a sixth matura subject chosen from the elective subjects. The subjects comprising the common part of the general matura are the mother tongue, a foreign language and mathematics. The subjects in the elective part of the general matura are subjects taught at gimnazija and serving as a basis for higher education courses in several scientific, artistic or professional fields of study. Examinations in individual matura subjects can be taken at a basic or higher level of difficulty. This serves to determine and test the breadth and depth of matura knowledge. The annual analysis of matura quality by individual school is drawn up by the *National Examination Centre* in line with the methodology determined by the minister at the proposal of the National Committee for the General Matura or the National Committee for the Vocational Matura.

2.3.2. Upper secondary technical education

Upper secondary technical education generally lasts four years (but possibly five) and comprises 240 to 300 credits. It is intended for students who have completed basic school or a programme of lower vocational education. It involves a broadly designed programme with a double qualification: candidates obtain a vocational qualification and prepare for further study in higher vocational and professional higher education programmes (also, under certain additional conditions, academic higher education programmes).

Programmes comprise a standard of general knowledge in the context of general education subjects, and compulsory and elective modules that offer options to students and in this way steer them towards various occupations. Freely chosen modules are prepared by each school separately in line with their autonomy. The technical modules define specific vocational and generic competences, and within this there is an intertwining of technical theory and practical lessons. An important component of curricula is practical training at work, which in upper secondary technical education programmes comprises four to 10 weeks. The course of education concludes with a *vocational matura*, comprising compulsory subjects (mother tongue and a technical/theoretical subject) and elective subjects (foreign language or mathematics and product or service with a supporting presentation). This serves to determine and test the breadth and depth of matura knowledge. Upon passing the vocational matura examination, students obtain a *vocational matura certificate*.

27 UL RS 15/2003, 115/2006, 1/2007-UPB1.

The ease of horizontal transition to university courses from upper secondary technical education is ensured through the possibility of taking an additional subject from the general matura examination.

2.3.3. Upper secondary vocational education

In upper secondary vocational education students are educated for broader vocational fields. Programmes generally have a practical orientation, since they include a minimum of 24 weeks of practical training at work. Programmes generally last three years (but possibly four) and comprise 180 to 240 credits. Enrolment is open to anyone who has completed basic school or a programme of short upper secondary vocational education. Students may choose from among various elective modules and in this way can train for an additional occupation with a narrower profile or for additional vocational competences. Education courses end with a *final examination,* comprising a written and oral examination in the mother tongue and a product or service with a supporting presentation. In the final examination candidates demonstrate their acquired theoretical and practical knowledge, and thereby show that they are qualified for their occupation. Upon passing the final examination, students obtain a *final examination certificate* and can continue their education in a two-year programme of vocational-technical education or take employment.

2.3.4. Vocational–technical education

Vocational-technical education is designed as building on upper secondary vocational education, and enables students who have successfully completed upper secondary vocational education to attain upper secondary technical qualifications that are equal in terms of educational qualification to four-year technical education. At the same time it allows students to acquire an occupation at a higher level of qualification. It lasts 2 years and comprises 120 credits. Education courses end with a *vocational matura*, which involves an examination catalogue valid for the vocational matura in the appropriate secondary technical education course. Upon passing the vocational matura examination, students obtain a *vocational matura certificate*.

2.3.5. Short upper secondary vocational education

Short upper secondary vocational education, which typically lasts two years and comprises 120 credits, is intended for students who have fulfilled basic education obligations and completed at least the 7th year of the nine-year basic programme, or have completed basic school under an adapted programme. In the technical modules the emphasis is on practical lessons, underpinned by technical and theoretical content. At the end of the course, students must take a *final examination.* In the final examination candidates demonstrate their acquired theoretical and practical knowledge, and thereby show that they are qualified for their occupation. Upon passing the final examination, students obtain *final examination certificate*. They are thereby qualified to pursue less demanding occupations, while at the same time they can continue their education in upper secondary vocational education programmes.

2.3.6. Vocational course

Vocational courses last one year and are intended for students who have successfully completed four years of gimnazija or technical education (without matura). For this the student's general education subjects from their prior education are recognised, and the programme involves only technical modules with practical training at work. Vocational courses are another route to a technical education qualification, for which there is also a four-year programme of upper secondary technical education.

2.3.7. Matura course

The matura course lasts one year and is intended as preparation for the matura for those students who have not attended gimnazija and for learners aged over 21 seeking to pass the matura examination. Upon completion of the matura course, candidates take the same matura examination as students in gimnazija schools.

2.3.8. Master craftsman/foreman/shop manager examination

Master craftsman's, foreman's and managerial examinations are intended for candidates who have completed upper secondary vocational education and have at least three years of relevant work experience. The examination comprises four parts: a practical unit, a specialised theoretical unit, a business and economics unit and a teaching/instruction unit. Upon passing the master craftsman's, foreman's or managerial examination, which tests the ability of the candidate to independently manage a plant or shop, pursue a master craftsman's trade and provide practical instruction to learners, candidates obtain a *master craftsman/foreman/shop manager certificate* and upper secondary technical qualification. On the basis of examinations passed in the general education subjects of the vocational matura, candidates can continue their education at short-cycle higher vocational schools and professional colleges. The sitting of these examinations comes under the competence of trade chambers.

2.4. Tertiary education

Tertiary education in Slovenia includes **short-cycle higher vocational education** (ISCED level 5B) and **higher education** (ISCED levels 5B, 5A and 6). Both subsystems of tertiary education fall under the competence of the Ministry of Education, Science, Culture and Sport, and have a mutual and logical connection. Graduates of short-cycle higher vocational education may transition to a higher year of higher education. The credit system, the diploma supplement, accreditation of programmes and the quality system are a feature of the entire field of tertiary education. The quality of tertiary education is the concern of NAKVIS.

Data show[28] that in the 2006/2007 academic year, among European Union countries Slovenia had the highest proportion of the generation aged 20 to 24 enrolled in tertiary education. In Slovenia, enrolment in tertiary education in 2008 involved 50.3% of all 19-year olds, 53.1% of the population aged 20 to 22, 48.1% of the population aged 19 to 24, 41% of the population aged 19 to 26 and 29.7% of the population aged 20 to 29. Based on data for generations born between 1985 and 1990, we can estimate that in Slovenia around 62% of the generation aged between 19 and 26 will enrol at least once in higher education. In the 2009/2010 academic year, 114,873 students were enrolled in tertiary education in Slovenia.

2.4.1. Short–cycle higher vocational education

Short-cycle higher vocational education in Slovenia is regulated by the Higher Vocational Education Act (2004).[29] It is aimed at students who have passed the vocational or general matura, and also at candidates who have passed the master craftsman/foreman/shop manager examination, three years' work experience and a test of knowledge of general education subjects at the level required for the vocational matura in upper secondary technical education. It is provided by public and private higher vocational schools. The practically oriented programmes, which were designed on the basis of occupational standards, last two years and comprise 120 credits (ECTS). It enables students to acquire vocational competences in line with occupational standards.

Short-cycle higher vocational programmes provide equal emphasis on technical/theoretical and practical knowledge, whereby the practical education is tied directly to technical/theoretical education within the individual module. During the course of study, students complete 20 weeks of practical training in companies. Courses are geared towards providing the competence to manage procedures in resolving technical issues, linking together knowledge from various fields in developing and using applications, effective business operations, development of innovations, communication both in the domestic and international business environment and performing jobs in the preparation, control, organisation and management of work processes.

---

28 Drzna Slovenija: na poti v družbo znanja / Bold Slovenia: on the path to a knowledge-based society (publication 2/3). Statistical data on higher education. (2010). Ljubljana: Ministry of Higher Education, Science and Technology.

29 UL RS 86/2004.

Courses are composed of basic technical modules, vocationally specialised modules, a freely elective part and a thesis. The basic technical modules are intended to enhance knowledge in a broader vocational field defined by occupational standards. The knowledge acquired is a basis for dealing with difficult and complex work assignments in the profession using scientific methods. The modules also cover generic competences. The vocationally specialised modules build upon the technical training of students in specific fields of work in the vocation.

Upon successful completion of the short-cycle higher vocational course, students obtain a *diploma of higher vocational education*, an integral part of which is a diploma supplement in Slovene and one other official language of the European Union. Graduates can continue their education at the first level (first cycle) of tertiary education or can take employment.

The development of short-cycle higher vocational education is called for by the Bologna (1999) and Copenhagen declarations (2002). In order to facilitate the free flow of persons and recognition of vocational qualifications in EU countries, the law explicitly states that occupational standards and courses should be comparable across Europe. The competent authorities should promote the development of joint study programmes and one-tier programmes.

2.4.2. Professional and academic higher education

Higher education in Slovenia is governed by the *Higher Education Act*.[30] Professional and academic higher education courses in Slovenia are provided by higher education institutions that are public or private universities or public or private independent higher education institutions. Members of universities and independent higher education institutions are: professional colleges, faculties and art academies. As at 15 June 2012 the register of higher education institutions kept by the ministry responsible for higher education showed:

- 3 public universities with 48 members
- 2 private universities with seven members
- 1 public independent higher education institution
- 35 independent higher education institutions of which 12 offer courses under a concession

Faculties and academies can provide academic or professional higher education programmes, while professional colleges can provide only professional higher education programmes.

All courses, in both public and private higher education institutions, must be accredited by the *Slovenian Quality Assurance Agency for Higher Education (NAKVIS).* Accreditation ensures public recognition for the course and the resulting diploma. Entry in the register of higher education institutions is a precondition, under the Higher Education Act, for starting to pursue the activities of a higher education institution and to provide courses.

The strategic goals for the specific five- to ten-year periods are set out in the national programme of higher education, which is adopted by the National Assembly. The *Resolution on the National Programme of Higher Education 2011–2020*[31]notes the following priorities for higher education: quality and excellence, diversity and accessibility, internationalisation, diversification of the study structure and more generous financing of higher education. Special attention is focused on the cooperation of higher education institutions with research institutes and the commercial and non-commercial sectors.

The reform and introduction of study programmes in accordance with the guidelines of the *Bologna Declaration* has taken place gradually in Slovenia. The old, pre-Bologna courses were last advertised in the 2008/2009 academic year, and students in these courses must complete their studies no later than in the 2015/2016 academic year. Starting with the 2009/2010 academic year, only new study programmes for all three cycles were advertised. Students entering higher education after the 2009/2010 academic year thus pursue their education in courses of the first, second and third cycles in line with the guidelines of the Bologna Declaration and later declarations, which have been adopted at the international (European) level by ministers competent for higher education. The course credits system (ECTS) has been obligatory since 2002.

30 UL RS 32/12-UPB7, 40/12-ZUJF and 57/12-ZPCP-2D.

31 UL RS 92/07.

2.4.2.1. Brief description of study programmes prior to the introduction of Bologna study programmes.

Courses at higher education institutions were provided under study programmes for OBTAINING QUALIFICATIONS and FURTHER STUDY PROGRAMMES. Study programmes for obtaining qualifications were designed as:

1) undergraduate:
- for obtaining a professional higher education qualification (*professional diploma*)
- for obtaining an academic higher education qualification (*academic degree*)

2) postgraduate:
- for obtaining post-higher education specialisation (*diploma o specializaciji*)
- for obtaining a master's degree (*diploma o magisteriju znanosti*)
- for obtaining a doctorate (*diploma o doktoratu znanosti*).

Courses of further study are programmes for building upon, intensifying or broadening specific knowledge from programmes for obtaining qualifications.

Study programmes leading to professional qualifications generally lasted 3 to 4 years, while those leading to an academic degree lasted from 4 to 6 years. Postgraduate programmes leading to a specialisation generally lasted 1 to 2 years, those leading to a master's degree lasted 2 to 3 years following the bachelor's degree (diploma), and those leading to a doctorate lasted 4 years following a diploma or 2 years following a master's degree.

Enrolment in higher education was open to anyone who had passed the matura examination. In addition to the matura, it was also possible to specify particular gifts or mental or physical abilities as a condition for enrolment in programmes. Enrolment in programmes leading to professional higher education qualifications was also open to anyone who had passed the final examination after the appropriate four-year upper secondary programme defined in the specific study programme. Art academies could design their programmes so that enrolment was also open to anyone who did not necessarily meet the above condition, but who demonstrated exceptional artistic talent. The conditions for enrolment in postgraduate courses were laid down in the study programme in line with the statutes of the higher education institution.

2.4.2.2. Description of the system and study programmes following the introduction of Bologna study programmes

Study programmes

Study programmes for obtaining qualifications are divided into three cycles:

1) first cycle
- professional higher education study programmes (*diploma o izobraževanju prve stopnje VS*)
- academic higher education study programmes (*diploma o izobraževanju prve stopnje UN*)

2) second cycle
- master's programmes (*diploma o strokovnem magisteriju*)
- integrated master's programmes (*diploma o strokovnem magisteriju*)

3) third cycle
- doctoral study programmes (*diploma o doktoratu znanosti*)

First-cycle study programmes (professional and academic) are undergraduate programmes, while second- and third-cycle programmes are postgraduate programmes.

PROFESSIONAL HIGHER EDUCATION PROGRAMMES provide students with the skills and expertise to apply scientific methods to the resolution of complex professional problems, develop the capacity to communicate within a profession and between professions, and develop professional critical faculties and responsibility, initiative and autonomy in decision-making and leadership. An obligatory component of such study programmes is practical training in the working environment.

ACADEMIC HIGHER EDUCATION PROGRAMMES provide students with expertise through the study of theoretical and methodological concepts, and the ability to transfer and apply theoretical knowledge in practice and resolve complex professional problems, in particular by seeking new sources of knowledge and using scientific methods, develop the capacity to communicate within a profession and between professions, and develop professional critical faculties and responsibility, initiative and autonomy in decision-making and leadership of demanding work. Practical training in the working environment or participation in research work may also be an integral part of these programmes.

MASTER'S STUDY PROGRAMMES provide students with the opportunity to enhance their knowledge in broader professional fields and train them to find new sources of knowledge in professional and academic fields, apply scientific research methods in a wider spectrum of issues and in new or changed circumstances, take responsibility for managing the most complex work systems and develop critical reflection and social and communication skills for managing group work. An obligatory component part of these programmes is project assignments in the work environment or basic, applied or developmental research assignments.

INTEGRATED MASTER'S PROGRAMMES may be designed if they provide education for professions regulated by European Union directives, and exceptionally, where so provided by a special regulation, for other professions in Slovenia. These courses enable students to acquire and enhance professional knowledge and training. With regard to advertising for enrolment, the conditions for enrolment and criteria for selection where enrolment is limited, these programmes are governed by the provisions of the ZViS for first-cycle academic higher education programmes.

DOCTORAL STUDY PROGRAMMES enable students to acquire a deeper understanding of theoretical and methodological concepts and the ability to develop new knowledge independently, solve very complex problems by testing and improving knowledge and discovering new solutions, manage the most complex work systems and research projects in a broad professional and/or academic field and develop the capacity for critical reflection. An obligatory component part of these programmes is basic or applied research assignments.

Study programmes for further study are a form of lifelong learning and are intended primarily to enhance, supplement, deepen and update knowledge. In addition to such further study programmes, higher education institutions may also organise various forms of non-formal learning such as courses, summer schools, training programmes and similar.

The quality of higher education institutions and study programmes is assured through accreditation procedures and internal and external evaluation procedures. Accreditation of higher education institutions and study programmes came under the competence of the Council of the Republic of Slovenia for Higher Education from 1994 to 2010; from 2006 the Council was also responsible for managing external evaluation procedures. In the spring of 2010 the Slovenian Quality Assurance Agency for Higher Education (NAKVIS) was established for these tasks. Internal evaluation procedures continue to be the responsibility of higher education institutions.

Credits system

Credits are allocated to study requirements in all study programmes in accordance with the ECTS. The course credits system (ECTS) has been obligatory in Slovenia since 2002. An individual year of a study programme comprises 60 credits. Professional and academic higher education programmes comprise 180 to 240 credits and last three to four years. Master's programmes comprise 60 to 120 credits and last one to two years, but in such a way that in the same professional field together with the first-cycle study programme, they last five years. Master's study programmes comprising 60 credits allow students who have completed a first-cycle programme worth 180 credits an additional year so that in total they obtain the 120 credits needed to complete the master's study programme. The course duration for study programmes leading to qualifications for professions regulated by European Union directives must be in compliance with those directives. Integrated master's programmes for other professions comprise 300 credits and last five years. Doctoral programmes comprise 180 credits and last three years. Study programmes for further study comprise a minimum of 10 and a maximum of 60 credits.

Admission requirements

Enrolment in first-cycle higher education programmes is open to anyone who has passed the matura examination. Enrolment in an academic higher education programme in a given field is also open to anyone who has passed the vocational matura examination following a programme leading to upper secondary vocational qualification in the same field, and an examination in one of the matura subjects. Enrolment in a professional higher education programme is also open to anyone who has passed the vocational matura examination following a programme leading to upper secondary vocational qualification as specified in the study programme.

It is also possible to specify particular gifts or mental or physical abilities as a condition for enrolment in study programmes. Art academies can design their programmes so that enrolment is also open to those who do not meet the above conditions but who demonstrate exceptional artistic talent.

Enrolment in master's study programmes is open to anyone who has completed a first-cycle programme in a relevant professional field, or a first-cycle programme in other professional fields if prior to enrolment they fulfilled the study requirements that are essential for further study. It is also possible to specify particular gifts or mental or physical abilities, or relevant work experience, as a condition for enrolment in master's programmes.

Enrolment in doctoral study programmes is open to anyone who has completed a second-cycle programme or a study programme that leads to professions regulated by EU directives, if it is assessed at 300 credits.

Professional and academic titles

Professional and academic titles obtained under first-, second- and third-cycle programmes are regulated by the *Professional and Academic Titles Act*,[32] which provides that:

- the professional title from a first-cycle professional higher education study programme is '**diplomirani/diplomirana**' followed by an indication of the study programme and the abbreviation for professional higher education (**VS**).
- the professional title from a first-cycle academic higher education study programme is '**diplomirani/diplomirana**' followed by an indication of the study programme and the abbreviation for academic higher education (**UN**).
- the professional title from a completed second-cycle study programme is '**magister/magistrica**' followed by an indication of the particular study programme.
- the academic title from a completed third-cycle study programme is '**doktor/doktorica znanosti**', and the diploma may also indicate the field for which the title has been conferred, but the indication of the field is not integral to the academic title.

2.5. Adult education

The adoption of the *White Paper on Education in the Republic of Slovenia* (1995) and the *Adult Education Act* (1996),[33] and the establishing of the *Expert Council of the Republic of Slovenia for Adult Education* (1996), the *Slovenian Institute for Adult Education* (1991) and the *adult education department* at the ministry responsible for education set up the systemic, administrative and professional foundations for the development of adult education in Slovenia.

The Adult Education Act governs non-formal adult education, education in which adults acquire knowledge, skills and competences, and also publicly recognised educational qualifications. The act introduced two key instruments for the field of adult education: the **national programme** of adult education as a stra-

32 UL RS 47/1998, 55/2003, 83/2003-UPB1, 61/2006.

33 UL RS 12/1996, 86/2004-ZVSI, 69/2006, 110/2006-UPB1.

tegic development document that defines the national adult education policy for the long term, and the **annual programme of adult education** as a government instrument for the specific planning of measures and resources for realising the national programme. On this basis, in the *Resolution on the National Programme of Adult Education* (ReNPIO) the National Assembly defines the public interest in the field of adult education, specifies objectives and priorities, defines the activities necessary for the implementation of adult education and indicates the scope of public funds.

The Resolutions on the National Programme of Adult Education 2004-2010[34] and 2013–2020[35] respond to the strategic challenges of education and its contribution to sustainable development with a definition of three priority areas in which the state realises the public interest: balanced development of adult education for personal, social and economic needs, raising the educational level and developing educational activities that support realisation of the strategic objectives.

The priority areas of adult education in both national programmes are combined into three fields:

1. developing general non-formal adult education,
2. raising the educational level of adults through formal level-based education,
3. education and training of employed and unemployed persons for adaptation to the labour market.

The table below[36] shows a precise view of the various avenues for acquiring knowledge and obtaining recognition for it (with an indication of the names of public documents) in terms of the defined priority areas.

Table 1: **Adult education in terms of paths to knowledge and recognition of knowledge**

CATEGORY ACCORDING TO THE NATIONAL ADULT EDUCATION MASTER PLAN 2004–2010		KNOWLEDGE ACQUISITION	RECOGNITION
PRIORITY AREA	**FORMAL /INFORMAL**	**TYPE OF PROGRAMME**	**CERTIFICATE/NO CERTIFICATE**
1	nonformal general education	courses, seminars, lectures	uncertified recognition of acquired knowledge tacit knowledge
2	formal education to acquire basic qualification	basic school for adults vocational and *matura* courses	basic school certificate final examination certificate master craftsman examination certificate vocational *matura* certificate *diploma*
	formal education to acquire higher levels of education	part-time education part-time study	
3	formal education for labour market needs	supplementary education specialisations	vocational qualification master examination certificate uncertified recognition of acquired knowledge
	nonformal education for labour market needs	training examination preparations for the acquisition of qualifications	
Not a priority area on the national level	nonformal general and vocational education which is not included in the Master Plan 2004-2010	courses, seminars, lectures	uncertified recognition of acquired knowledge tacit knowledge

Adult education, like the entire system of education in Slovenia, is based on the principle of *lifelong learning* for all. State-approved qualifications obtained by adults are based on the same demanding standards as for the education of young persons.

Data on the European scale show that with an involvement level of 15.9% of adults in the formal and non-formal systems of education and training, we are already beyond the target set by the European Commis-

34 The Resolution on the National Programme of Adult Education in the Republic of Slovenia up to 2010. UL RS 70/2004.

35 The Resolution on the National Programme of Adult Education in the Republic of Slovenia 2013–2020. UL RS 90/2013.

36 https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Slovenija:Izobra%C5%BEevanje_in_usposabljanje_odraslih (obtained 30 November 2012).

sion, specifically that by 2020 EU countries should achieve 15% involvement of adults in lifelong learning.[37] The Resolution 2013–2020 thus proposes that by 2020 the involvement of adults in formal and non-formal systems of education and training in Slovenia should rise to 19%.

Analysis of implementation of the ReNPIO 2004-2010 has shown that Slovenia has markedly improved the material conditions for adult education, which has contributed to greater enrolment in education and training. Major progress has been recorded in programmes of training for work and the enrolment of adults in higher vocational schools. It has been noted that persons with lower educational qualifications are still enrolling in education and training to a lesser extent, and that we have not succeeded in reducing the inclusion gap between the less educated and the better educated. Equally, there is still a notable gap in regional access to education.

2.6. National vocational qualifications system

The national vocational qualifications (NVQ) system was introduced by the *National Vocational Qualifications Act*[38] adopted in 2000. This opens a route to formal recognition (*certification*) in accordance with European guidelines for validating non-formal and informal learning.[39] The system facilitates the identification and certification of non-formally and informally acquired knowledge for all persons, irrespective of how such knowledge and skills were obtained. A national vocational qualification is the *formally recognised competence necessary to perform an occupation at a specific level of complexity* based on a nationally accepted *occupational standard*.

Through the NVQ system we certify knowledge that an individual has acquired through work experience, voluntary work, free-time activities, participation in non-formal education or training programmes, self-study, etc. The NVQ system is only aimed at adults (18 and over).

The advantage of the NVQ system lies in its flexibility, since it enables a rapid response to the needs of the labour market. The possibility of certifying previously acquired knowledge and designing short training programmes to supply missing knowledge and skills and allow access to an occupation also has a positive impact on the elimination of differences between supply and demand in the labour market.

The NVQ system is based on prescribed procedures for the validation and certification of non-formally acquired knowledge. This guarantees the objectivity and quality of the system. These procedures are illustrated below.

2.6.1. NVQ verification and validation procedure

In the NVQ verification and validation procedure, candidates demonstrate their skills and knowledge for the effective performance of specific occupational tasks. Through verification and validation of NVQs, we ascertain the skills and knowledge of the candidate with regard to a specific *occupational standard* and a *catalogue of standards of vocational knowledge and skills*.

The method and procedure of assessment is set out in the *Rules on the method and procedure for verification and validation of NVQs*,[40] which ensures the uniformity, transparency and quality of certificates:

- The NVQ verification and validation procedure is carried out by **providers** of procedures for identifying and validating NVQs entered in a register of providers at the National Examination Centre (NEC). The latter must meet the material conditions set out in the catalogue of standards of vocational knowledge and skills.

37 Commission staff working document. Education and Training Monitor 2012. http://ec.europa.eu/education/news/rethinking/sw373_en.pdf (obtained 20 November 2012).

38 UL RS 81/2000, 55/2003, 83/2003-UPB1, 118/2006, 1/2007-UPB2, 85/2009.

39 European Guidelines for the validation of non-formal and informal learning. (2009). Luxembourg: CEDEFOP.

40 UL RS 13/2001, 97/2003, 108/2004, 117/2005, 57/2007, 85/2009-ZNPK-C, 37/2010.

- Verification and validation of NVQs takes place before a three-member **committee** appointed by the NEC. The members of the verification and validation committee are experts in their field of work, as demonstrated by their possession of the required knowledge, educational qualifications and work experience. On completion of training for members of the committee, the NEC grants them a **licence** which is valid for four years. Before expiry of the licence, committee members must submit proofs of ongoing professional training to the NEC, on the basis of which the NEC extends the validity of the licence.
- Every candidate who participates in the NVQ verification and validation procedure is provided with **advice and guidance**. A counsellor provides the candidate with information about the NVQ verification and validation procedure, gives advice on suitable/more suitable qualifications and helps to put together a portfolio (personal summary folder).
- During the **verification procedure**, the NVQ verification and validation committee evaluates the candidate's *portfolio* in accordance with the adopted occupational standard and on the basis of criteria for the evaluation of proofs. On the basis of the latter it can:
  - establish fulfilment of the conditions set out in the occupational standard and the catalogue of standards of vocational knowledge and skills, decide that direct verification is not necessary and validate the candidate's NVQ;

  or

  - direct the candidate who does not meet (in part or in full) the conditions set out in the catalogue of standards of vocational knowledge and skills for assessment. In this case the committee, in accordance with the catalogue of vocational knowledge and skills, specifies the content and precise instructions for verification and validation for each candidate separately.
- During the **assessment procedure**, the candidate demonstrates his or her skills and knowledge directly to the committee. Assessment can be written, practical or oral but is most frequently a combination of these methods of assessment. The assessment method is defined in the catalogue of standards of vocational knowledge and skills, along with the tasks by means of which the committee verifies the candidate's skills and knowledge.

2.6.2. Different routes to the achievement of NVQs

In Slovenia a candidate can obtain an NVQ either through the school system (in upper secondary and short-cycle higher vocational education) or through the NVQ system (recognition of non-formally acquired knowledge). The *Vocational Education and Training Act* connects the two systems by determining that the national occupational standard that defines learning outcomes shall be the basis for every NVQ in Slovenia. The procedure for preparing occupational standards is set out in the *Rules on the Standard Classification of Occupations.*[41]

The occupational standard sets out the content of a vocational qualification at a specific level of difficulty and defines the necessary knowledge, skills and vocational competences. The occupational standard is coordinated within the competent *Sectoral Committee for Occupational Standards*, which proposes the occupational standard to the national *Expert Council for Vocational Education* and Training for discussion and adoption. The Expert Council for Vocational Education and Training then proposes the occupational standard to the Ministry of Labour, Family and Social Affairs for adoption and publication in the *National Reference Point* (NRP).

The drafting of occupational standards is based on the principle of social partnership (dialogue), since the preparation of an occupational standard (definition of the content of occupations and qualifications, their

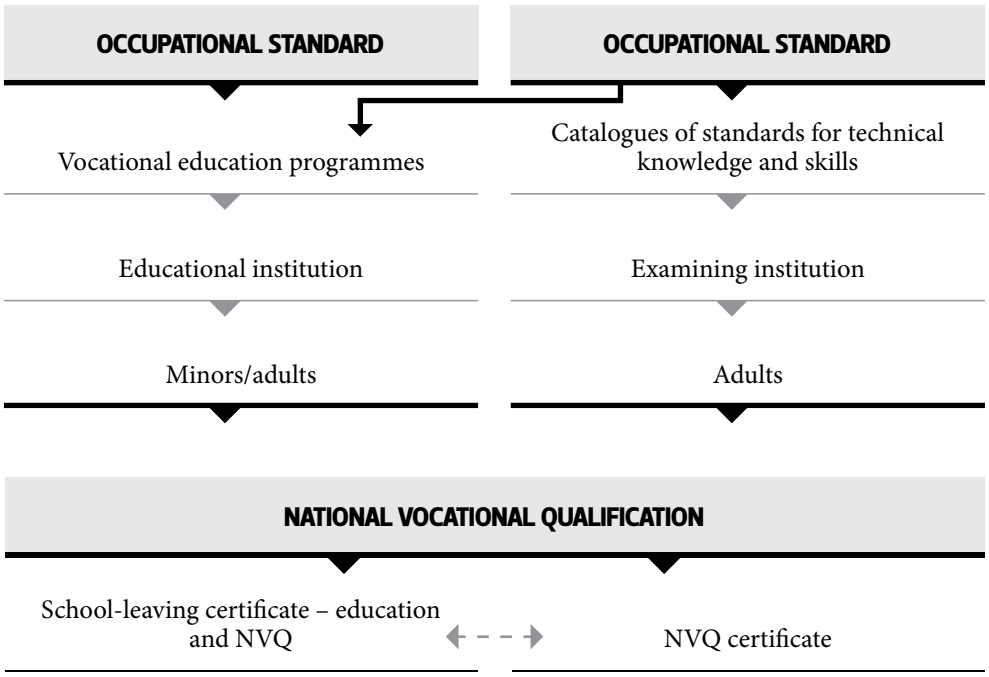
41 UL RS 77/2003, 27/2004, 73/2004, 108/2004, 18/2005, 54/2005, 103/2005, 21/2006, 50/2006, 136/2006, 31/2007, 85/2007, 17/2008, 117/2008, 67/2009, 85/2009-ZNPK-C, 37/2010.

level of complexity and future labour market needs) involves all key social partners at the national level.[42] Also important is the participation of the most advanced entities from industry, small business and the service sector in the early identification of needs for new qualifications and development trends.

All upper secondary and short-cycle higher vocational education programmes are developed on the basis of occupational standards, as are the catalogues of vocational knowledge and skills for the NVQ system. The methodology for the preparation of occupational standards is prescribed and confirmed by the *Expert Council for Vocational Education and Training* The occupational standard is therefore an element linking upper secondary and short-cycle higher vocational education and the NVQ system. This means that we are building a uniform system of NVQs in the school system and the certificate system.

The figure below illustrates in more detail the link between the school system and the certificate system in Slovenia. The left-hand column shows how an individual can obtain an educational qualification in formal education programmes, where the basis for the preparation of the programme is one or more occupational standards. Some of these occupational standards are also the basis for the preparation of catalogues of vocational knowledge and skills (NVQ system), which means that NVQs can be obtained by both methods. The right-hand column shows the possibilities of obtaining NVQs in the system of verification and validation of non-formally acquired knowledge. The key difference between the school system and the certificate system lies in the fact that qualifications obtained in the school system lead to an educational qualification attested by a certificate or diploma, while NVQs enable the acquisition of formal professional competence to perform an occupation at a specific level, attested by a certificate.

Figure 2: **The role of occupational standards in the education system and the NVQ system**



42 The Ministry of Labour, Family, Social Affairs and Equal Opportunities, sectoral committees for occupational standards, the Expert Council for Vocational Education and Training, trade chambers, employer associations, professional associations, unions, non-governmental organisations and other competent ministries.

03 SLOVENIAN QUALIFICATIONS FRAMEWORK

This chapter introduces the reader to a description of the Slovenian Qualifications Framework. Section 3.1. contains a detailed description of the development and planned implementation of the framework; section 3.2. describes the purpose, role and objectives of the SQF; section 3.3. considers the role of KLASIUS in the development of the SQF; and section 3.4. describes the fundamental concepts, levels and descriptors of the SQF. Section 3.5. explains what documents have been incorporated into the framework; sections 3.6. and 3.7. show how the SQF links to the system of quality assurance and the recognition of non-formally and informally acquired knowledge. The chapter ends with a presentation of the website and the register of SQF qualifications, which will contain descriptions of all qualifications in Slovenia that are included in the SQF.

3.1. Development and implementation of the framework and the role of stakeholders

The first discussions of the *European Qualifications Framework for Lifelong Learning* (EQF) in Slovenia began in 2005, when the then Ministry of Education and Sport, in conjunction with the Ministry of Higher Education, Science and Technology and the Ministry of Labour, Family and Social Affairs, organised a national debate on the European Qualifications Framework.[43] This debate was designed above all to obtain information about the EQF and the situation in the field of the establishment of a national qualifications framework. Other conferences relating to the European and national qualifications frameworks have followed since 2006. The national debate concluded with the decision that Slovenia should begin designing a Slovenian Qualifications Framework, since the levels and descriptors of the European Qualifications Framework for Lifelong Learning are too broad and do not respond adequately to the specifics of Slovenia's education and qualifications system. On this basis, consensus was then achieved in Slovenia between the ministries (Ministry of Education and Sport, Ministry of Higher Education, Science and Technology, Ministry of Labour, Family, Social Affairs and Equal Opportunities) and social partners on the establishment of a *Slovenian Qualifications Framework* (SQF).

The establishment of a Slovenian Qualifications Framework also required the following support activities:

- The Ministry of Labour, Family, Social Affairs and Equal Opportunities drafted and assumed responsibility for the 'Slovenian Qualifications Framework' project, which is co-financed by the European Social Fund (ESF) and the ministry. Management of the project was entrusted to the Institute of the Republic of Slovenia for Vocational Education and Training (CPI), which began implementing the project in September 2009.

43 Available online at: http://ec.europa.eu/education/policies/educ/eqf/results/slovenia_sl.pdf (obtained on 15 November 2012).

- In October 2009 the CPI was named national coordination point for the EQF. In accordance with its powers, the CPI carried out the tasks set out in the *Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning*[44] and ensured the accessibility of information on the nascent Slovenian and European qualifications frameworks, prepared material and coordinated the work of stakeholders on the preparation of the SQF and on referencing the SQF to the EQF and the QF-EHEA. As the NCP for the EQF, the CPI collaborates with the Slovenian Quality Assurance Agency for Higher Education (NAKVIS) – the competent institution responsible for the quality of higher education qualifications – on all issues relating to higher education.
- In January 2010 the Slovenian government appointed an *Interdepartmental Working Group for the preparation of a national qualifications framework consistent with the European Qualifications Framework* (IWG).[45] This working group consists of representatives of: (the then) Ministry of Education and Sport and Ministry of Higher Education, Science and Technology;[46] the Ministry of Labour, Family and Social Affairs, the Institute of the Republic of Slovenia for Vocational Education and Training; the Chamber of Commerce and Industry of Slovenia; the Chamber of Crafts and Small Business of Slovenia; the Association of Employers in Crafts and Small Business of Slovenia; the Federation of Free Trade Unions of Slovenia; the Statistical Office of the Republic of Slovenia; the National Union of Students and the Secondary School Students Union. It also defined its tasks, from which it follows that the IWG is the highest decision-making body in the establishment of the Slovenian Qualifications Framework and its referencing to the EQF and QF-EHEA. These were the following:
  - definition of a national coordination point in accordance with the Recommendation on the establishment of the European Qualifications Framework; preparation of strategy and procedures for referencing Slovenian qualifications to the European Qualifications Framework in accordance with the criteria; preparation of positions for the European Commission advisory group; approval of background documentation for the construction of the Slovenian Qualifications Framework; preparation of guidelines for implementation groups and the relevant basis for drawing on dedicated funds from the ESF; monitoring the process of construction of the Slovenian Qualifications Framework and the placing of individual qualifications standards into it.
- In May 2010 the IWG appointed an SQF expert group (consisting of three experts from the fields of education, higher education and the labour market),[47] which prepared a first draft of the proposed SQF (in November 2010) and a draft proposal for placing qualifications in the SQF and referencing SQF levels to the EQF and the QF-EHEA (March 2012).

By the end of January 2011 the draft SQF prepared in November 2010 by the SQF expert group had been discussed and harmonised by the IWG. In February and March 2011 we held five consultations on the draft SQF with various stakeholders: employers' representatives (4 February 2011), representatives of schools (16 February 2011), representatives of higher education (2 March 2011), representatives of trade unions (16 March 2011) and representatives of ministries (30 March 2011). After the consultations we collected together the conclusions that emerged from them and on this basis supplemented the draft SQF. On 20 April 2011 we presented the draft SQF at a concluding conference called the National Consultation on the Slovenian Qualifications Framework, which was open to all interested stakeholders.[48] Following the national consultation we again supplemented the draft SQF with conclusions proposed at the consultation. The draft SQF took on its final form in May 2011.

Among those attending the presentation of the draft SQF to representatives of the higher education sector were leading EQF experts from Ireland (Edwin Mernagh), Austria (Elizabeth Frank) Finland (Sirkka-Liisa Kärki) and Croatia (Dr Mile Dželalija), who presented examples of good practice in their own countries and participated in the workshops. The CPI then appointed Edwin Mernagh, Elizabeth Frank and Sirkka-Liisa Kärki as international EQF experts of the Republic of Slovenia (in accordance with EQF Criterion 7). They

44 OJ C 111/1.

45 Number of decision: 02401-28/2009/3 of 14 January 2010.

46 Now the Ministry of Education, Science and Sport.

47 Dr Roberto Biloslavo, Dr Klara Skubic Ermenc and Dr Samo Pavlin.

48 All presentations from the consultations are available online at: http://www.nok.si/slovensko-ogrodje-kvalifikacij/posveti-in-delavnice.aspx.

latter cooperated with the CPI, the IWG and the SQF expert group at two workshops (19 April 2011 and 18 June 2012) and through their comments contributed both to the formulation of the draft SQF (they presented an evaluation of the draft SQF at the 'National Consultation on the Slovenian Qualifications Framework' on 20 April 2011) and to the referencing of the SQF to the EQF (they presented an evaluation of referencing of the SQF to the EQF and QF-EHEA at a consultation entitled 'Referencing the Slovenian Qualifications Framework to the European Qualifications Framework' on 19 June 2012).

Following the consultations we presented the draft SQF to the following:[49]

- Council for Higher Education (11 May 2011)
- Committee for Monitoring Implementation of the National Adult Education Programme (1 December 2011), Expert Council for Adult Education (8 December 2011)
- Expert Council for General Education (22 December 2011)
- Committee for Education Programmes (14 February 2012), Expert Council for Vocational Education and Training (17 February 2012)

Following the consultations and presentations of the SQF we began preparing a draft of the placing of qualifications in the SQF and referencing SQF levels to the EQF and the QF-EHEA. A draft[50] was completed by the SQF expert group by March 2012. Between March and June 2012 the draft was considered by the IWG, which supplemented it with its own proposals. An assessment of the draft was also submitted in May by the three international EQF experts. In June the IWG then presented a harmonised draft[51] to Slovenian stakeholders at a consultation entitled 'Referencing the Slovenian qualifications framework to the European qualifications framework' (19 June 2012). At this consultation an evaluation of the draft referencing of the SQF to the EQF and the QF-EHEA was also provided by the international EQF experts.

In June 2012, following the consultation, the IWG appointed two working groups: one to prepare the technical background for a law on the SQF and one to prepare a final report on referencing the SQF to the EQF and QF-EHEA.

The procedure of implementation of the SQF will be prescribed in more detail by the SQF Act, which is currently being drafted (see chapter 4, EQF criterion 1).

It is, however, possible to talk about its added value, in particular at the following levels:

a) As a framework whose primary role is communication, the SQF is not intended to make significant modifications to curriculum documents, since this would require a comprehensive reform. Curriculum reform is undertaken regularly, in accordance with the findings of evaluations of individual segments of the education system. Nevertheless, the SQF, in particular the level descriptors, is used in accreditation procedures relating to new education programmes or in their reaccreditation, since level descriptors describe in a transparent manner the depth and breadth of expected learning outcomes.

b) The SQF, in particular with the help of the nascent register of SQF qualifications, significantly increases the transparency of the qualifications system in the country, which is (will be) useful above all to users: participants in education and employees, employers, educational institutions, careers advisers and others.

c) The SQF will also gain added value with the establishment of a system that will enable the incorporation of supplementary qualifications. It will be particularly useful for employees and employers, since it will make it easier for the former to choose individual qualifications that can increase their competitiveness in the labour market, and make it easier for the latter to select candidates and encourage employees to strengthen their competence.

---

49 The Slovenian government set up these expert councils to make decisions on technical matters in the areas of general education, vocational education and training, adult education and higher education, and to provide expert assistance in drafting regulations. More on the composition, tasks and competences of the expert councils can be found at: http://www.mizks.gov.si/si/delovna_podrocja/urad_za_razvoj_izobrazevanja/strokovni_sveti/ (obtained on 4 December 2012).

50 Biloslavo, R., Skubic Ermenc, K., Pavlin, S. (2012). Placing qualifications in the SQF and referencing SQF levels to the EQF and QF-EHEA. Ljubljana: Institute of the Republic of Slovenia for Vocational Education and Training (internal material).

51 Qualifications in the SQF and SQF levels in the EQF and QF-EHEA. Proposal of the interdepartmental working group for the preparation of a national qualifications framework. (2012). Ljubljana: Institute of the Republic of Slovenia for Vocational Education and Training.

d) The increased transparency of the qualifications system, the harmonisation of qualifications and the coherence of the system as a whole will increase the ability of the education system to put into effect the principle of lifelong learning, which is one of its fundamental principles.

3.2. Purpose, role and objectives of the SQF

The SQF is a framework of communication that also contains a small element of reform. The starting points for the classification of qualifications in the SQF are the relevant sectoral legislation and the *Classification System of Education and Training* (hereinafter: KLASIUS)[52] Since the SQF establishes the relationship between basic types of formal education by levels and the qualification structure in a slightly different way, it changes the number of levels from eight (with two sub-levels) to 10 (without sub-levels). There is, however, no change in the logic of the level itself, which is still tied to specific criteria for defining a stage of education or the level of complexity of an occupational standard.

The components of the Slovenian Qualifications Framework are

1) **Level descriptors:** covering 10 levels and three categories (knowledge, skills, competences) (see Annex 2)
2) **Qualifications framework:** tabular presentation of categories and types of qualifications at 10 qualification levels (see Table 2)
3) **Methodology of description** (see p. 55-56) **and referencing of qualifications** (see EQF criterion 4)
4) **Register of SQF qualifications** (see section 3.7.)

The purpose of the Slovenian Qualifications Framework is to achieve transparency and recognisability of qualifications in Slovenia and the EU, while its fundamental objective is to support lifelong learning; to connect and coordinate Slovenian qualifications subsystems; and improve the transparency, accessibility and quality of qualifications with regard to the labour market and civil society.

3.3. The role of KLASIUS in the development of the SQF

The concept of a qualifications framework is not a new one in Slovenia. The first instrument to have a role partly similar to that to the SQF was introduced in 1980, when Slovenia was still part of Yugoslavia. It was called the *Social Agreement on a Uniform Basis for the Classification of Occupations and Professional Qualifications* (Social Agreement, 1980). The Social Agreement defined eight levels of qualifications and four sub-levels (levels six and seven were divided). The levels were based on a combination of the difficulty level of the occupation and the qualification and included three categories: difficulty of the work, common characteristics of educational objectives and contents, and minimum criteria for obtaining a vocational qualification. The Social Agreement introduced a concept with which we are still familiar today, namely the linking of the level of difficulty of the occupation and the level of difficulty of an educational qualification (cf. *Design of a Classification System for Education in Slovenia*, 2005, p. 11). The system is built into 'classifications of positions, the system of authorisations to perform specific vocational and professional activities, the employment system, payment systems, etc.' (*ibid.*).

In 2006 Slovenia adopted KLASIUS, which is used for the classification of education and training (activities and results) informal administrative databases and for statistical analysis. KLASIUS is a mandatory national standard used in the recording, collection, processing, analysis, dissemination and presentation of statistical/analytical data important for the monitoring of socio-economic and demographic situations and trends in the Republic of Slovenia. It was introduced by the Slovenian government by means of the *Decree on the*

52 Decree on the introduction of a classification system for education and training. (2006). UL RS 46/2006, 15/2008 Constitutional Court Decision: U-I-370/06-20 and Methodological explanations of the classification system for education and training. (2006). UL RS 89/2006.

introduction and use of a classification system for education and training,[53] having been prepared on the basis of interdepartmental cooperation between the ministries responsible for education, higher education and labour, relevant public institutions and the Statistical Office of the Republic of Slovenia. KLASIUS is used to classify:

- education and training activities (i.e. state-approved programmes leading to an educational qualification; state-approved professional development and training programmes and other activities organised for the purpose of achieving a predefined goal or specified series of educational tasks);
- the results of education and training (i.e. state-approved educational qualifications, national vocational qualifications and other outcomes that are demonstrable by public documents).

The main purpose of KLASIUS is to ensure consistency of data in statistical monitoring of the participation of the population in education and training and statistical monitoring of the educational/qualifications structure of the population.[54]

KLASIUS defined eight levels of qualifications and two sub-levels (levels 6 and 8 are divided into two sub-levels). Educational activities and the results of education are classified by levels with regard to the similarity of the level of difficulty of the content of activities and the results of education and training. The levels represent the principal steps in progressing from less complex to more complex learning experiences and competences. They are defined by level descriptors (with the knowledge, skills and competences typical for the individual level) or by general indirect criteria for defining levels (typical admission requirements, programme duration, etc.). Levels enable the uniform recording, analysis and presentation of data on the educational/qualifications structure of the population and data on results achieved in different periods and under different regulatory frameworks. (*ibid.*). EQF descriptors were taken into account when defining the level descriptors.

Before KLASIUS reached its finally approved version, its authors prepared a draft of descriptors for 10 levels (Design of a Classification System…, 2005, p. 19–20). The final version, however, contained eight levels and two sub-levels, as a result of approximation with the EQF. The SQF is therefore close to the first version of KLASIUS.

KLASIUS was developed over a long period and was the result of negotiations among relevant stakeholders. Its adoption made preparation of the SQF easier, in terms of both content and negotiations. It also contributed to the decision that the SQF would be a communication framework in the sense that it is not intended to affect the statutory characteristics of the education system. Despite their close links, there are differences between the SQF and KLASIUS:

1) The key difference between the SQF and KLASIUS is that the SQF – despite its communicative nature – is a development tool the purpose of which is to influence the characteristics, quality and levels of difficulty of qualifications, something that KLASIUS, as a statistical tool, is unable to do. The SQF is therefore intended to guide the further quality development of all types of qualifications, while KLASIUS merely covers the existing reality.
2) With the SQF, Slovenia wishes to make the national qualifications system transparent – something it has not been until now, at least not to a sufficient extent. The register of SQF qualifications will also contribute to this transparency. Transparency will above all benefit citizens and enable them to find their way more easily through the maze of different types of education and qualifications. It should also contribute to raising citizens' awareness of the importance of lifelong learning.
3) Education reform and constant changes to the system of education and qualifications have also introduced a considerable number of changes to terminology in the period since independence. A statistical tool is unable to address all these changes and therefore the interdepartmental group that has developed the SQF hopes that it has also been successful in introducing greater transparency and consistency with existing practice in the field of terminology.

53 Uradni list RS, št. 46/2006, 15/2008 Odl.US: U-I-370/06-20.

54 Statistični urad Republike Slovenije. http://www.stat.si/klasius.

3.4. Structure, concepts, levels and SQF descriptors

The SQF contains 10 levels, which enables a flexible connection between the educational structure and the qualification structure. **The harmonisation and, at the same time, the flexibility of these two structures** offer a basis for the easier identification of qualifications and the recognition of non-formally or informally acquired knowledge/skills/competences. It is this element that represents the 'reforming' characteristic of the framework.

The SQF, in line with KLASIUS, links two concepts: **the concept of educational activities/programmes and the concept of learning outcomes**. This solution is consistent with the communicative role of the framework (see under EQF criterion 3; the position of learning outcomes in the SQF).

The descriptor for each level contains **three categories of learning outcomes**: knowledge, skills and competences (see Annex 2). Each qualification that is included in the framework contains all three categories, although it is not necessarily the case that **each category has equal weight within the qualification**. Such a selection of categories enables us to 'capture' the full diversity of learning outcomes and qualifications at an individual level that, though acquired in different settings and for different purposes, are *comparable* in terms of complexity.

Each higher level encompasses the knowledge, skills and competences of the lower level. This does not mean that knowledge, skills, competences and responsibilities at lower levels do not or may not also contain elements of higher levels, since the purpose of the learning process includes preparation for a higher level, which cannot be achieved without the incorporation of higher elements in the learning process. Thus the learning process and education objectives (including standards of knowledge) contain knowledge, skills and competences from higher levels of complexity (higher levels on scales such as Bloom's taxonomy, Marzano's taxonomy, etc.).

3.5. Certificates and diplomas in the SQF

Qualifications are referred to by the names of the relevant documents. The SQF includes all qualifications and associated documents that are obtained in the formal education system, and those qualifications obtained outside the formal education system that have successfully completed public accreditation procedures.

Students obtain certificates at the basic and upper secondary levels, diplomas at the tertiary level, and certificates in the case of non-formal education.

Certificates from general and vocational education are classified at SQF levels 1 to 5. Diplomas from tertiary education are classified at SQF levels 6 to 10. Certificates from national vocational qualifications (NVQs) are classified at SQF levels 2 to 6.

The table below shows the different categories and types of qualifications in the SQF (see also Annex 1).

A QUALIFICATION CATEGORY consists of qualifications that share a common purpose. The education system in Slovenia distinguishes between three categories of qualifications:

1) **Educational qualifications**, tied to formal education by levels (see sections 2.1., 2.4. and 2.5.);
2) **National vocational qualifications**, tied to the system of national vocational qualifications (see section 2.6.) and
3) **Supplementary qualifications**, tied to the supplementing of abilities and competences. Since accreditation procedures for supplementary qualifications are still being developed, these have not been included in the framework in this phase. Broadly speaking, these are qualifications that exist in the Slovenian labour market and cannot be obtained either within the formal education system or within the national vocational qualifications system. There are two main groups of supplementary qualifications which will be placed in the framework in the future:

a) those tied to **regulated activities or occupations** (professional examinations, specialisations, etc. – e.g. professional examination in the field of education, state bar examination, librarian's examination, specialisation in clinical pharmacy, specialisation in gynaecology and obstetrics, tourist guide). These qualifications are obtained in state-approved programmes for which the relevant ministries or associations are responsible, and have prescribed admission procedures. The scope and content of the programmes, their publicising, implementation and quality assurance are prescribed by the competent ministries in the relevant legislation.[55]

b) those that increase the **individual's competences and qualifications** in the labour market (e.g. a master's qualification in pharmacy with additional knowledge in the field of homoeopathy, ECDL qualifications, Oracle qualifications, small animal veterinary medicine, veterinary public health and food safety, etc. These qualifications are obtained in training programmes which are the responsibility of university faculties, professional chambers, institutes, etc. The latter are responsible for the scope and content, publicising, implementation and quality assurance of such training.[56]

These two groups of qualifications are expected to be placed in SQF level 3 and upwards. The process of placing these qualifications into the framework is defined in more detail by the draft SQF Act.

A QUALIFICATION TYPE is a group of qualifications united by the same qualification category, the same qualification level and a related general purpose of qualification from the point of view of further education or employment.

The method of placing qualifications in the SQF is described in the next chapter (see EQF criterion 4). A description of types of qualifications is given in Annex 4.

In order to make it easier to distinguish between current education programmes, those that are being phased out and past programmes, qualifications are shown in the table in different colours:

- qualifications obtained by learners in current education programmes are shown in blue,
- qualifications obtained by learners in education programmes that are being phased out (levels 7 to 10) are shown in green[57],
- qualifications that were obtained by learners in past education programmes (levels 6 to 10) are shown in purple.

55 For example: the State Bar Examination Act, UL RS 83/2003, 46/2009; Rules on traineeships for professional staff in the field of education, UL RS 23/2006, 72/2007; Rules on types, content and procedure of specialisations for doctors, UL RS 59/2003; 51/2004, 15/2005, 20/2007, 102/2007, 22/2009 (revised 42/2009), etc.

56 Article 5 of the Rules on homeopathic medicines for human use (UL RS 94/2008) provides, for example, that an 'authorised person to prescribe homeopathic medicines is […] a person holding a master's qualification in pharmacy who has passed a professional examination and has additional knowledge in the field of homeopathy'.

57 No later by the end of the academic year 2015/2016.

Table 2: **Tabular presentation of categories and types of qualifications in the SQF**

Qualifications obtained within the formal education system	Qualifications obtained outside the formal education system	
EDUCATIONAL QUALIFICATIONS	NATIONAL VOCATIONAL QUALIFICATIONS	SUPPLEMENTARY QUALIFICATIONS[58]
	1. LEVEL	
Certificate of completing grade 7 or 8 of basic school (Incomplete basic education) Basic school leaving certificate[59] (Basic education with lower educational criteria)		
	2. LEVEL	
Basic school leaving certificate (Basic education)	**National vocational qualification certificate** (National vocational qualification, level 2)	
	3. LEVEL	
Final examination certificate (Short upper secondary vocational education)	**National vocational qualification certificate** (National vocational qualification, level 3)	
	4. LEVEL	
Final examination certificate (Upper secondary vocational education)	**National vocational qualification certificate** (National vocational qualification, level 4)	
	5. LEVEL	
Vocational matura certificate (Upper secondary technical education) General matura certificate Master craftsman's examination certificate Foreman's examination certificate Managerial examination certificate (Upper secondary education)	**National vocational qualification certificate** (National vocational qualification, level 5)	
	6. LEVEL	
Diploma o višji strokovni izobrazbi (Short-cycle higher vocational education)[60] Diploma o višji strokovni izobrazbi oz. višješolski izobrazbi (Higher vocational education)[61]	**National vocational qualification certificate** (National vocational qualification, level 6)	
	7. LEVEL	
Diploma prve stopnje (VS) (Professional bachelor's degree)[62] Diploma prve stopnje (UN) (Academic bachelor's degree)[63] Diploma o visokem strokovnem izobraževanju (Diploma of professional higher education)[64] Diploma o specializaciji (Specialisation following higher vocational education)[65]		

58 Accreditation procedures for supplementary qualifications are defined in more detail by the draft SQF Act.

59 Slovenia also has 'special education programmes' for children and adolescents with moderate and serious learning disabilities. The programme does not lead to a qualification and is therefore not included in the SQF. On completion of education, most adolescents join sheltered work centres.

60 Awarded after 1996 in accordance with the Vocational Education and Training Act and after 2004 in accordance with the Higher Vocational Education Act.

61 Awarded up to 30 September 2002 in accordance with the Career-Oriented Education Act.

62 Awarded after 2004 in accordance with the Higher Education Act.

63 Awarded after 2004 in accordance with the Higher Education Act.

64 Awarded after 2004 in accordance with the Higher Education Act.

65 Awarded up to 30 September 1997 in accordance with the Career-Oriented Education Act.

Qualifications obtained within the formal education system	Qualifications obtained outside the formal education system	
EDUCATIONAL QUALIFICATIONS	NATIONAL VOCATIONAL QUALIFICATIONS	SUPPLEMENTARY QUALIFICATIONS[58]
	8. LEVEL	
Diploma druge stopnje (Master's degree)[66] Diploma o specializaciji (Specialisation following professional higher education)[67] Diploma o univerzitetnem izobraževanju (Diploma of academic higher education)[68] Diploma o visokošolskem izobraževanju (Professional higher education)[69]		
	9. LEVEL	
Diploma o magisteriju znanosti (Research master's degree)[70] Diploma o magisteriju znanosti (Research master's degree)[71] Diploma o specializaciji (Specialisation following academic higher education programme)[72] Diploma o specializaciji (Specialisation following higher education programme)[73]		
	10. LEVEL	
Diploma tretje stopnje (Doctorate)[74] Diploma o doktoratu znanosti (Doctorate)[75] Diploma o doktoratu znanosti (Doctorate)[76]		

3.6. Quality assurance in the SQF

The quality of the SQF depends on two global factors: (A) on the one hand, on the quality of the procedures and processes that are directly tied to the preparation of the SQF and its application and development; (B) and on the other hand, on the quality of the national system of education and qualifications itself.

A) Quality in the first sense is assured in several ways.

1. The SQF has been prepared on the basis of two rounds of public consultations which involved all key stakeholders (see section 3.1.).
2. The process of preparation of the SQF involved the participation of foreign and domestic experts (see section 3.1.).

66 Awarded after 2004 in accordance with the Higher Education Act.
67 Awarded in accordance with the Higher Education Act, but only up to the end of 2015/16 academic year.
68 Awarded after 1994 and in accordance with the Higher Education Act, but only up to the end of 2015/16 academic year.
69 Awarded in accordance with the Career-Oriented Education Act.
70 Awarded in accordance with the Higher Education Act, but only up to the end of the 2015/16 academic year.
71 Awarded in accordance with the Career-Oriented Education Act.
72 Awarded after 1994 in accordance with the Higher Education Act, but only up to the end of 2015/16 academic year.
73 Awarded up to 30 September 1997 in accordance with the Career-Oriented Education Act.
74 Awarded after 2004 in accordance with the Higher Education Act.
75 Awarded after 1994 in accordance with the Higher Education Act, but only up to the end of the 2015/16 academic year.
76 Awarded in accordance with the Career-Oriented Education Act.

3. The SQF will gain a legal basis. The draft SQF Act is defined by the SQF administrator. This is the ministry responsible for education, which delegates some responsibilities to other institutions. In accordance with the draft act, the ministry sets out the procedures for placing qualifications into the SQF and provides the necessary resources for the implementation, functioning and development of the SQF. The draft act likewise defines the national coordination point for the EQF (see section 3.1.), which will provide access to information and content relating to the SQF and EQF, prepare and maintain the register of SQF qualifications, which will be linked to the EQF portal, and publish qualifications in the register of SQF qualifications (see section 3.8.).
4. On the basis of the public consultation on the SQF, the IWG adopted the rule that only those qualifications that have successfully undergone all relevant levels of the accreditation procedure and are included in the national system of quality assurance in education and training can be included in the SQF (see chapter 4, EQF criterion 5).
5. The quality of the SQF is also assured through definition of all the institutions in Slovenia that are responsible for quality assurance and also participate in the preparation or accreditation of programmes. These are: The Slovenian Quality Assurance Agency for Higher Education (NAKVIS), which is responsible for the quality assurance system in tertiary education; the National Education Institute of the Republic of Slovenia (ZRSŠ), responsible for quality assurance in the general education sector; the Institute of the Republic of Slovenia for Vocational Education and Training (CPI), responsible for the quality assurance system in the field of vocational education and training and NVQs; and the Slovenian Institute for Adult Education (ACS), responsible for the quality assurance system in the field of adult education.

B) The quality of the SQF also depends on the quality of the system of education and qualifications. The quality of the system of education and qualifications is, however, crucially dependent on established, high-quality accreditation procedures and systems of quality assurance. In Slovenia these two elements – accreditation procedures and quality assurance systems – together provide **integrated oversight of the quality of the education system and the quality of its outcomes**. Information about oversight of the quality of the system can be found in other chapters (chapters 2 and 4), while below we offer a brief and synthetic presentation of the three levels of the system: the input level, the process level and the output level.

3.6.1. Input level

1. Accreditation procedures defined and regulated at the national level

1.1. In the education system up to the higher education level

- Accreditation of educational institutions: takes place in the process of entering the institution in the register. Entry in the register means that all providers of state-approved education programmes must be entered in the register of providers of state-approved education programmes before commencing activity.[77]
- Accreditation of educational programmes and national vocational qualifications:
  - a proposal for a new education programme or new vocational qualification is formulated by specialist services at the national level (ZRSŠ, CPI) (see point 2.3.)
  - the programme or national vocational qualification is adopted by the corresponding Expert Council (see points 2.2.2. and 2.3.)
  - accreditation of providers and assessors in the certificate system (see point 2.6.1.)

1.2. In the education system at the higher education level

- Accreditation of higher education institutions is defined by the *Criteria for the Accreditation and*

77 The precise procedure for entry in the register of nursery schools, basic schools, music schools, secondary schools, school boarding houses, institutions for the education of children and adolescents with special needs, adult education organisations and private teachers and private educators is regulated by the Rules on keeping the register of providers of state-approved education programmes (UL RS 10/09). The register is a public book kept by the Ministry of Education, Science and Sport.

External Evaluation of Higher Education Institutions and Study Programmes.[78] These criteria set out the procedures and minimum criteria by which the meeting of conditions for the accreditation of higher education institutions is assessed. The criteria take into account the agreed quality assurance standards and guidelines that apply in the European Higher Education Area.

- The accreditation of study programmes is also defined by the *Criteria for the Accreditation and External Evaluation of Higher Education Institutions and Study Programmes.* These criteria set out the procedures and minimum criteria by which the meeting of conditions for the accreditation of study programmes is assessed. The criteria take into account the agreed quality assurance standards and guidelines that apply in the European Higher Education Area.

2. Systems of assessing knowledge, skills and competences defined and regulated at the national level (see chapter 2)
3. In the education system up to the higher education level, curriculum documents are prescribed at the national level: they are based on the concept of learning outcomes and competences; in upper secondary and short-cycle higher vocational education they are based on nationally defined and regulated occupational standards.

3.6.2. Process level

1. The introduction into practice of new education programmes is always supported at the level of basic and upper secondary education by the expert support offered by relevant public research and development institutions (ZRSŠ, CPI, ACS). Teachers participate in training and institutions provide networking opportunities; in recent years the introduction of programmes has also been supported by projects.
2. Public research and development institutions also carry out continuous monitoring of the implementation of education programmes. Along with research institutions (research institutes and universities), they carry out evaluation studies (see chapter 4, EQF criterion 5).
3. Educational institutions implement self-evaluation procedures in accordance with legislation (see chapter 4, EQF criterion 5).
4. Extended accreditation in higher education is defined by the *Criteria for the Accreditation and External Evaluation of Higher Education Institutions and Study Programmes.* A condition for the extension of accreditation is the external evaluation of the higher education institution or study programme, to be carried out before the expiry of the current accreditation.
5. The quality of nursery schools and schools is monitored at the national level by the Council for Quality and Evaluations (see chapter 4, EQF criterion 5).
6. In the national vocational qualifications system, NVQs are reviewed every five years. Providers are also assessed during the review. Assessors extend their licence every four years and the NEC provides continuous monitoring of the work of the members of committees during NVQ verifications (see section 2.6.).

3.6.3. Output level

Integrated oversight of quality concludes with monitoring and responding to learning outcomes and other achievements of the education system.

1. At the basic school level, systematic external verification of knowledge is carried out annually. The main purpose of this is to ascertain and guarantee the quality of compulsory education (see section 2.2.2.).
2. At the upper secondary education level, final learning outcomes are assessed by means of final testing: in the case of upper secondary general education, a national and external general matura examination; in the case of upper secondary technical education, a national and partly external vocational matura; and

78 UL RS 95/2010, 17/2011, 51/2012.

in the case of upper secondary vocational education, an internal final examination before a five-member board whose members may include a representative of employers approved by the National Examination Centre (see section 2.3.).

3. As part of its monitoring of quality, Slovenia participates in numerous international measurements of the learning achievements of participants in education: PISA, TIMMS, PIRLS, TALIS, SITES, CIVICS (see chapters 2 and 4, EQF criterion 5).

4. At the initiative of the Council for Quality and Evaluations and other stakeholders (schools and universities), with the financial support of the ministry responsible for education, and on the basis of secondary studies of achievements, measures to improve achievements are being prepared as a response to the results achieved (e.g. measures in the field of increasing reading literacy in young people).

5. In the adult education sector, in FORMAL EDUCATION PROGRAMMES LEADING TO A STATE-APPROVED EDUCATIONAL QUALIFICATION, the quality assurance mechanisms at the output level are the same as those that apply to the system of education for young people. In STATE-APPROVED PROGRAMMES aimed exclusively at adults, quality is measured by means of quantitative indicators such as national examinations[79] and learning achievements portfolios.[80] In non-formal education programmes which are NOT STATE-APPROVED, quality is usually assured in accordance with quality systems for other activities and by implementing various nationally or internationally recognised standards of quality.[81] In the adult education system, the ACS carries out national evaluations of the adult education system.

6. In the national vocational qualifications system, the CPI carries out evaluation of the NVQ system.

3.7. The SQF and the recognition of non–formally and informally acquired knowledge

There are two main (legally regulated) routes to the recognition of non-formally and informally acquired knowledge in Slovenia, for the purposes of (a) *further participation in formal education* and (b) *recognition of occupational competence in the labour market* (NVQ system). In the process of recognition of non-formally acquired knowledge through evaluation, we establish the comparability of the candidate's non-formally acquired knowledge, skills and competences with **standards of knowledge**. In the case of further participation in the formal education system – (a) – we use educational standards (knowledge catalogues, modules and the operational curriculum) based on the education system which enable the recognition of knowledge acquired by various educational routes (regulated at the systemic level in upper secondary vocational, upper secondary technical and short-cycle higher vocational schools). For the needs of the labour market – (b) – we have set up a formalised system of national vocational qualifications (NVQs), where the knowledge and experience gained by candidates is compared to occupational standards defined at the national level.

The recognition of non-formally and informally acquired knowledge is also possible in higher education. There are, however, no uniform criteria and procedures at the national level for the recognition of non-formally and informally acquired knowledge. For the purpose of continuing education these are regulated independently by higher education institutions using rules that follow criteria for the allocation of credits to study programmes and criteria for the accreditation of higher education institutions and study programmes. These rules regulate the procedures of identifying, verifying, validating and recognising non-formally and

79 National examinations in foreign languages and Slovene for foreigners are held by organisations authorised by the National Examination Centre or the Centre for Slovene as a Second/Foreign Language.

80 In adult literacy development programmes the attainment of standards of knowledge defined in the programme is recorded as achievement or non-achievement, and documented in the participant's learning achievement portfolio.

81 E.g. the NGO standard – the quality standard for non-governmental organisations in companies at the Slovenian Institute for Quality and Metrology; SiQ2; various standards (ISO) or the EFQM Business Excellence model at education centres or company departments; the Common Assessment Framework (CAF) for organisations in the public sector and the EFQM in various ministries an administrative organisations that are developing their educational activities.

informally acquired knowledge and criteria for recognising knowledge and skills acquired by candidates before enrolment and during their studies at a higher education institution.

The development of the system of non-formally and informally acquired knowledge in adult education has also been dealt with at the systemic level by the ACS in conjunction with the CPI. From 2009 to 2011 the Ministry of Education and Sport and the European Social Fund financed the sub-project Identifying and Recognising Non-Formal Learning. Technical criteria have been drawn up for the systemic regulation of the evaluation and recognition of non-formally and informally acquired knowledge in adult education.[82]

Candidates whose previously acquired knowledge is recognised may therefore be exempted from certain requirements of a formal education programme (e.g. practical training, subjects or modules, etc.), obtain a national vocational qualification, or make a career progression within an enterprise.

How does the existing system for recognising non-formally and informally acquired knowledge tie up with the SQF? The smallest unit in the SQF is the qualification, which means that the framework is a classification of qualifications and not individual knowledge, skills or competences. For this reason, for the time being only national vocational qualifications leading to a public document (a certificate or NVQ (see section 2.6.) have been included in the framework from the system of recognising non-formally and informally acquired knowledge in Slovenia.

In the next phase of development of the SQF we will also incorporate supplementary qualifications, something strongly advocated by stakeholders during public consultations and debates on the SQF. Procedures for the accreditation of supplementary qualifications and their inclusion in the SQF are defined in more detail by the draft SQF Act.

3.8. Register of SQF qualifications

As part of the project 'Activities of EQF National Coordination Points with a view to implementing the EQF at national level' (2011/12 and 2012/13) we set up an online register of SQF qualifications[83] on the SQF website.[84] The latter describes qualifications in accordance with SQF parameters and will also take into account the proposed parameters on the EQF portal.[85] Via the register of SQF qualifications, which will be connected to the nascent EQF portal, descriptions of individual Slovenian qualifications will be accessible to users from all European countries. Likewise, the register will facilitate easier comparability of Slovenian qualifications with the qualifications of other European countries.

Although we have set up an online register of SQF qualifications, there is still a great deal of work to do, since we still have to prepare descriptions of individual qualifications that conform to the descriptions of qualifications in the SQF. These will gradually be entered in the SQF register by fields (KLASIUS-P or ISCED-F), with the process expected to be complete by the end 2015. Descriptions are currently available for qualifications in the following fields: education science and teacher training, art, humanities, social sciences, journalism, business and administration, computing, agriculture, forestry and fisheries, veterinary medicine, healthcare, social care and some personal services (hotels and catering, tourism).

82 http://arhiv.acs.si/porocila/Strokovne_podlage_za_sistemsko_urejanje_vrednotenja.pdf (obtained 22 November 2012).

83 http://www.nok.si/register-kvalifikacij.aspx

84 www.nok.si

85 Questionnaire on the proposal for the information to be provided about individual qualifications through the EQF portal. (2012). European Commission, Directorate-General for Education and Culture, Lifelong learning: horizontal policy issues and 2020 strategy, Skills and qualifications.

04 IMPLEMENTING THE 10 EQF REFERENCING CRITERIA

In this chapter we show how the Republic of Slovenia implements the 10 referencing criteria of the EQF advisory group.

Criterion 1:

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.

In October 2009 the CPI was named as the National Coordination Point for the EQF. In accordance with its powers, the CPI carried out the tasks set out in the *Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning*.[86] As the NCP for the EQF, the CPI collaborates with the Slovenian Quality Assurance Agency for Higher Education (NAKVIS) – the competent institution responsible for the quality of higher education qualifications – on all issues relating to higher education. To this end the CPI and NAKVIS have also signed a written agreement on mutual cooperation.[87]

In January 2010 the Slovenian government appointed an *Interdepartmental Working Group for the preparation of a national qualifications framework consistent with the European Qualifications Framework* (IWG).[88] This working group consists of representatives of: (the then) Ministry of Education and Sport and Ministry of Higher Education, Science and Technology;[89] the Ministry of Labour, Family and Social Affairs, the Institute of the Republic of Slovenia for Vocational Education and Training; the Chamber of Commerce and Industry of Slovenia; the Chamber of Crafts and Small Business of Slovenia; the Association of Employers in Crafts and Small Business of Slovenia; the Federation of Free Trade Unions of Slovenia; the Statistical Office of the Republic of Slovenia; the National Union of Students and the Secondary School Students Union. The mandate of the IWG is to prepare/develop a Slovenian Qualifications Framework that is consistent with the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area.

A draft SQF Act[90] has been prepared which regulates in detail the placing of qualifications in the SQF; referencing SQF levels to the EQF and QF-EHEA; the competences of the NCP for the EQF; the provision of resources and the keeping of records (register of SQF qualifications). The following competences of the NCP for the EQF derive from the draft SQF Act.

86 OJ C 111/1.

87 Letter Ref. 0348/2012/01-BM of 26 October 2012.

88 Number of decision: 02401-28/2009/3 of 14 January 2010.

89 Now the Ministry of Education, Science and Sport.

90 The draft SQF Act was published on the Slovenian government's e-Democracy website on 24 April 2014. The deadline for the submission of comments was 14 May 2014. In the meantime, as a result of political changes, the date for the adoption of the Act was moved back.

- provides access to information on the SQF, EQF and QF-EHEA on its website;
- provides information on and promotes the SQF and EQF;
- leads the process of referencing the SQF to the EQF;
- prepares technical material and coordinates the work of key stakeholders in referencing national qualifications to the EQF via the SQF;
- oversees the development of the SQF and monitors its implementation;
- cooperates with the competent international institutions (European Commission, CEDEFOP, etc.);
- cooperates in the network of NCPs for the EQF;
- publishes qualifications in the register of SQF qualifications;
- establishes and maintains the register of SQF qualifications and links to the EQF portal;
- issues confirmation of SQF and EQF levels for NVQs;
- proposes procedures and criteria for the placing of supplementary qualifications in the SQF;
- proposes criteria for the inclusion of experts in the register of experts;
- establishes and updates the register of experts for the placing of supplementary qualifications in the SQF;
- appoints groups of experts for the placing of supplementary qualifications in the SQF; and
- provides technical and administrative support for the work of the expert panel of the NCP for the EQF.

The NCP for the EQF has an expert panel consisting of seven members. The tasks of the expert panel of the NCP for the EQF are as follows:

- it defines the procedures and criteria for the placing of supplementary qualifications in the SQF;
- it confirms the placing of a supplementary qualification in the SQF;
- it defines the criteria for the inclusion of experts in the register of experts;
- it sets the price of the procedure of placing a supplementary qualification in the SQF at the proposal of the director of the institution in which the NCP for the EQF operates; and
- it monitors the process of placing qualifications in the SQF and referencing them to the EQF and QF-EHEA.

Experts from the register of experts kept by the NCP for the EQF are appointed to expert groups for the placement of supplementary qualifications in the SQF.

Other institutions such as the ministry responsible for education, the ministry responsible for labour and NAVKIS carry out tasks prescribed by the applicable legislation.

Criterion 2:

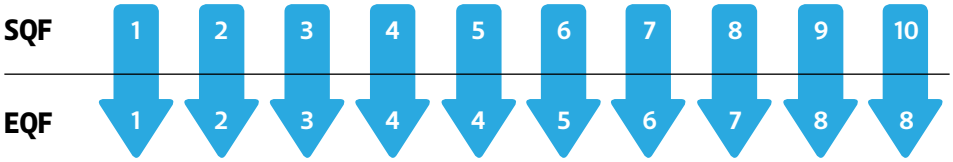
There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.

In order to show the clear and demonstrable link between the Slovenian Qualifications Framework (SQF) and the European Qualifications Framework (EQF), we carried out a three-stage methodological analysis as follows:

1. Structural comparison of the two frameworks,
2. Conceptual comparison of the two frameworks,
3. Comparison of SQF descriptors and EQF descriptors.

On the basis of the results of this analysis, we have arrived at the following conclusion with regard to referencing SQF levels to the EQF:

Table 3: **Referencing SQF levels to the EQF**



SQF levels 1, 2 and 3 were shown in the referencing process to be equivalent to EQF levels 1, 2 and 3.

SQF levels 4 and 5 are, in accordance with the best fit principle, equivalent to EQF level 4: in the competences category, EQF level 4 shows a slightly higher degree of difficulty than SQF level 4, while in the knowledge and skills categories the descriptors of SQF level 5 are slightly above these categories at EQF level 4 in terms of difficulty and complexity.

SQF levels 6, 7 and 8 were shown to be equivalent to EQF levels 5, 6 and 7.

SQF levels 9 and 10 were shown to be equivalent to EQF level 8. Under the best fit principle SQF level 9 is comparable with EQF level 8 because it emphasises the aspect of the candidate's ability to take part in original research projects or artistic projects of the highest standard leading to the creation of new knowledge or achievements of the highest artistic standard.

1) STRUCTURAL COMPARISON OF THE FRAMEWORKS

A structural comparison of the SQF and the EQF was carried out in order to establish whether a clear similarity exists between the two qualifications frameworks. The IWG finds that the two frameworks are similar in structure but that some differences do exist between them.

Similarities

Both frameworks begin at level 1 and work upwards, where the first level at the same time means the lowest level. Both frameworks are based on the concept of learning outcomes and enable the incorporation of qualifications of different types, in this way promoting lifelong education and learning.

Differences

The SQF differs from the EQF in that it consists of 10 levels and is based on the connection of the concept of *learning outcomes* with the concept of *educational activities/education programmes*. The SQF is a national qualifications framework into which different types of qualifications are placed, while the EQF is a meta-framework that acts as a translation device for national qualifications frameworks.

The SQF currently incorporates two categories of qualifications that meet national quality criteria:

- Educational qualifications, which are obtained within the formal education system.
- National vocational qualifications, which are the result of verification of non-formally and informally acquired knowledge.
- The design of the SQF also envisages the incorporation of a third type of qualifications – supplementary qualifications. Their incorporation into the SQF is dependent on the development of adequate national quality criteria.

2) CONCEPTUAL COMPARISON OF THE FRAMEWORKS

The SQF is based on a combination of Slovenia's existing Classification System of Education and Training (KLASIUS) and EQF guidelines. Each SQF level is described on the basis of the same three concepts – knowledge, skills and competences – as the levels in the EQF. The above concepts are defined in a similar manner, although it may be observed that while the EQF describes them in generic terms, the SQF takes into account the characteristics of the national education system and labour market, for which reason the descriptors at all levels are for the most part more detailed.

When comparing similarities and differences between knowledge, skills and competences in the SQF and EQF, we note the following:

Knowledge. The starting definitions of the concept of 'knowledge' are similar in both frameworks. In both cases knowledge is defined as the result of a learning process in different settings, with the definition in the SQF also specifically mentioning learning processes in the context of work and private and social life.

Skills. The definition of the concept of 'skills' in the SQF incorporates the distinction between cognitive skills and practical skills from the EQF definition but differs from the EQF in that it also emphasises the use of knowledge to carry out tasks and solve problems.

Competences.[91] Both definitions of competences, in the SQF and the EQF, are coherent in the part that describes competences as the ability to use knowledge and skills in various situations, where the EQF places slightly more emphasis on the professional and personal development of the individual, while the SQF emphasises responsible conduct on the part of individual. Both frameworks include the notions of autonomy and responsibility.

3) COMPARISON OF SQF DESCRIPTORS AND EQF DESCRIPTORS

In addition to the conceptual comparison of the two frameworks, we present below a more detailed comparison of the contents of SQF descriptors and EQF descriptors, where we compare the similarities and differences of the Slovenian and European qualifications frameworks at individual levels of knowledge, skills and competences. In both frameworks descriptors at higher levels are to be understood as incorporating descriptors from lower levels.

Comparison of SQF level 1 with EQF level 1

Knowledge: The generic descriptions of the knowledge category are almost identical, although the SQF descriptor emphasises the capacity for further systematic learning.

Skills: The EQF descriptor relates exclusively to carrying out simple tasks, while the SQF descriptor differentiates between basic literacy and the ability to learn information and concepts, and the demonstration of practical skills required to carry out simple, repetitive tasks.

Competences: The generic description is very similar but the difference between the two frameworks is evident from the fact that the EQF descriptor emphasises work or study, while the SQF descriptor emphasises the ability to operate in a specifically defined/supervised and structured environment.

We conclude that SQF level 1 corresponds to EQF level 1.

Comparison of SQF level 2 with EQF level 2

Knowledge: The SQF defines knowledge at this level in a more structured manner than the EQF. While the EQF defines knowledge as the basic processing of information tied to a field of work or study, the SQF explicitly ties it to understanding natural concepts, processes and laws as a basis for further learning. The SQF

91 We use the concept of competence in the plural form, although – see Mernagh, E. (2011): *Differentiating between 'competence', 'competences', and 'competency'* – Working Paper – use of the term in the singular is also possible.

also defines knowledge as a basis for further learning and social participation, while this is not emphasised in the EQF. As a result we can compare knowledge in the SQF at this level to knowledge at EQF level 3.

Skills: The EQF emphasises the use of information in order to carry out tasks and to solve routine problems using simple rules and tools, while the SQF emphasises basic literacy in relation to the use of basic tools, methods and materials. Both frameworks emphasise the low degree of complexity of the tasks to be performed: carrying out simple, repetitive tasks consisting of a small number of operations (SQF) and the solving of routine problems using simple rules and tools (EQF).

Competences: The EQF simply raises the level in comparison to level 1 in the sense of increasing autonomy – with partial autonomy of work/study in a supervised environment. The EQF and SQF descriptors coincide with regard to increasing autonomy (partial autonomy, limited responsibility) but the SQF descriptor is broader and places more emphasis on the lifelong learning aspect with the acquisition of new knowledge and skills and operation on the basis of written instructions.

We find correspondence between all three components of the descriptors, although in the knowledge category the SQF descriptor defines learning outcomes at a slightly more demanding level. The element of basic literacy is emphasised in the SQF.

Comparison of SQF level 3 with EQF level 3

Knowledge: At level 3 the EQF describes knowledge very generically without an increase in requirements, while the SQF places knowledge at this level in the national context of education and work and therefore emphasises the practical and vocational nature of knowledge, the limitation of its theoretical basis and the situational orientation of learning tied to a specific discipline.

Skills: The EQF emphasises the practical nature of the accomplishment of tasks, which are based on the application of basic methods, tools, materials and information. The SQF adds the element of basic literacy and places skills in the context of the predictability of problems and standardisation of tasks.

Competences: The EQF descriptor for level 3 refers to the ability to take responsibility for completion of tasks in work or study, while the SQF descriptor at this level is based on limited autonomy of operation and simple verbal and written instructions. The SQF also mentions the element of guidance, which relates to autonomy of operation.

SQF level 3 highlights the practical aspect of knowledge and skills and in this way builds on SQF level 2. SQF level 3 and EQF level 3 correspond in terms of degree of difficulty.

Comparison of SQF level 4 with EQF level 4

Knowledge: The descriptors in the two frameworks are similar, except that the SQF descriptor places knowledge more explicitly in the context of a vocational orientation and emphasises that the study of examples and the integration and application of knowledge take precedence over the principles of systematic scientific organisation.

Skills: The level of complexity of the two descriptors in this category is comparable, except that the SQF descriptor breaks down skills in more detail and emphasises the ability to perform less standardised tasks.

Competences: In the competences category both descriptors include the ability to operate more autonomously in a more predictable environment and the ability to assume responsibility for own work. Unlike the SQF, the EQF includes supervision of the routine work of others, while the SQF emphasises an entrepreneurial orientation and the ability to organise and work in teams.

Learning outcomes at EQF level 4 and SQF level 4 are of comparable complexity.

Comparison of SQF level 5 with EQF level 4

Knowledge: The descriptor of SQF level 5 shows a slightly higher degree of difficulty than the EQF descriptor: it includes analytical thinking and advanced knowledge of certain academic or professional technical concepts, including as preparation for further learning.

Skills: The skills category in the SQF also shows a slightly higher degree of difficulty than the EQF descriptor: broad or specialised methodological skills, the ability to solve problems in atypical situations and the ability to solve abstract problems. It also includes the ability to carry out various, non-standardised tasks.

Competences: This category is the most comparable in terms of degree of difficulty. The SQF particularly emphasises taking responsibility for the acquisition of new knowledge, the ability to organise and work in complex and heterogeneous teams, autonomy and initiative.

We may state that SQF level 5 is in principle comparable to EQF level 4, but that in the categories of knowledge and skills the SQF descriptor includes learning outcomes at a slightly higher degree of difficulty. We can talk about comparability under the best fit principle.

Comparison of SQF level 6 with EQF level 5

Knowledge: In the knowledge category we can observe comparability between the EQF and the SQF in terms of the difficult and complexity of expected knowledge, where the SQF descriptor particularly highlights the importance of knowledge for the resolution of concrete and more complex tasks in specific fields of the discipline.

Skills: Comparability between the two descriptors can also be observed in the skills category in the sense of complexity and difficulty. The SQF descriptor again highlights nationally specific aspects such as the ability to carry out more complex technical tasks linked to the preparation and control of work processes, the ability to perform complex tasks based on abstract thought, and the use of various tools, methods or technological processes.

Competences: Correspondence between the EQF and SQF at the level of descriptions of competences is evident from the fact that the former describes competence in terms of management and supervision in the context of work activities, and the latter in terms of assuming responsibility for the work of individuals and groups. The SQF also emphasises forming basic connections and placing issues in a general and social context. The latter can be equated with 'review(ing) and develop(ing) performance of self and others' in the EQF.

We conclude that the descriptors of SQF level 6 and EQF level 5 correspond.

Comparison of SQF level 7 with EQF level 6

Knowledge: At EQF level 6, knowledge is defined as 'advanced knowledge of a field of work or study' involving a 'critical understanding' of theories and principles, which corresponds to the definition of knowledge at SQF level 7, which talks about advanced technical, theoretical and practical knowledge 'in a specific field' as a basis for critical reflection (in the skills category).

Skills: At the level of skills, correspondences between the frameworks are apparent in the description of skills that demonstrate the mastery and innovation required to solve complex and unpredictable problems (EQF) and are the basis for original thinking/work and the mastery of complex work processes in new work situations (SQF).

Competences: We also find correspondence between the descriptors in the competences category. Similarity is apparent in the elements of taking responsibility for decision-making, operating in unpredictable contexts, taking the initiative and taking responsibility for professional development. The SQF descriptor also highlights the ability to devise and sustain arguments and transfer knowledge within a group.

We find that the descriptors of EQF level 6 correspond to those of SQF level 7.

Comparison of SQF level 8 with EQF level 7

Knowledge: Both descriptors emphasise highly specialised (EQF) or advanced theoretical, methodological and analytical knowledge (SQF) as a basis for original thinking and research (EQF, SQF – skills category) or as a basis for highly complex professional work (SQF).

Skills: The description of specialised problem-solving skills at EQF level 7 corresponds to the mastery of very demanding processes/tools in specialised fields and problem-solving in the description of skills at SQF level 8. The EQF emphasises the integration of knowledge from different fields, which relates to the competences category in the SQF, where the emphasis is on the ability to carry out tasks in multidisciplinary contexts.

Competences: We also find correspondence at the level of competences between the descriptors in EQF level 7 and SQF level 8. Both include elements such as: the ability to manage and transform work or study context that are complex and unpredictable (EQF) or the ability to carry out tasks independently and autonomously in atypical, broader, multidisciplinary contexts (SQF), taking responsibility for decisions, professional development, strategic performance of teams. The descriptions differ in that the SQF emphasises, more than the contribution to professional knowledge (EQF), the ability to take responsibility for own professional development and instruct others, which is closer to the wording of EQF level 6: 'take responsibility for managing professional development of individuals or groups'.

We find that the descriptors of EQF level 7 and SQF level 8 are comparable.

Comparison of SQF level 9 with EQF level 7 and 8

A comparison of SQF level 9 with EQF levels 7 and 8 shows that the descriptors of SQF level 9 are to a certain extent comparable to both EQF levels, although comparability is greater between SQF level 9 and EQF level 8.

Knowledge: SQF level 9 includes in the knowledge category advanced theoretical, methodological and analytical knowledge serving as the basis for original research/artistic work leading to the creation of new knowledge. This is comparable to the EQF level 8 descriptor, which refers to knowledge at the most advanced frontier of a given field.

Skills: At both EQF level 8 and SQF level 9, the skills category highlights the ability to solve problems in research (EQF) and the ability to participate in research projects/artistic projects of the highest standard and solve theoretical and practical problems (SQF). The EQF also contains a reference to extending existing knowledge, while the SQF refers to creating new knowledge/works. Those skills described in the EQF as the most advanced and specialised skills and techniques already appear at SQF level 8 as mastery of highly demanding, complex work processes and methodological tools.

Competences: EQF level 8 mentions the demonstration of substantial autonomy and the development of new ideas or processes in contexts including research, which corresponds to the SQF description: the ability to carry out tasks autonomously and the ability to formulate original thinking/work (in the skills section) in connection with basic and/or applied research/artistic work. Here the SQF particularly emphasises the ability to independently, professionally and ethically orient own learning and the learning of others in different contexts.

We find that SQF level 9 corresponds to EQF level 8 in accordance with the best fit principle, because it emphasises 'participation in original research projects/artistic projects of the highest standard' that 'create new knowledge' and/or artistic works of the highest standard.

Comparison of SQF level 10 with EQF level 8

Knowledge: Correspondence between EQF level 8 and SQF level 10 is apparent in knowledge at the most advanced frontier (EQF) and advanced knowledge for autonomous original research/artistic work (SQF), where the EQF specifically refers to the interface between fields.

Skills: Correspondence between skills at EQF level 8 and SQF level 10 is apparent in the most advanced skills including synthesis and the solving of critical problems in the EQF, and through the synthesis of new and complex ideas and the solving of the most complex problems in the SQF.

Competences: We find correspondence at the level of competences between EQF level 8 and SQF level 10.

Both descriptors highlight the ability to acquire new knowledge autonomously and innovatively, resolve the most complex problems and be creative. The SQF particularly highlights the ability to act responsibly and evaluate the consequences of the application of new knowledge in different contexts.

We may conclude that SQF level 10 corresponds to EQF level 8.

A more detailed comparison of SQF and EQF levels is given in table form in Annex 3.

Criterion 3

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.

The position of learning outcomes in the Slovenian education system

Curricula throughout the Slovenian education system are a reflection of a gradual shift to learning outcomes that has been taking place since at least 1996, when new legislation was adopted for the entire field of education. In the late 1980s curricula were still designed in terms of content, but soon curriculum planners began to seek ways to conceive them in such a way that they would focus on the objectives of education: initially, under the influence of the theory of Benjamin Bloom, the emphasis was on the idea of operational learning objectives and standards of knowledge. As a result of certain criticisms, new approaches were sought in the years that followed. Of all these approaches the one that had the greatest effect was undoubtedly the competence-based approach. Today the majority of curricula are at least partly based on competences.

The second important point of debate centred on standards of knowledge; this issue was particularly in the foreground in the case of basic and upper secondary education. In the most recent curricula at both the basic and the upper secondary level we distinguish today between basic and minimum standards. These are contained in curricula alongside general and operational objectives. The situation is different in vocational education and training, where standards of knowledge are not defined at the national level. Standards are defined by groups of teachers at individual schools, relying on examination catalogues prepared at the national level.

In the field of upper secondary and short-cycle higher vocational education, we have to be careful to differentiate between occupational standards and standards of knowledge. Occupational standards are the basis for the preparation of education programmes and curricula, and are therefore indirectly the starting point for the definition of standards of knowledge. As already noted (see section 2.6.), occupational standards are the point of contact between the certificate system and the formal education system – a point that enables us to ensure a comparable standard of quality in the two systems.

When adults enrol in formal education the same characteristics apply as for children and young people. Adult education programmes are based on the same learning outcomes and standards of knowledge as the education of children and young people.

Despite a long tradition of orientation towards learning outcomes, the Slovenian education system did not use the term 'learning outcome' until the start of the project to develop a Slovenian qualifications framework. For the purposes of the framework, the term was defined in the sense of knowledge, skills and competences, standardised at a specific qualification level.

Although the term 'learning outcome' was not used, it is clear from the above that the curriculum concept throughout the entire system is based on the idea of a transparent representation of what the learner should know, understand and be capable of demonstrating at the conclusion of a period of learning. Owing to the specific characteristics of individual segments of the education system, differences naturally exist between programmes and curricula; these are apparent in the method of operationalisation of learning objectives, the ratio between general and operational objectives, and also in the position occupied by competences. These differences are also evident from the examples given in Annex 4.

In the next section we show what legal and other official acts represent the basis for defining learning outcomes in individual segments of the education system in Slovenia and in what concepts they are included.

The formal education system

Basic education

The starting point for defining the content of learning outcomes is the general educational objectives defined by the *Organisation and Financing of Education Act* and the *Elementary Education Act*. Learning outcomes are defined directly by syllabuses prepared for each subject separately. The level and complexity of knowledge is most evident from operational objectives and standards of knowledge. Curricula are quite extensive and operational objectives are analysed in detail. Curricula distinguish between basic and minimum standards of knowledge and contain didactic recommendations and instructions for assessment. Learning objectives are also verified at the end of the second and third triads of elementary education by means of *national assessment* (see section 2.2.2.).

Upper secondary education

The *Organisation and Financing of Education Act* is also the basic starting point for the definition of learning outcomes for programmes of general and vocational level at the higher vocational level. Also important are the *Vocational Education and Training Act* and the *Gimnazije Act*. Of key importance here are education programmes, which define educational objectives in slightly more detail, and of course operational curriculum documents, which take different names and forms:

- In the gimnazija system these are individual subject syllabuses which – like elementary education curricula – contain general and operational objectives and basic and minimum standards. Key competences are also indicated more explicitly. Learning outcomes themselves are also influenced by information catalogues, which are prepared in accordance with the Matura Act. Learning outcomes are also verified at the conclusion of gimnazija education by means of the *general matura examination* (see section 2.3.).
- In the vocational and technical education system there are, in addition to curricula (for general education subjects), catalogues of knowledge (for technical modules) prepared on the basis of occupational standards. Catalogues of knowledge contain guidance objectives and occupational competences, which are divided into informative and formative operational learning objectives. Integrated among them are the objectives of key competences. Learning outcomes in vocational education are also shaped by matura examination catalogues, prepared in accordance with the Rules on the Vocational Matura (see chapter 2). Learning outcomes are verified at the conclusion of vocational education by means of a *final examination* (see section 2.3.3.) and at the conclusion of technical education by means of the *vocational matura* (see section 2.3.2.).

Tertiary education

Short-cycle higher vocational education

Learning outcomes are in accordance with the *Higher Vocational Education Act*. They also follow the educational objectives defined in individual education programmes. Each subject (or module) includes its own syllabus, which defines learning outcomes more precisely. Catalogues of knowledge are structured in such a way as to contain general objectives and subject-specific competencies. These are divided into informative and formative learning objectives. The achievement of learning outcomes is verified by the Expert Council for Vocational Education and Training in the process of adopting the programme. Additionally, NAKVIS is responsible for quality assessment, just as in higher education (see EQF criterion 5).

Higher education

Pursuant to the *Higher Education Act*, learning outcomes follow educational objectives and are written into individual education programmes. Each subject (or module) contains its own syllabus, which defines learning outcomes in detail. Syllabuses do not, however, describe expected learning outcomes in the categories

of knowledge, skills and competences as the SQF does. Syllabuses define the general and subject-specific competences that are obtained through the programme. The concept of competences relates here to learning outcomes to express the ability of the graduate to apply the acquired knowledge in practice.

Level of learning outcomes is first verified by NAKVIS in the process of accreditation of the higher education institution and study programmes and again in the process of re-accreditation, which as a rule takes place every 7 years. Higher education institutions are also required to prepare self-evaluation reports, which also include student questionnaires and staff questionnaires (see EQF criterion 5).

The system of recognition of non–formally and informally acquired knowledge

National vocational qualifications

Learning outcomes are defined in occupational standards and catalogues of standards of vocational knowledge and skills, which are verified in accordance with the regulations governing national vocational qualifications (see section 2.6.). In occupational standards, learning outcomes are divided into three categories: *areas of work*, *key work* and *skills and knowledge*. Functional skills and the application of vocational knowledge are in the foreground.

The position of learning outcomes in the Slovenian Qualifications Framework

The SQF links two concepts:

1. The traditional '*input concept*' or *educational activity/programmes concept.* This is tied to legal acts and other regulations which, for each programme type and associated qualification, define its purpose, objectives and position in the education system, and also rights in the sense of the transitions it enables.
2. The *learning outcomes concept*, introduced at the system level by the SQF, defines more transparently the relationships between programmes and qualifications in the sense of their difficulty and complexity.

The learning outcomes concept is tied to consideration of the following criteria:

- complexity and depth of knowledge and understanding;
- necessary level of support and teaching;
- level of involvement, autonomy and creativity;
- scale and complexity of application/practice.

The learning outcomes concept is reflected in the *descriptors of learning outcomes* prepared through the development of the SQF (see Annex 2 and section 3.3.).

Credit system

In Slovenia credits are allocated to programmes of vocational education and training, higher vocational education and higher education.

The credit system in vocational education and training

The credit system in Slovenia is an accumulation and transfer system for vocational education and training. It enables a systematic description of education programmes and their units/modules. Each module is defined by credits reflecting the relative weight of the individual module in relation to the education programme as a whole. The smallest unit expressed in terms of credits is the subject or module.

The criteria for the allocation of credits to VET programmes state that the credit system is used for:

- allocation of credits to learning outcomes obtained through formal and non-formal learning;
- accumulation of units and credits for the completion of education programme and the obtaining of educational qualification or national vocational qualification;

- transfer of learning outcomes and credits from one education programme to another, between institutions providing vocational education and training in Slovenia and abroad, and between the education system and the certificate system.

Credits are allocated to education programmes by the Expert Council for Vocational Education and Training at the proposal of the drafters of the education programme. Credits are allocated to the education programme and units thereof and represent in numerical terms the scope of learning outcomes, measured in terms of the amount of work (learning activities) that the average learner has to do in order to achieve the planned learning outcomes, and the relative importance of each unit making up the education programme.

One credit is allocated for 25 hours of learning activities by the learner. Learning activities include: lessons, individual learning (ongoing work, literature study, seminar papers, projects, research), practical training through work, preparation for examinations or other forms of verification of knowledge, and preparation and implementation of the project part of a final examination or vocational matura. Credits are allocated to learners when they fulfil the learning requirement defined by the education programme or the subjects/modules of the education programme and achieve the learning outcomes or prove that they have reached the objectives by other routes.

In accordance with the *Vocational Education and Training Act* (2006, Article 14), education programmes are allocated 60 credits for one year of education. Education programmes thus have the following number of credits:

- short upper secondary vocational education programmes enable the acquisition of 120 credits,
- upper secondary vocational education gives 180–240 credits
- upper secondary technical education gives 240–300 credits
- vocational-technical education gives 120 credits,
- a vocational course gives 60–90 credits.

An education programme must be compiled in such a way that the number of credits necessary to complete an individual programme unit (subject or module) and the programme as a whole is clearly apparent. An individual programme unit must be allocated a whole number of credits. The first allocation of credits in the syllabus is a matter of agreement. Credits are allocated to all parts of the syllabus:

- general education subjects,
- technical modules,
- practical lessons,
- practical on-the-job training,
- extracurricular activities,
- open curriculum
- final work in upper secondary vocational education (product or service with oral presentation) and upper secondary technical education (fourth unit of the vocational matura).

ECVET

The allocation of credits to vocational education and training programmes is also compatible with ECVET recommendations.[92] The CPI was named as the *ECVET national reference point* in 2010. In its activities it focuses on the use of ECVET instruments in international student mobility. In 2012 a group of ECVET experts was formed, coordinated by CMEPIUS, Slovenia's national centre for mobility and European education and training programmes. The main task of this group is the promotion of already obtained results, methodologies and tools for the effective implementation of the ECVET system in Slovenia. The CPI is also participating in the pilot projects N.E.T.Work, VET-CCS and YOUR ECVET.

92 Recommendation of the European Parliament and of the Council of 18 June 2009 on the Establishment of a European Credit System for Vocational Education and Training. OJ C 155/11.

The credit system in tertiary education

The table below shows ECTS credits for first-cycle, second-cycle, third-cycle and short-cycle programmes, or the duration of study in the case of old higher education qualifications. The allocation of credits to a study programme as a whole and to individual units is defined in accordance with the *Higher Education Act* (Articles 36 and 37) and the *Higher Vocational Education Act* and criteria for the allocation of credits to study programmes under the ECTS.

Table 4: **ECTS credits in tertiary education in the SQF and QF–EHEA**

QF–EHEA	SQF	ECTS in the SQF	ECTS IN THE QF–EHEA
Third cycle	10	180 ECTS credits or a minimum of 3 years of original research/artistic work after completion of the second cycle, or a minimum of 3 years after completion of an undergraduate programme and 1–2 years after completion of a postgraduate (master's) programme	not specified
	9	60–120 ECTS credits or 1–2 years at postgraduate level after completion of a professional or academic higher education programme at the undergraduate level	
Second cycle	8	60–120 ECTS credits at SQF level 8 after completion of the first cycle or 4–6 years of university education	Typically includes 90–120 ECTS credits, min. 60 ECTS credits in the second cycle
First cycle	7	Typically 180–240 ECTS credits, min. 60 ECTS credits at SQF level 7	Typically includes 180-240 ECTS credits
Short cycle	6	120 ECTS credits at SQF level 6	not specified

Criterion 4

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.

A proposal for the inclusion of educational qualifications into SQF up to the higher education level is prepared by the public institution competent under the *Organisation and Financing of Education Act* to propose state-approved education programmes to the competent Expert Council for adoption. The SQF level for an individual educational qualification is an integral part of the education programme. The competent Expert Council simultaneously defines the level of SQF for the individual educational qualification at the proposal of the public institution. The minister responsible for education adopts the SQF level for the individual educational qualification together with the programme.

A proposal for the inclusion of higher educational qualifications into SQF is prepared by the higher education institution in application for accreditation of study programme. Slovenian Quality Assurance Agency for Higher Education, at accreditation of study programme, defines also the level of SQF for proposed study programme.

A proposal for the inclusion of national vocational qualifications (NVQ) into SQF is prepared by the public institution competent under the *National Vocational Qualifications Act* to propose NVQ to the competent Expert Council for adoption. The SQF level for an individual NVQ is an integral part of the catalogue of standards of vocational knowledge and skills. The competent Expert Council defines the level of SQF for the individual NVQ at the proposal of the public institution. The minister responsible for labour adopts the SQF level for the individual NVQ together with the catalogue of standards of vocational knowledge and skills.

Following adoption of the programme or catalogue of standards of vocational knowledge and skills, the National Coordination Point for the EQF publishes the details in the register of SQF qualifications and other

materials. Individuals have the right to request for the attestation of SQF and EQF levels on documents issued before the entry into force of the SQF Act at EQF NCP. Entries on public documents are defined by implementing regulations on the basis of the draft SQF Act.

Only those qualifications that go through formal accreditation procedures are automatically included in the SQF. These procedures are described.

Accreditation procedures currently only exist for two types of qualifications:

- those obtained within the formal education system (educational qualifications);
- outside the formal education system, these procedures only exist for national vocational qualifications.

The draft SQF Act also envisages the procedure for placing **supplementary qualifications** in the SQF. A proposal to place a supplementary qualification in the SQF is prepared by a legal entity or government body on the prescribed form, which contains: a) the standard of the supplementary qualifications (description of learning outcomes defined for the individual SQF level), b) the procedure for verifying and assuring the quality of learning outcomes and c) references of the proposer in the specific specialist field.

A review of the suitability of the qualification is carried out by the group of experts responsible for placing supplementary qualifications in the SQF; the proposal to place a supplementary qualification in the SQF and the opinion of the group of experts are considered by the expert panel at the NCP for the EQF, which approves (or rejects) the placing of the supplementary qualification in the SQF. The minister responsible for labour determines the placing of the supplementary qualification in the SQF. Following confirmation of the supplementary qualification, the NCP for the EQF publishes the qualification in the register of SQF qualifications.

Qualifications in the SQF

The placing of individual types of qualifications in the SQF is based on two foundations:

1. Initially, all types of qualifications were placed in the framework in accordance with sectoral legislation and KLASIUS. This approach conforms to the communicative role of the framework and the concept of educational activity/programmes.
2. The suitability of the classification was also checked from the point of view of the conformity of qualifications with learning outcomes at individual qualification levels. In order to confirm the suitability of the classification of individual types of qualifications at a given level, a three-member expert group randomly chose 3 to 4 examples of qualifications for each type of qualification and checked them against the criteria listed in chapter 4 (see criterion 3).

Since the characteristics of the national system were already taken into account when determining the number of SQF levels and formulating the descriptors of learning outcomes, it is of course anticipated that the verification of individual qualifications should in most cases confirm the suitability of the classification.

Analysis of individual qualifications has, however, revealed the discrepancies that are characteristic of some qualifications, which can be expected to undergo reform in the future:

- In the case of qualifications at SQF level 3, some learning outcomes in the knowledge category are typically closer to the level 2 degree of difficulty than that of level 3, judging from the descriptors of learning outcomes. Since, however, these programmes train candidates for specific vocational competences and entire vocational qualifications that go considerably beyond the competences and skills of learning achievements at SQF level 2, we consider that under the best fit principle these qualifications belong at SQF level 3.
- Some master craftsman qualifications also deviate from the descriptors: in the knowledge category they are for the most part at level 5 (like the vocational and general matura examinations), while in the skills category and, in particular, the competences category, some of them cross over to SQF level 6. In view of the statutory regulation of the system, we leave them at SQF level 5.

- SQF level 9 is a specific case: the only qualification that fully corresponds to the descriptors at this level is the *magisterij znanosti/umetnosti*, since it emphasises the aspect of the candidate's ability to take part in original research projects or artistic projects of the highest standard resulting in the creation of new knowledge or artistic works of the highest standard. The *specialisation following academic higher education* qualification is classified at this level according to the best fit principle and in accordance with the statutory regulation of higher education in Slovenia.

The SQF also includes qualifications obtained in study programmes before the introduction of the Bologna reform, since we believe that equivalence between new qualifications and old ones (which will continue to be present in the labour market for many years) is important both from the point of view of the rights of individual holders of qualifications and from the point of view of the better comprehensibility and transparency of qualifications in the labour market on the part of employers. These qualifications were not designed using the terminology of learning outcomes, and therefore in classifying them we took into account sectoral legislation and KLASIUS, just as in the case of new qualifications (see point 1 above). In classifying these qualifications we also took into account their validity or recognisability in the labour market in comparison with qualifications since the Bologna reform.

The table below contains four columns and shows:

- Three types of qualifications with associated typical qualifications:
  1) Educational qualifications
  2) National vocational qualifications
  3) Supplementary qualifications[93]
- Referencing SQF levels to the EQF

For an explanation of the colours in the table see section 3.5.

Table 5: **qualifications in the SQF and SQF levels in the EQF**

Qualifications obtained within the formal education system	Qualifications obtained outside the formal education system		EQF level
EDUCATIONAL QUALIFICATIONS	NATIONAL VOCATIONAL QUALIFICATIONS	SUPPLEMENTARY QUALIFICATIONS	
1. LEVEL			**1.**
Certificate of completing grade 7 or 8 of basic school (Incomplete basic education) Basic school leaving certificate[94] (Basic education with lower educational criteria)			
2. LEVEL			**2.**
Basic school leaving certificate (Basic education)	**National vocational qualification certificate** (National vocational qualification, level 2)		
3. LEVEL			**3.**
Final examination certificate (Short upper secondary vocational education)	**National vocational qualification certificate** (National vocational qualification, level 3)		
4. LEVEL			**4.**
Final examination certificate (Upper secondary vocational education)	**National vocational qualification certificate** (National vocational qualification, level 4)		

93 Since the accreditation procedures for supplementary qualifications are still being developed, they have not been included in the framework.

94 Slovenia also has 'special education programmes' for children and adolescents with moderate and serious learning disabilities. The programme does not lead to a qualification and is therefore not included in the SQF. On completion of education, most adolescents join sheltered work centres.

Qualifications obtained within the formal education system	Qualifications obtained outside the formal education system		EQF level
EDUCATIONAL QUALIFICATIONS	NATIONAL VOCATIONAL QUALIFICATIONS	SUPPLEMENTARY QUALIFICATIONS	
5. LEVEL			**4.**
Vocational matura certificate (Upper secondary technical education) **General matura certificate** **Master craftsman's examination certificate** **Foreman's examination certificate** **Managerial examination certificate** (Upper secondary education)	**National vocational qualification certificate** (National vocational qualification, level 5)		
6. LEVEL			**5.**
Diploma o višji strokovni izobrazbi (Short-cycle higher vocational education)[95] **Diploma o višji strokovni izobrazbi oz. višješolski izobrazbi** (Higher vocational education)[96]	**National vocational qualification certificate** (National vocational qualification, level 6)		
7. LEVEL			**6.**
Diploma prve stopnje (VS) (Professional bachelor's degree)[97] **Diploma prve stopnje (UN)** (Academic bachelor's degree)[98] **Diploma o visokem strokovnem izobraževanju** (Diploma of professional higher education)[99] **Diploma o specializaciji** (Specialisation following higher vocational education)[100]			
8. LEVEL			**7.**
Diploma druge stopnje (Master's degree)[101] **Diploma o specializaciji** (Specialisation following professional higher education)[102] **Diploma o univerzitetnem izobraževanju** (Diploma of academic higher education)[103] **Diploma o visokošolskem izobraževanju** (Professional higher education)[104]			
9. LEVEL			**8.**
Diploma o magisteriju znanosti (Research master's degree)[105] **Diploma o magisteriju znanosti** (Research master's degree)[106] **Diploma o specializaciji** (Specialisation following academic higher education programme)[107]			

95 Awarded after 1996 in accordance with the Vocational Education and Training Act and after 2004 in accordance with the Higher Vocational Education Act.

96 Awarded up to 30 September 2002 in accordance with the Career-Oriented Education Act.

97 Awarded after 2004 in accordance with the Higher Education Act.

98 Awarded after 2004 in accordance with the Higher Education Act.

99 Awarded after 1994 in accordance with the Higher Education Act.

100 Awarded up to 30 September 1997 in accordance with the Career-Oriented Education Act.

101 Awarded after 2004 in accordance with the Higher Education Act.

102 Awarded in accordance with the Higher Education Act, but only up to the end of 2015/16 academic year.

103 Awarded after 1994 and in accordance with the Higher Education Act, but only up to the end of 2015/16 academic year.

104 Awarded in accordance with the Career-Oriented Education Act.

105 Awarded in accordance with the Higher Education Act, but only up to the end of the 2015/16 academic year.

106 Awarded in accordance with the Career-Oriented Education Act.

107 Awarded after 1994 in accordance with the Higher Education Act, but only up to the end of 2015/16 academic year. In view of the Slovenian regulatory framework and in accordance with the 'best fit' principle, this qualification is placed at SQF level 9, although in terms of learning outcomes it does not reach the level of complexity of the learning outcomes at EQF level 8. It is therefore comparable to the descriptors for EQF level 7.

Qualifications obtained within the formal education system	Qualifications obtained outside the formal education system		EQF level
EDUCATIONAL QUALIFICATIONS	NATIONAL VOCATIONAL QUALIFICATIONS	SUPPLEMENTARY QUALIFICATIONS[94]	
9. LEVEL			**8.**
Diploma o specializaciji (Specialisation following higher education programme)[108]			
10. LEVEL			**8.**
Diploma tretje stopnje (Doctorate)[109]			
Diploma o doktoratu znanosti (Doctorate)[110]			
Diploma o doktoratu znanosti (Doctorate)[111]			

Methodology of description of qualifications

Methodology of description of educational qualifications for the purposes of the SQF

Qualifications are described with regard to the parameters below.

1. Name of qualification
2. Type of qualification
3. Category of qualification
4. Type of education
5. Duration of education and allocation of credits (where it exists)
6. Admission requirements
7. Learning outcomes (SQF levels)
8. Assessment and completion: assessment system, progression, conditions for obtaining a public document
9. Providers
10. Transitions

Table 6: **Example of description of educational qualification**

Name of qualification	
Type of qualification	
Category of qualification	
Type of education	
Duration	
Admission requirements	
Learning outcomes (SQF levels)	
Assessment and completion	Assessment system: Promotions: Condition for obtaining a public document:
Providers	
Transitions	

108 Awarded up to 30 September 1997 in accordance with the Career-Oriented Education Act. In view of the Slovenian regulatory framework and in accordance with the 'best fit' principle, this qualification is placed at SQF level 9, although in terms of learning outcomes it does not reach the level of complexity of the learning outcomes at EQF level 8. It is therefore comparable to the descriptors for EQF level 7.

109 Awarded after 2004 in accordance with the Higher Education Act.

110 Awarded after 1994 in accordance with the Higher Education Act, but only up to the end of the 2015/16 academic year.

111 Awarded in accordance with the Career-Oriented Education Act.

Methodology of description of national vocational qualifications for the purposes of the SQF

The description of national vocational qualifications does not include admission and procedural parameters (such as age, duration, etc.), since these are not relevant. The exception is (or can be) admission criteria stipulated by some catalogues of standards of vocational knowledge and skills. The description includes those elements indicating the characteristics and quality of verification and assessment of knowledge – a key parameter in the system of identifying and recognising non-formally and informally acquired knowledge.

Qualifications are described with regard to the parameters below.

1. Name of qualification
2. Type of qualification
3. Category of qualification
4. Admission criteria (where relevant)
5. Learning outcomes (SQF levels)
6. Assessment and completion: assessment system, assessors, condition for obtaining a public document
7. Providers (of procedures for the identification and validation of national vocational qualifications)

Table 7: **Example of description of national vocational qualification**

Name of qualification	
Type of qualification	
Category of qualification	
Admission criteria (where relevant)	
Learning outcomes (SQF levels)	
Assessment and completion	Assessment system: Assessors: Condition for obtaining a public document:
Providers	

Criterion 5

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

Responsibility for the quality of education in Slovenia is shared between: educational institutions, public research and development institutions, evaluation bodies and agencies and the government.

Administrative supervision is the responsibility of school inspection services, while control of the expenditure of public funds is the responsibility of the Court of Auditors. The ministry responsible for education is responsible for promoting quality assessment and assurance processes in nursery schools, basic and upper secondary schools, and, in part, higher vocational schools.

The quality assurance system is based both on the principle of internal quality assessment, i.e. the self-evaluation of the work of nursery schools, schools and higher education institutions, and the principle of external quality assessment, which in basic and upper secondary education includes assessment of learning outcomes (standards of knowledge) by means of external testing of knowledge at different levels.

Self-evaluation of institutions, external evaluation of programmes and institutions, and evaluation of the education system as a whole are all prescribed by law. Education institutions must carry out self-evaluation every year and report on it to their managing authorities. In this process they use:

- annual analyses of learning achievements,
- reports of the education inspectorate,
- analyses of the results of external assessment of knowledge (national assessment, matura examinations), and
- the results of domestic research (basic and applied research projects co-financed by the Slovenian Research Agency) and international research (PISA, TIMSS, PIRLS, TALIS, SITES, CIVICS, etc.).

In the last decade new forms of quality assurance have also developed. The ministry is introducing them in part through projects and research and in part through systemic regulation via rules and regulations. They include the monitoring and evaluation of new initiatives in nursery schools and schools, evaluation studies and international evaluations. Public research and development institutions (ZRSŠ, CPI, ACS) are legally obliged to assess the effects of introducing new elements to educational practice. Their main task, therefore, is to monitor the development of nursery schools and schools, provide them with expert support in transferring new knowledge into practice, and assessing the quality of implementation of various practices.

In 2008, the minister responsible for education appointed a Council for Quality and Evaluations to coordinate processes connected with quality in nursery schools and schools. This replaced the earlier Council for Evaluations. The Council proposes a list of evaluation areas and makes decisions on evaluation studies. On the basis of the results of evaluation reports, it reports to the minister.

Systematic external testing of basic and upper secondary school students' knowledge is regulated by law as a form of external evaluation. It is important for the individual institution and for the annual evaluation of the basic and upper secondary school systems. Evaluation of the education system up to the higher education level is facilitated by analyses of the achievements of basic and upper secondary school students, the results of evaluation research and targeted research projects, and reports on the monitoring of the introduction of new elements to nursery schools and schools.

Quality is assured in higher education by accreditation procedures for higher education institutions and study programmes and by internal and external evaluations. Since 2010 these have been the responsibility of the Slovenian Quality Assurance Agency for Higher Education. Internal evaluation procedures are the responsibility of the higher education institutions themselves.

The Ministry of Education, Science and Sport also promotes activity through financial instruments, offering priority financing to research and development projects linked to quality assurance.

Upper secondary education

The system of quality assessment and assurance in the field of basic and upper secondary education is defined in the *Organisation and Financing of Education Act*. Head teachers are responsible for carrying out self-evaluation.

Vocational education and training in Slovenia is characterised by a wide variety of quality assessment and assurance initiatives which derive from the conception of quality as meeting the needs and expectations of participants in the educational process. Initiatives at the national level and the school level are linked by the *Vocational Education and Training Act*, which provides that quality assurance must be an integral part of the management of schools. Schools must assure the quality of educational work according to the principles of an integrated quality management system and observing the *Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Quality Assurance Reference Framework for Vocational Education and Training*.[112] At the proposal of the head teacher, the school council appoints a quality committee responsible for monitoring and assessing the quality of education. The committee con-

112 OJ C 155/1.

sists of representatives of school staff, employers, students and parents. On the basis of self-evaluation the committee draws up an annual report and publishes it on the school's website. The form and method of self-evaluation are chosen by the school itself.

Verification of the legal procedures of quality assessment and assurance at the national level is carried out by the education inspectorate on the basis of the *Education Inspectorate Act*.[113]

The CPI was named as the *EQAVET national reference point* in 2008. In this capacity, it promotes Slovenian schools within the European network and presents the results of the network to stakeholders in Slovenia. The CPI also participates on a permanent basis in issues regarding the development of the system of quality assurance in education in Slovenia.

The *Expert Council for Vocational Education and Training* is responsible for formulating national quality indicators on the basis of which the CPI annually monitors the quality of vocational education and training and draws up an annual report on the quality of vocational education and training in Slovenia.

The seven indicators adopted by the Expert Council for Vocational Education and Training represent the current national framework as a long-term orientation for quality assessment and assurance in vocational education and training. The indicators are to a large extent compatible both with the recommended indicators of the *European quality assurance reference framework*[114] and with the *Common Principles for Quality Assurance in Higher Education and Vocational Education and Training in the context of the European Qualifications Framework*.[115] They include both context, input and process indicators and output indicators or indicators of outcomes.

Indicator 1 monitors the setting up of quality systems in schools with regard to legislation and European and other expert recommendations. The work of quality committees is monitored on the basis of collected data and the reports of the committees.

Indicators 2 and 3 focus on teachers as important holders of responsibility for the development of quality. Indicator 2 monitors the proportion of teachers with an appropriate formal educational qualification (or otherwise meeting conditions to work as a teacher, which in addition to an educational qualification include teacher training and a professional examination, and, in the case of providers of practical instruction, an adequate number of years of work experience). Indicator 3 establishes the proportion of teachers who participate in continuing professional education and training and the proportion of money invested for this purpose by the vocational education and training provider.

Indicators 4 and 5 focus on the results of education and monitor the share of participants in education who have successfully completed education within the envisaged period and success in the final examination and vocational matura.

Indicator 6 monitors the outcomes of education, namely the status of participants in education six months/one year after completion of education (students are in further education, employed or unemployed).

Indicator 7 is a contextual indicator and monitors the embedding of the school in the local environment by identifying the share of resources generated through the preparation and implementation of seminars for the business enterprise sector.

Higher education

The Slovenian Quality Assurance Agency for Higher Education (NAKVIS)[116] was founded in 2010 for the purpose of assuring quality in higher education in the Republic of Slovenia. NAKVIS is responsible for the development and operation of the quality assurance system in Slovenian higher education. It holds substantive and formal responsibility and provides guidance to all stakeholders and participants in tertiary education, in line with European and global development guidelines. The key objectives of NAKVIS are:

113 UL RS 114/2005.

114 OJ C 155/1, Annexes 1 and 2.

115 European Qualifications Framework for Lifelong Learning. (2009). Annex 3. Luxembourg: Office for Official Publications of the European Communities.

116 Previously the system of quality assurance in higher education was the responsibility of the Slovenian Higher Education Council (from 1994) and the National Committee for the Quality of Higher Education (from 1996).

- development and operation of the quality assurance system;
- monitoring progress and consolidating a culture of quality in higher education;
- public visibility and recognition of the role, importance and quality of the work of the agency;
- participation in the creation and development of quality policy in the higher education sector;
- promotion of the quality of transnational education;
- provision of high-quality advisory services with professionally trained staff.

NAKVIS is autonomous in its work and follows the following European recommendations and quality assurance standards,[117] which also take into account the common principles indicated in Annex 3 of the Recommendation:

- professionalisation of evaluation procedures;
- involvement of important stakeholders in the decision-making process;
- observance of the principle of conflict of interests;
- transparency and responsibility towards the public;
- prior definition of criteria and procedures for the evaluation of work and quality assurance of the agency, higher education institutions and study programmes;
- monitoring and supervision of the implementation of recommendations and requests to eliminate deficiencies;
- encouraging higher education institutions to take into account competitiveness, rationality, efficient use of resources, innovation and a development orientation in their work.

In 2012 NAKVIS continued intensively with procedures for the self-evaluation of the agency. In early 2012 the agency council appointed two groups, one to prepare an action plan for the implementation of self-evaluation, and the other to prepare for membership of the European Association for Quality Assurance in Higher Education (ENQA) and the entry of the agency in the European Quality Assurance Register (EQAR). The action plan covers a broad spectrum of the agency's work, from revision of the acts governing the agency to training for groups of experts and the construction of a comprehensive internal and external quality assurance system. The basis for the agency's self-evaluation report will be analyses of all areas of operation and analyses of the questionnaires by means of which we measure the satisfaction of stakeholders with the work of the agency. External evaluation of the agency by the ENQA is planned in 2013 (see QF-EHEA criterion 5).

National vocational qualifications system

The national vocational qualifications (NVQ) system likewise contains clear elements of a quality assurance system, defined inter alia by the *National Vocational Qualifications Act*.[118] These are apparent in the following points:

- *Occupational standards* and *Catalogues of vocational knowledge and skills* are planned at the national level in conjunction with the social partners (enterprises, chambers of commerce).
- *Providers* of NVQ verification and validation procedures are accredited by the National Examination Centre. They also provide advice to participants in NVQ verification and validation procedures.
- *Counsellors* advise candidates about NVQ verification and validation procedures, help with the preparation of a portfolio and give advice on possibilities of additional training.
- *Assessors* of NVQ verification and validation procedures undergo compulsory training and obtain a licence from the National Examination Centre. Provisions on the composition of the committee for the verification and validation of NVQs are contained in the Catalogue of standards of vocational knowledge and skills.
- Candidates have the right to appeal against the result of the NVQ verification and validation procedure.

117 Standards and Guidelines for Quality Assurance in the European Higher Education Area. (2009). Helsinki: European Association for Quality Assurance in Higher Education. Available at: http://www.enqa.eu/files/ESG_3edition%20%282%29.pdf (obtained 28 December 2012).

118 UL RS 81/2000, 55/2003, 83/2003-UPB1, 118/2006, 1/2007-UPB2, 85/2009.

- The CPI carries out evaluation of the NVQ system and the NEC provides ongoing monitoring of the work of the members of the committees during NVQ verifications. The NEC and CPI also run workshops with members of the committee and counsellors, at which more detailed instructions for the implementation of an individual NVQ are prepared.
- The NEC is responsible for the tasks bank for individual NVQs.

These elements of the NVQ quality assurance system are compliant with and take account of the elements of the quality assurance system contained in Annex 3 of the Recommendation (under point 6).

A description of how the quality assurance system links to the SQF can be found in section 3.5.

Criterion 6

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

The Ministry of Education, Science and Sport (MESS), the Slovenian Quality Assurance Agency for Higher Education (NAKVIS) and the Institute of the Republic of Slovenia for Vocational Education and Training (CPI) formally support the process of referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning through the involvement of their staff in the preparation of the final report.

This report, in which representatives of the MESS, NAKVIS and the CPI participate, represents the stated agreement of the relevant quality assurance bodies.

Criterion 7

The referencing process shall involve international experts.

The following international experts were involved in the referencing process:

- Edwin Mernagh, independent EQF expert from Ireland
- Elisabeth Frank, Ministry of Science and Research (Austria)
- Sirkka-Liisa Kärki, The Finnish National Board of Education (Finland)

The three international EQF experts have been involved in the creation of the SQF from its earliest beginnings, in other words from February 2011 onwards, taking part in the three consultations and three working meetings on the SQF, placing qualifications in the SQF and referencing the SQF to the EQF (see section 3.1.). Their joint opinion on the final report is included in Annex 5.

Criterion 8

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.

The final report on referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area was prepared in conjunction with the Interdepartmental Working Group for the preparation of a national qualifications framework consistent with the European Qualifications Framework (see section 3.1.).

The interdepartmental working group approved the first report, which was presented to the EQF Advisory Group, on 27 March 2013, and an updated and supplemented report on 30 September 2014. The Government of the Republic of Slovenia took note of the report on 23 April 2013[119].

Preparation of the final report was managed by the CPI as NCP for the EQF. The report will be published on the SQF website: www.nok.si.

Criterion 9

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.

The report will be presented at the EQF Advisory Group and published both on the official EQF platform and on the SQF website: www.nok.si.

Criterion 10

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 draft SQF Act envisages that SQF, EQF and QF-EHEA levels will be entered on every public document (Europass supplement, NVQ certificate, confirmation of supplementary qualification).

119 Number of decision: 60400-2/2013/4 of 23 April 2013.

05 SELF-CERTIFICATION OF THE SQF WITH REGARD TO THE QF-EHEA

In this chapter we show how the Republic of Slovenia meets QF-EHEA criteria and procedures.

5.1. TYPES OF SHORT-CYCLE HIGER VOCATIONAL AND HIGHER EDUCATION DIPLOMAS

As previously described in this report (see section 2.4.), tertiary education in the Republic of Slovenia includes short-cycle higher vocational education (ISCED level 5B) and higher education (ISCED levels 5B, 5A and 6). Both subsystems of tertiary education fall under the competence of the Ministry of Education, Science, Culture and Sport, and have a mutual and logical connection. Graduates of short-cycle higher vocational education may transition to a higher year of higher education. The credit system, the diploma supplement, accreditation of programmes and the quality system are a feature of the entire field of tertiary education. The quality of tertiary education is the concern of NAKVIS.

Short-cycle higher vocational education programmes correspond to the EHEA 'short cycle' and are placed at SQF level 6. Enrolment in these programmes is open to students who have previously obtained an SQF level 5 qualification. These practically oriented programmes last two years and comprise 120 credits (ECTS). They enable students to acquire vocational competences in line with occupational standards. Upon successful completion of a higher vocational programme, students obtain a diploma of short-cycle higher vocational education. Graduates can continue their education at the first level (first cycle) of tertiary education (SQF level 7) or can take employment.

Professional higher education programmes correspond to the EHEA first cycle and SQF level 7. Professional higher education programmes provide students with the skills and expertise to apply scientific methods to the resolution of complex professional problems, develop the capacity to communicate within a profession and between professions, and develop professional critical faculties and responsibility, initiative and autonomy in decision-making and leadership. An obligatory component of such study programmes is practical training in the working environment. Professional higher education programmes comprise 180 credits and last three years. The professional title from a first-cycle professional higher education programme is 'diplomirani/diplomirana' followed by an indication of the study programme and the abbreviation for professional higher education (VS). Enrolment in higher education programmes is open to students who have previously obtained an SQF level 5 qualification. Graduates can continue their education at the second level (second cycle) of tertiary education (SQF level 8) or can take employment.

Academic higher education programmes provide students with expertise through the study of theoretical and methodological concepts, and the ability to transfer and apply theoretical knowledge in practice and resolve complex professional problems, in particular by seeking new sources of knowledge and using scientific methods, develop the capacity to communicate within a profession and between professions, and develop professional critical faculties and responsibility, initiative and autonomy in decision-making and leadership of demanding work. Practical training in the working environment or participation in research work may also be an integral part of these programmes. Academic higher education programmes comprise 180 to 240 credits and last three to four years. The professional title from a first-cycle professional higher education study programme is ‘diplomirani/diplomirana’ followed by an indication of the study programme and the abbreviation for professional higher education (UN).

Enrolment in academic higher education programmes is open to students who have previously obtained a relevant SQF level 5 qualification (general matura certificate or vocational matura certificate and an examination in one of the matura subjects). Graduates can continue their education at the second level (second cycle) of tertiary education (SQF level 8) or can take employment.

With the introduction of Bologna study programmes to Slovenia's higher education system, the old professional higher education qualification (visoka strokovna izobrazba/professional diploma) is no longer offered. Study programmes under this system correspond to the EHEA first cycle and SQF level 7. As a rule programmes lasted 3 to 4 years and comprised 180 to 240 credits (ECTS). Graduates of the programmes were able to enrol in postgraduate study programmes (specialisation programmes).

In accordance with the Higher Education Act, master's study programmes are classified among postgraduate study programmes. These programmes correspond to the EHEA second cycle and SQF level 8. Master's study programmes provide students with the opportunity to enhance their knowledge in broader professional fields and train them to find new sources of knowledge in professional and academic fields, apply scientific research methods in a wider spectrum of issues and in new or changed circumstances, take responsibility for managing the most complex work systems and develop critical reflection and social and communication skills for managing group work. Project assignments in the working environment or basic, applied or developmental research assignments are an obligatory component of these programmes. Master's study programmes comprise 60 to 120 credits and last one to two years, where the total duration of programmes in the same field, including the first-cycle study programme, is five years. Master's programmes comprising 60 credits allow students who have completed first-cycle studies comprising 180 credits to complete an additional year in order to obtain the total 120 credits necessary to complete the master's programme. Enrolment in master's study programmes is open to students who have obtained an SQF level 7 qualification. In order to enrol in an integrated Master's programme comprising 300 credits and lasting five years, students must have first obtained an SQF level 5 qualification. The professional title from a completed second-cycle study programme is 'magister/magistrica' followed by an indication of the particular study programme.

With the introduction of Bologna study programmes to Slovenia's higher education system, the old academic higher education qualification (univerzitetna izobrazba/academic degree) is no longer offered. Study programmes under this system correspond to the EHEA second cycle and SQF level 8. As a rule programmes lasted 4 to 6 years and together with diploma comprised at least 270 to 300 credits (ECTS). Graduates of the programmes were able to continue their education in specialisation and magisterij znanosti programmes.

With the introduction of Bologna study programmes to Slovenia's higher education system, the specialisation following professional higher education qualification is no longer offered. Specialisation following professional higher education corresponds to the EHEA second cycle and SQF level 8. These programmes lasted one to two years and did not usually include a final thesis. Graduates of the programmes were able to continue their education in magisterij znanosti programmes. Students enrolled in these programmes must complete them by no later than the end of the 2015/16 academic year.

With the introduction of Bologna study programmes to Slovenia's higher education system, the old master's degree programmes (magisterij znanosti/umetnosti) are no longer offered. These programmes correspond to the EHEA third cycle and SQF level 9. The programmes lasted two to three years and included the writing and defence of a master's thesis, the result of which had to represent 'new knowledge' or an 'artistic work of the highest standard'. Graduates of these programmes were able to continue their education in doctoral programmes. Students enrolled in these programmes must complete and by no later than the end of the 2015/16 academic year. The academic title from a completed master's degree programme is 'magister znanosti', while the diploma may also include an indication of the academic field.

With the introduction of Bologna study programmes to Slovenia's higher education system, the specialisation following academic higher education qualification is no longer offered. Specialisation following academic higher education corresponds to the EHEA second cycle and SQF level 9. These programmes lasted one to two years and did not usually include a final thesis. Graduates of the programmes were able to continue their education in magisterij znanosti programmes. Students enrolled in these programmes must complete them by no later than the end of the 2015/16 academic year.

Doctoral programmes correspond to the EHEA third cycle and SQF level 10. Doctoral programmes enable students to acquire a deeper understanding of theoretical and methodological concepts and the ability to

develop new knowledge independently, solve very complex problems by testing and improving knowledge and discovering new solutions, manage the most complex work systems and research projects in a broad professional and/or academic field and develop the capacity for critical reflection. Basic or applied research assignments are an obligatory component of these programmes. Doctoral study programmes comprise 180 credits and last three years. Enrolment in doctoral programmes is open to students who have obtained an SQF level 8 or 9 qualification. The academic title from a completed third-cycle study programme is 'doktor/doktorica znanosti', and the diploma may also include an indication of the academic field, although the indication of the field is not integral to the academic title.

5.2. SELF-CERTIFICATION OF THE SQF WITH REGARD TO THE QF-EHEA

The self-certification process is carried out in accordance with the criteria defined by the QF-EHEA. A detailed explanation of fulfilment of the criteria is given in section 5.3. A comparison of QF-EHEA and SQF descriptors showed that the latter do not follow the Dublin descriptors directly but include the conceptual categories knowledge, skills and competences. As Table 8 shows, however, there is consistency between the QF-EHEA descriptors (knowledge and understanding, application of knowledge, ability to formulate judgements, ability to communicate and ability to learn) and the SQF descriptors.

In the process of comparing the SQF and the QF-EHEA it became apparent that SQF level 6 is equivalent to the EHEA short cycle and that SQF level 7 corresponds to the EHEA first cycle, SQF level 8 to the EHEA second cycle, SQF levels 9 and 10 to the EHEA third cycle, where SQF level 9 is comparable to the EHEA third cycle on the basis of the best fit principle, since SQF level 9 emphasises 'participation in original research projects/artistic projects of the highest standard' that 'create new knowledge' or 'artistic works of the highest standard'.

Table 8: **Referencing SQF levels 6, 7, 8, 9 and 10 to the QF-EHEA**

QF-EHEA	Knowledge and understanding	Application of knowledge	Ability to formulate judgements	Ability to communicate	Ability to learn
	Students:				
Short cycle	Have demonstrated knowledge and understanding in a field of study that builds upon general secondary education and is typically at a level supported by advanced textbooks. Such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle.	Students can apply their knowledge and understanding in occupational contexts.	Have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems	Can communicate about their understanding, skills and activities, with peers, supervisors and clients.	Have the learning skills to undertake further studies with some autonomy.

QF–EHEA	Knowledge and understanding	Application of knowledge	Ability to formulate judgements	Ability to communicate	Ability to learn
SQF level 6	Technical and theoretical knowledge in a specific field and practical knowledge for the resolution of concrete tasks. Knowledge enables the resolution of more complex tasks in specific fields of the discipline.	Ability to carry out more complex operational/technical tasks linked to the preparation of works and control of work processes. Ability to carry out complex and usually specialised tasks in relation to the area of operation, including abstract thought and the use of appropriate tools, methods, different technological procedures, materials and theories.		Ability to operate in different and specific settings with elements of creativity. Autonomous activity characterised by taking responsibility for the work of individuals and groups, material sources and information. Ability to make basic connections and place issues in a general social context is also important. Identification of own learning needs and attention to knowledge transfer in a work setting.	
	Students:				
First cycle	Have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that is supported by advanced textbooks and includes some aspects that are at the forefront of their field of study.	Can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study.	Have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues.	Can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.	Have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.
SQF level 7	Advanced technical/theoretical and practical knowledge in a given field, supported by a broad theoretical and methodological basis.	Ability to carry out complex operational/technical tasks, including the use of methodological tools. Mastery of demanding and complex work processes through autonomous application of knowledge in new work situations. Ability to diagnose and resolve problems in various specific work settings linked to the education and training domain. A basis for original thinking/work and critical reflection.		Ability to operate in different settings and functions and articulate new knowledge. Taking responsibility for defining and achieving own work results and/or work results of a heterogeneous group in defined fields of work. Ability to devise and sustain arguments within specific work settings related to the field of education and training. Identification of own learning needs, ability to take the initiative for own learning, ability to transfer knowledge within a group.	
	Students:				
Second cycle	Have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context.	Can apply their knowledge and understanding, and problem-solving abilities in new or unfamiliar settings within broader (or multidisciplinary) contexts related to their field of study.	Have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements.	Can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously.	Have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.

QF–EHEA	Knowledge and understanding	Application of knowledge	Ability to formulate judgements	Ability to communicate	Ability to learn
SQF level 8	Advanced theoretical, methodological and analytical knowledge with elements of research serving as a basis for highly complex professional work.	Mastery of highly demanding and complex work processes and methodological tools in specialised fields. Planning and managing the work process on the basis of creative resolution of problems related to the field of education and training. Capacity for original thinking/work and critical reflection.		Ability to carry out tasks independently and autonomously in mainly atypical settings in broader or multidisciplinary contexts. Ability to take responsibility for own professional development and instruct others. Taking responsibility for decisions relating to activities, processes and management of complex and heterogeneous groups.	
	Students:				
Third cycle	Have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field.	Have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity. Have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication.	Are capable of critical analysis, evaluation and synthesis of new and complex ideas.	Can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise.	Can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge-based society.
SQF level 9	Advanced theoretical, methodological and analytical knowledge serving as the basis for original research/artistic work leading to the creation of new knowledge/works.	Planning, managing and carrying out works of the highest complexity, including participation in research projects/artistic projects of the highest standard and resolving theoretical and practical problems in special work situations. Capacity for complex original thinking/work and critical reflection.		Ability to carry out tasks autonomously in atypical settings and broader or multidisciplinary contexts in connection with basic and/or applied research/artistic work. Ability to take responsibility for own professional development and the development of the discipline. Ability to independently, professionally and ethically orient own learning and learning of others in different contexts.	
SQF level 10	Advanced knowledge serving as the basis for autonomous, original research/artistic work or the development of the discipline at the highest level, which is connected with scholarly, professional or artistic recognition both nationally and internationally.	Planning, managing and carrying out works of the highest complexity, including participation in research projects/artistic projects, and resolution of the most complex theoretical and practical problems. Capacity for critical reflection, advanced abstract thinking and synthesising new and complex ideas.		Capacity for highly autonomous work/creative work of the highest standard, interpretation and the ability to find answers to abstract questions and questions of the greatest complexity in a professional, academic or artistic field. Ability to transfer knowledge via critical dialogue between a professional discipline and an academic discipline, and a capacity for responsible evaluation of the consequences of the application of new knowledge in different contexts.	

5.3. QF–EHEA CRITERIA

Criterion 1

The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education.

In January 2010 the government of the Republic of Slovenia appointed an Interdepartmental Working Group for the preparation of a national qualifications framework consisting of representatives of the ministries responsible for education, higher education and labour, representatives of the Statistical Office of the Republic of Slovenia, the Chamber of Commerce and Industry, the Chamber of Crafts and Small Business and trade unions, student representatives and representatives of the CPI. The mandate of the IWG is to prepare/develop a Slovenian Qualifications Framework that is consistent with the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area (see section 3.1.).

In October 2009 the CPI was named as the National Coordination Point for the EQF. As the NCP for the EQF, the CPI collaborates with the Slovenian Quality Assurance Agency for Higher Education (NAKVIS) – the competent institution responsible for the quality of higher education qualifications – on all issues relating to quality assurance in higher education.

Criterion 2

There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the European framework.

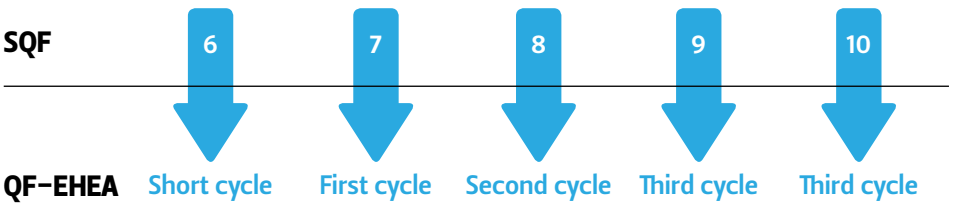
As stated in the report of the Bologna qualifications framework working group from 2007,[120] the aim of the referencing process is to ensure compatibility between the part of the national qualifications framework covering higher education qualifications and the QF-EHEA. On the basis of the above, we can conclude that the referencing process does not require complete correspondence between the descriptors of the two qualifications frameworks but rather comparability and recognisability.

In order to verify whether compatibility exists between SQF descriptors and QF-EHEA descriptors, the Interdepartmental Working Group for the preparation of a national qualifications framework appointed an SQF expert group (see section 3.1.). The SQF expert group carried out a methodological analysis in two stages as follows:

1) conceptual analysis of the two frameworks,
2) comparison of SQF descriptors and QF-EHEA descriptors.

On the basis of the results of this analysis, we have arrived at the following conclusion in terms of referencing the higher education levels in the SQF to the QF-EHEA:

Table 9: **Referencing SQF levels to the QF–EHEA**



120 Qualifications Frameworks Working Group Report. 2007. http://www.dfes.gov.uk/londonbologna/uploads/documents/WGQF-report-final2.pdf (obtained 21 December 2012).

In the process of comparing the SQF and the QF-EHEA it became apparent that SQF level 6 is equivalent to the EHEA short cycle and that SQF level 7 corresponds to the EHEA first cycle, SQF level 8 to the EHEA second cycle, SQF levels 9 and 10 to the EHEA third cycle, where SQF level 9 is comparable to the EHEA third cycle on the basis of the best fit principle, since we find that SQF level 9 emphasises 'participation in original research projects/artistic projects of the highest standard' that 'create new knowledge' or 'artistic works of the highest standard'.

1) Conceptual analysis of SQF and QF–EHEA

Conceptual analysis showed that the 'vocabulary' of the Dublin descriptors was not used in the development of the SQF but instead the conceptual categories *knowledge*, *skills* and *competences*. This is the origin of the fundamental conceptual difference between the two frameworks. Direct comparison of the SQF and the QF-EHEA is not possible, since the SQF descriptors follow three categories of learning outcomes – *knowledge*, *skills* and *competences* – while the QF-EHEA descriptors follow a description of *knowledge and understanding*, *application of knowledge*, *ability to formulate judgements*, *ability to communicate* and *ability to learn*. In order to carry out a comparison of the two frameworks we placed the QF-EHEA descriptors into SQF categories in terms of similarity of content as follows:

- *knowledge and understanding* → knowledge;
- *application of knowledge* and *ability to formulate judgements* → skills; and
- *ability to communicate* and *ability to learn* → competences.

2) Comparison of SQF descriptors and QF–EHEA descriptors

A comparison of individual descriptors showed that there is consistency between the descriptors of the SQF levels and the descriptors of the EHEA cycles. This is shown in the table below.

A comparison of SQF and QF-EHEA descriptors shows that SQF levels 7 and 8 are more demanding from the point of view of capacity for critical reflection than the corresponding QF-EHEA first- and second-cycle descriptors. Meanwhile, SQF level 9 is less demanding than the QF-EHEA third-cycle descriptors from the point of view of mastery of the skills and methods of research and capacity for original research that merits national or international publication. However, the distinction between descriptors of SQF level 9 and QF-EHEA third-cycle is minimal and significantly lower than the distinction between descriptors of SQF level 9 and QF-EHEA second-cycle. The interdepartmental working group here took into account the fact that in the development of the higher education part of the SQF, an approach was used in which existing and former (old) types of qualifications that still have significant value in the labour market were described in a manner that reflects their specific characteristics and their position in Slovenia's higher education system. On this basis the group concluded that SQF level 9 is comparable to the QF-EHEA third cycle according to the best fit principle.

Attention was also drawn to this aspect by the international EQF experts (see section 3.1.). In their last assessment the latter agreed with the referencing as proposed by the IWG.

Criterion 3

The national framework and its qualifications are demonstrably based on learning outcomes and the qualifications are linked to ECTS or ECTS-compatible credits.

Despite a long tradition of orientation towards learning outcomes, the Slovenian education system did not use the term 'learning outcome' until the start of the project to develop a Slovenian qualifications framework. For the purposes of the framework, the term was defined in the sense of knowledge, skills and competences, standardised at a specific qualification level.

Since 2004, when Slovenia joined the Bologna reform process and reformed all new study programmes in accordance with the requirements of the latter, we can state that all higher education qualifications classified in the SQF are based on learning outcomes, which in this phase are expressed as general and subject-specific competencies and not as the knowledge, skills and competences that fully describe learning outcomes in the SQF.

Examples of individual types of qualifications are shown in Annex 4 (see also EQF Criteria 3, The position of learning outcomes in the Slovenian education system).

The credit system in tertiary education

The table below shows ECTS credits for first-cycle, second-cycle, third-cycle and short-cycle programmes, or the duration of study in the case of old higher education qualifications. The allocation of credits to a study programme as a whole and to individual units is defined in accordance with the *Higher Education Act* (Articles 36 and 37) and the *Higher Vocational Education Act* and criteria for the allocation of credits to study programmes under the ECTS.

Table 10: **ECTS credits in tertiary education in the SQF and QF–EHEA**

QF–EHEA	SQF	ECTS in the SQF	ECTS IN THE QF–EHEA
Third cycle	10	180 ECTS credits or a minimum of 3 years of original research/artistic work after completion of the second cycle, or a minimum of 3 years after completion of an undergraduate programme and 1–2 years after completion of a postgraduate (master's) programme	not specified
	9	60–120 ECTS credits or 1–2 years at postgraduate level after completion of a professional or academic higher education programme at the undergraduate level	
Second cycle	8	60–120 ECTS credits at SQF level 8 after completion of the first cycle or 4–6 years of university education	Typically includes 90–120 ECTS credits, min. 60 ECTS credits in the second cycle
First cycle	7	Typically 180–240 ECTS credits, min. 60 ECTS credits at SQF level 7	Typically includes 180-240 ECTS credits
Short cycle	6	120 ECTS credits at SQF level 6	not specified

Criterion 4

The procedures for inclusion of qualifications in the national framework are transparent.

Procedures for the inclusion of qualifications in the national framework are defined in the draft SQF Act (more in section 4, EQF criterion 4).

Parameters for the inclusion of higher education qualifications in the national framework are defined in the methodology of description of qualifications obtained within the formal education system for the needs of the Slovenian Qualifications Framework (see chapter 4, EQF criterion 1).

Criterion 5

The national quality assurance systems for higher education refer to the national framework of qualifications and are consistent with the Berlin Communiqué and any subsequent communiqué agreed by ministers in the Bologna Process.

The *Slovenian Quality Assurance Agency for Higher Education* (NAKVIS)[121] was founded in 2010 for the purpose of assuring quality in higher education in the Republic of Slovenia. NAKVIS is responsible for the development and operation of the quality assurance system in Slovenian higher education. It holds substantive and formal responsibility and provides guidance to all stakeholders and participants in tertiary education, in line with European and global development guidelines. The key objectives of NAKVIS are:

- development and operation of the quality assurance system;
- monitoring progress and consolidating a culture of quality in higher education;
- public visibility and recognition of the role, importance and quality of the work of the agency;
- participation in the creation and development of quality policy in the higher education sector;
- promotion of the quality of transnational education;
- provision of high-quality advisory services with professionally trained staff.

NAKVIS is autonomous in its work and follows the following European recommendations and quality assurance standards:[122]

- professionalisation of evaluation procedures;
- involvement of important stakeholders in the decision-making process;
- observance of the principle of conflict of interests;
- transparency and responsibility towards the public;
- prior definition of criteria and procedures for the evaluation of work and quality assurance of the agency, higher education institutions and study programmes;
- monitoring and supervision of the implementation of recommendations and requests to eliminate deficiencies;
- encouraging higher education institutions to take into account competitiveness, rationality, efficient use of resources, innovation and a development orientation in their work.

In 2012 NAKVIS continued intensively with procedures for the self-evaluation of the agency. In early 2012 the agency council appointed two groups, one to prepare an action plan for the implementation of self-

121 Previously the system of quality assurance in higher education was the responsibility of the *Slovenian Higher Education Council* (from 1994) and the *National Committee for the Quality of Higher Education* (from 1996).

122 Standards and Guidelines for Quality Assurance in the European Higher Education Area. (2009). Helsinki: European Association for Quality Assurance in Higher Education. Available at: http://www.enqa.eu/files/ESG_3edition%20%282%29.pdf (obtained 28 December 2012).

evaluation, and the other to prepare for membership of the European Association for Quality Assurance in Higher Education (ENQA) and the entry of the agency in the European Quality Assurance Register (EQAR). The action plan covers a broad spectrum of the agency's work, from revision of the acts governing the agency to training for groups of experts and the construction of a comprehensive internal and external quality assurance system. The basis for the agency's self-evaluation report will be analyses of all areas of operation and analyses of the questionnaires by means of which we measure the satisfaction of stakeholders with the work of the agency. External evaluation of the agency by the ENQA is planned in 2013.

From the Republic of Slovenia Council for Quality in Higher Education (1994–2010), NAKVIS inherited full membership of the European Consortium for Accreditation[123] and full membership of the Central and Eastern European Network of Quality Assurance Agencies in Higher Education.[124] It also participates actively in ECA projects:

- **Qrossroads**, the main aim of which is to present in the form of register those qualifications awarded in the context of publicly recognised or accredited European higher education institutions and study programmes. These qualifications are presented from the point of view of the higher education system of which they are part, along with information on national quality assurance and accreditation bodies and bodies responsible for the recognition of qualifications obtained;
- **JOQAR,** a project with the general aim of facilitating Erasmus Mundus programmes (and joint study programmes in general), in particular in the fields of accreditation and recognition. The project partnership includes quality assurance/accreditation agencies and recognition bodies. NAKVIS also participates in the Steering Group and the Working Group. In December 2012 it carried out and coordinated evaluation of the joint master's study programme *Migration and Intercultural Relations* (EMMIR) offered by seven higher education institutions from Germany, Norway, the Czech Republic, Slovenia, Sudan and Uganda. Evaluation took place at the University of Oldenburg and the report of the group of experts will be the basis for a decision on an extension of accreditation, which will be taken according to the principle of reciprocity among all the quality assurance agencies involved.
- **MULTRA**, a project within the JOQAR project,[125] where NAKVIS is endeavouring to obtain full membership.

Criterion 6

The national framework, and any alignment with the European framework, is referenced in all Diploma Supplements.

The draft SQF Act envisages that the QF-EHEA level will be entered on every diploma or Europass diploma supplement.

Criterion 7

The responsibilities of the domestic parties to the national framework are clearly determined and published.

In January 2010, the Slovenian government appointed an *Interdepartmental Working Group for the preparation of a national qualifications framework* (see section 3.1.).

123 *European Consortium for Accreditation – ECA Consortium.*

124 *Central and Eastern European Network of Quality Assurance Agencies in Higher Education – CEENQA.*

125 Mutual Recognition of accreditation Results regarding Joint Programmes.

In October 2009 the CPI was named as the National Coordination Point for the EQF. As the NCP for the EQF, the CPI collaborates with the Slovenian Quality Assurance Agency for Higher Education (NAKVIS) – the competent institution responsible for the quality of higher education qualifications – on all issues relating to higher education.

Under applicable legislation, **the ministry responsible for higher education** performs the following tasks:

- prepares the legal basis for procedures for the accreditation of study programmes in the higher education sector;
- prepare the legal basis for procedures for the validation of non-formally acquired knowledge for the obtaining of a higher education qualification,
- prepare the legal basis for stating SQF and EQF levels on public documents or diploma supplements for educational qualifications achieved through state-approved education programmes in the higher education sector,
- prepare the legal basis for quality assurance at all levels up to higher education.

The Act is expected to be adopted by the National Assembly of the Republic of Slovenia in the first half of 2013. For more on the competences of other national bodies with regard to the qualifications framework, see chapter 4, EQF criteria 1.

5.4. QF–EHEA PROCEDURES

Procedure 1

The competent national body/bodies shall reference the national framework to the European framework.

The interdepartmental working group appointed by the Government of the Republic of Slovenia prepared, in cooperation with a group of appointed SQF experts and international EQF experts (see section 3.1.), a Final Report on Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area. The interdepartmental working group approved the first report, which was presented to the EQF Advisory Group, on 27 March 2013, and an updated report on 30 September 2014. The Government of the Republic of Slovenia took note of the report on 23 April 2013.

Procedure 2

The referencing process shall include the stated agreement of the quality assurance bodies in the country in question recognised through the Bologna Process.

NAKVIS and the ministry responsible for higher education formally support the process of referencing the Slovenian Qualifications Framework to the Qualifications Framework of the European Higher Education Area through the involvement of their staff in the preparation of the final report.

This report, in the preparation of which both representatives of the ministry responsible for higher education and representatives of NAKVIS cooperate, represents a stated agreement.

Figure 3: **Attestation of the Slovenian Quality Assurance Agency for Higher Education**

n·a·k·v·i·s
Nacionalna agencija Republike Slovenije za kakovost v visokem šolstvu
s·q·a·a
Slovenian Quality Assurance Agency for Higher Education

Number: 029-1/2012/116

Date: 12. 3. 2013

Subject: Report on the Referencing and Self-certification Report of the Slovenian Qualifications framework

On behalf of the Slovenian Quality Assurance Agency (SQAA), which was established by the Republic of Slovenia for the development of quality assurance system in higher education, I hereby conform that through its representative SQAA has been involved in the working group of the Institute of the Republic of Slovenia for Vocational Education and Training (CPI), national coordinator of European Qualifications Network, in preparing the Slovenian qualifications framework in individual sectors and areas respectively.

SQAA has been involved in preparing material regarding Slovenian higher education area for the Final Report 'Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area'.

Tatjana Debevec,
Acting director of SQAA

SLOVENIAN QUALITY ASSURANCE AGENCY FOR HIGHER EDUCATION LJUBLJANA

Nacionalna agencija Republike Slovenije za kakovost v visokem šolstvu, Slovenska cesta 9, SI-1000 Ljubljana, Slovenija
T: +386 1 400 5771, +386 1 400 5772 | F: +386 1 400 5779 | E: info@nakvis.si | www.nakvis.si
davčna številka/VAT ID number 13496340 | matična številka/Reg. number 3705480

REPUBLIKA SLOVENIJA

Procedure 3

The referencing process shall involve international experts.

Three international experts on qualifications frameworks have been involved in the process of preparing the Slovenian Qualifications Framework and referencing it to the European meta-frameworks. They are:

- Edwin Mernagh, independent EQF expert from Ireland
- Elisabeth Frank, Ministry of Science and Research (Austria)
- Sirkka-Liisa Kärki, The Finnish National Board of Education (Finland)

Their opinion is included in Annex 5.

Procedure 4

Referencing and the evidence supporting it shall be published. Each described criterion is treated separately.

The Final Report on Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area will be published on the SQF website (www.nok.si).

The Interdepartmental Working Group approved the report at its seventeenth session on the 27th March 2013. The government of the Republic of Slovenia was informed about the final report on the 23rd April 2013[126], which was approved by the Interdepartmental Working Group.

Procedure 5

The ENIC and NARIC networks shall maintain a public listing of States that have confirmed that they have completed the referencing process.

Immediately after adoption of the final report on referencing the Slovenian Qualifications Framework to the European Qualifications Framework for lifelong learning and the Qualifications Framework for the European Higher Education Area the NCP for the EQF will inform all relevant stakeholders, including the ENIC and NARIC networks that the referencing process has been completed.

Procedure 6

The completion of the referencing process shall be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.

The draft SQF Act envisages that the QF-EHEA level will be entered on every diploma or Europass diploma supplement.

The form of diploma supplements in the Republic of Slovenia is regulated by the Rules on Diploma Supplements, which immediately following adoption of the Act regulating the qualifications framework will be appropriately amended in such a way that the diploma supplement will also include the link between the national framework and the European Qualifications Framework for lifelong learning and the Qualifications Framework for the European Higher Education Area.

126 Number of decision: 60400-2/2013/4 of 23 April 2013.

06 FUTURE CHALLENGES FOR THE SQF

Future challenges are connected to the implementation of the SQF (see also point 3.1.).

a) Adoption of the SQF Act and its effective implementation.

b) Approval and implementation of accreditation procedures and the methodology for placing supplementary qualifications in the SQF.

c) Dissemination of information about the SQF among the general public and professional public.

d) Further development of the register of qualifications for the purposes of the SQF: ensuring sufficient system resources and infrastructure conditions.

e) Specification of an administrator, procedures and guidelines for the further development of the SQF.

f) The process of adapting further development and applicability of the SQF in form of a meaningful connectivity to the related national (KLASIUS …) and international (EQF …) tools.

07 ADDITIONAL EXPLANATIONS OF THE SLOVENIAN FINAL REPORT REGARDING THE OPINION OF THE EUROPEAN COMMISSION

In this section we offer additional clarifications with regard to the written opinion of the European Commission, the Council of Europe and CEDEFOP[127] on the Final Report from Slovenia, which was presented to the EQF Advisory Group on 29 and 30 May 2013.[128]

Criterion 1

The members of the EQF Advisory Group highlighted the question of the adoption of the SQF Act or possible complications in adopting the Act within the expected period, i.e. by the end of 2013.

The draft SQF Act was prepared and submitted for interdepartmental coordination and no major difficulties were expected in its adoption, since it is an Act of a technical nature. The draft SQF Act was already in the procedure for the adoption of regulations under preparation within the ministry. Its proposer is the ministry responsible for education. On 24 April 2014 the draft Act was published on the Slovenian government's e-Democracy website. The deadline for the submission of comments on the draft Act was 14 May 2014. In the meantime, as a result of political changes, the date for the adoption of the SQF Act has been postponed. The SQF Act is expected to be adopted by the end of March 2015.

Criterion 3

The final report for Slovenia showed that the different sub-systems (general, vocational and higher education) define and apply the learning outcomes approach in different ways. Do differences in interpretation of learning outcomes influence the transfer of learning outcomes within the education and training system?

Although learning outcomes are designed differently in different segments of the education system, they are based on a common philosophy; curriculum documents are always designed in such a way as to encourage the user (teacher, professor, supervisor and, indirectly, learner) to think and act in a targeted way; in the case of teaching work they are directed by consideration of what skills, knowledge and competences learners

127 Written opinion, The report on 'Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area' (2013), was received by Slovenia on 20 September 2013.

128 The Final Report from Slovenia on 'Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area' (2013) is available online at: http://www.nok.si/cms/files/nok/userfiles/SOK/Zaklju%C4%8Dno%20poro%C4%8Dilo%20SOK.pdf.

should develop, and to what level of complexity, difficulty, depth and breadth. At the more general level, they are directed toward such consideration by the guidance objectives or competences that need to be achieved. Guidance objectives or competences are always broken down into operational learning objectives, which can be 'translated' most directly into learning outcomes. In the case of basic and upper secondary general education (gimnazija), operational objectives are joined by defined minimum, basic and higher standards of knowledge; in the case of vocational education these have to be defined by teacher teams. The difference between curriculum documents in different segments of the system becomes more apparent if we look at their focus: in general education there is, understandably, more emphasis on knowledge, understanding and general intellectual skills, while in the vocational field (and, in part, in higher education) there is a greater emphasis on professional skills and competences. More than conceptual differences, these are differences in emphasis, which is why it was possible to talk about equivalence between different programmes (or qualifications) at the same qualification levels.

For this reason, differences in the conceptualisation of learning outcomes do not influence transfer within the system. We consider the system to be highly permeable. Vertical transfer is possible, via both the general educational and vocational routes, to the highest levels of education; unrestricted access to university is made possible by a general matura examination which is taken by upper secondary school students at the end of general secondary education or by adults (over the age of 21). The latter have the option of attending a one-year matura course and sitting the matura examination.

Access (restricted) to university is also possible on the basis of the vocational matura (with an additional examination in a general matura subject).

Unrestricted access to professional higher education is enabled by the vocational matura, an examination sat by candidates following the successful completion of a four-year vocational or technical education programme. The vocational matura can also be taken by candidates who have completed a three-year vocational education programme, although in this case they must continue education in an additional two-year vocational-technical programme, which ends with the vocational matura and an additional vocational qualification in a technical field. The combination of vocational and vocational-technical education (known as the 3+2 system) was designed as a way to encourage horizontal transfer, which opens the way to the highest levels of education to candidates who have completed vocational education. This route is frequently chosen, with around 75–80% of those completing vocational education taking up this option.

Slovenia also provides the possibility of horizontal transfer for those leaving upper secondary general school, who by enrolling in a vocational course lasting between a year and a year and a half can also obtain a vocational qualification at the upper secondary level.

Lastly, figures for enrolment in professional and academic higher education programmes demonstrate that progression and transfer are not problematic issues within Slovenia's education system. In the last five years the percentage of 19- to 24-year-olds enrolled in professional and academic higher education programmes has been more than 40%.

The final report of Slovenia mentions that learning outcomes requirements in upper secondary education refer to key competences. The EQF AG questioned whether this approach is applied in other sub-systems of education.

Key competences have an important role in Slovenia's education system; they are integrated into curricula from basic to higher education. Common to the entire system is the fact that key competences are always integrated into subjects/modules and are never stand-alone course units. This systemic solution is supported by expert findings showing that the development of key competences is more successful if it is tied to individual subject or thematic fields and linked to other more subject-specific competences and learning objectives.

In the case of basic and upper secondary general education, the integration of key competences into curricula is carried out at the national level, while in upper secondary VET programmes it is done at the school and teacher team level. Schools are required to carry out integration, but it is up to them how they do it. The reason for this decision is the great diversity of VET programmes.

In the short-cycle higher vocational education sector, key (generic) qualifications are in principle already integrated into curricula, which are prepared at the national level.

In the higher education sector the integration of generic or transversal competences is also one of the principles of the Bologna reform and is also envisaged by curriculum design. Its realisation, however, depends on the planners of the programmes (i.e. the professors), who enjoy professional autonomy in this field.

Criterion 4

In relation to educational qualifications and national vocational qualifications, the question is asked whether it is possible to develop national vocational qualifications based on occupational standards above SQF level 6 or EQF level 5.

Under the National Vocational Qualifications Act,[129] an NVQ can be obtained through completion of parts of study programmes leading to a higher education qualification or study programmes for continuing education, in other words higher than SQF level 6 or EQF level 5. One of the components of the study programme is a vocational qualification, which can be obtained under the study programme.

Can you explain the decision to place the master craftsman qualification at a lower level than in most other European countries (EQF level 5 or 6)? Is Slovenia considering an upgrade of this qualification to bring it more into line with other master craftsman qualifications in Europe?

In addition to the explanation we provided in the report itself, namely that the master craftsman qualification is placed in the framework on the basis of regulatory requirements, we drew attention to the examples of descriptions of qualifications appended to the report (Annex 4). One example points to a typical situation where learning outcomes in the knowledge category are at SQF level 5, learning outcomes in the skills category are between SQF level 5 and SQF level 6, while learning outcomes in the competences category are (usually) at SQF level 6. Differences also exist between individual concrete qualifications.

Over the last two years activities have been under way in Slovenia in connection with a reform of the master craftsman qualification. These activities are being conducted by the Chamber of Crafts and Small Business of Slovenia in conjunction with the CPI, the Ministry of Education, Science and Sport, and other social partners. As part of this reform, changes to occupational standards and the level of complexity of learning outcomes, resulting in the qualification being moved to a higher SQF level, are being considered.

The EQF AG discussed at length the levelling of SQF level 9 to EQF level 8. Slovenian qualifications at this level are being phased out (they will only be available until the end of the 2015/16 academic year) and their relationship to the three cycles of the QF-EHEA is not clear-cut. While the EQF AG acknowledged that the distinction between SQF level9 and SQF level 10 makes sense in the national context, it pointed out that this could create confusion internationally in terms of both mobility and recognition. The Slovenian representatives noted that the placement of SQF level 9 qualifications at EQF level 8 is based on the 'best fit' principle, but that there are some open issues in relation to the third cycle QF-EHEA. The EQF AG therefore requests additional discussion of the 'level 9' issue, in particular in relation to the third cycle QF-EHEA.

As noted in the report, the magisterij znanosti/umetnosti (pre-Bologna research master's) qualification emphasises the aspect of the candidate's ability to take part in original research projects or artistic projects of the highest standard leading to the creation of new knowledge or achievements of the highest artistic standard (see section 4, criterion 4). As such, it is comparable to EQF level 8 under the 'best fit' principle.

129 Document No: 6037-19/2014/2 of 24 June 2014.

By way of additional explanation with regard to the 'level 9' issue, we have once again sought the view of the ministry responsible for higher education[130]. The view of the ministry is that it agrees with this placing of SQF level 9 in relation to the third cycle QF-EHEA. The ministry's view is reproduced in full below.

Opinion of the ministry responsible for higher education on the 'level 9' issue:

'The basic purpose of qualifications frameworks, both national and European (for lifelong learning and higher education) is to enable the transparency and comparability of qualifications in an individual country, among EU countries and signatories to the Bologna Declaration. One of the purposes of referencing qualifications is also to help procedures for the recognition of education programmes in other countries, which are offered in each country in accordance with national regulations, taking into account international conventions. From the point of view of higher education, the transparency of qualifications obtained through "Bologna" three-cycle study programmes is undisputed, as is their referencing to the QF-EHEA. Significantly more important, from the point of view of ensuring the transparency of qualifications, is the appropriate placing of old, pre-Bologna qualifications in a meta-framework, since these are qualifications deriving from study programmes offered in individual countries before the Bologna reform, which in some countries are still being awarded and/or will remain present in the labour market for decades (in the concrete case of Slovenia, for at least another 40 years). The comparability of old study programmes and titles obtained from "Bologna" programmes has been implemented differently by the signatories to the Bologna Declaration, either through direct transfer of the title obtained or through comparability that is defined by law (as in the case of Slovenia). For this reason it is essential that all these "old" qualifications are also appropriately placed in the European meta-framework. This has already been the subject of numerous meetings of the group of national QF-EHEA correspondents and the regional network for QF-EHEA in south-east Europe.

The concrete qualification "magisterij znanosti", which is situated at level 9 in the SQF, was correctly referenced to EQF level 8, or the third cycle QF-EHEA, in the meta-framework by national experts using the "best fit" method. We should emphasise that this qualification has been awarded in Slovenia since at least 1963, while the last year in which it will still be possible to obtain this qualification is the 2015/16 academic year. When the three-cycle (Bologna) system was introduced, the Higher Education Act defined this qualification as being comparable to the third cycle, since as a rule the programme – following a previously completed higher education programme lasting at least four years (some programmes, particularly those in the field of engineering, pharmacy and medicine lasted 4.5, 5 or 6 years, while all of them involved an additional year devoted to writing a thesis, which is not included in the nominal length of the programme) – lasts at least three years, of which at least one year consists of autonomous research, which concludes with an autonomous, research-focused final paper (the master's thesis).'

With respect to the question regarding 'level 9', we would like to emphasise that Slovenia, in the scope of mandatory activities linked to the European Statistical System, classified the *magisterij znanosti/umetnosti* (pre-Bologna research master's) study programme and qualification at level 8 according to the new ISCED 2011, as follows: study programme under ISCED sub-category - P: '844' (Academic, Sufficient for completion of level); qualification in ISCED sub-category - A: '840' (Academic, Not further defined). As part of the process in which participating international institutions (Eurostsat, UNESCO and the OCED) harmonised the national classifications of programmes and qualifications, Slovenia received a request in February 2014 for certain additional explanations regarding classification, including with respect to the classification of the *magisterij znanosti/umetnosti* study programme and qualification. Slovenia sent its response with supplemented information to the aforementioned institutions in June 2014. In August 2014, Eurostat sent Slovenia confirmation that such classification (so-called 'iscedmapping') was acceptable. Specific national classifications of programmes and qualifications according to ISCED 2011 are or will be published by the European Commission's communication and information centre (CIRCABC).

130 Document No: 6037-19/2014/2 of 24 June 2014.

Criterion 5

More information regarding quality assurance arrangements for adult learning would have been welcome.

Adult education, like the entire education system in Slovenia, is based on the principle of lifelong learning for all. State-approved qualifications obtained by adults are based on the same demanding standards as the education of young people, and are subject to the same quality assurance procedures.

The most established approach to quality assurance in adult education is represented today by the self-evaluation model known as POKI (Offering Quality Education to Adults). Various other incentives for investment in the quality of adult education have also been developed, along with ICT support for self-evaluations and intensive training for the implementation of self-evaluation.

Criterion 8

What is the opinion of international experts on the 'level 9' issue?

International experts noted that the old qualifications are qualifications that are defined by law. The 'magisterij znanosti/umetnosti' qualification is therefore a legally defined qualification that is being phased out, which has been referenced to EQF level 8 in accordance with the 'best fit' principle.

The experts proposed that the SQF should distinguish more clearly between new qualifications, existing qualifications and qualifications that are being phased out. To this end they prepared a document entitled 'Memorandum: to the Bologna Follow-Up Group and the Council of Europe. Clarification of the compatibility of Slovenian higher education qualifications with the Framework for Qualifications of the European Higher Education Area' (2013). The content of the document and the experts' opinion on the 'level 9' issue in relation to the third cycle QF-EHEA is reproduced in full below.

The purpose of this memorandum is to clarify the compatibility of Slovenian higher education qualifications with the FQEHEA, as set out in the Report Referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning and the Qualifications Framework for the European Higher Education Area (2013). The Report was presented to the EQF Advisory Group on 30 May 2013.

The types of qualifications included in the Slovenian Qualifications Framework (SQF) are listed on page 34-35 of the Report. This listing is colour-coded to show

- *the range of currently-awarded qualifications, and also*
- *the many qualifications that have been discontinued or that are no longer to be awarded, but that are still in use in Slovenian society and in the labour market.*

The table on pages 53-55 of the Report illustrates the distribution of types of qualifications across the ten SQF levels and the eight EQF levels.

The types of qualifications that relate to higher education are analysed and discussed on pages 62-64 of the Report. The results of this analysis are summarised in the following table:

Table 11: **Distribution of former and current types of higher education qualifications in the SQF, at the EQF Levels and in the FQEHEA Cycles**

EQF Level	SQF Level	Former / discontinued qualifications	Current / continuing qualifications	FQEHEA cycle
5	6	Diploma o višji strokovni izobrazbi oz. višješolski izobrazbi (Higher vocational education)	Diploma o višji strokovni izobrazbi (Short cycle higher vocational	1 (short)
6	7	Diploma o visokem strokovnem izobraževanju (Diploma of professional higher education) Diploma o specializaciji (Specialisation following higher vocational education)	Diploma prve stopnje (VS) (Professional bachelor's degree) Diploma prve stopnje (UN) (Academic bachelor's degree)	1
7	8	Diploma o specializaciji (Specialisation following professional higher education) Diploma o univerzitetnem izobraževanju (Diploma of academic higher education) Diploma o visokošolskem izobraževanju (Professional higher education)	Diploma druge stopnje (Master's degree)	2
8	9	Diploma o magisteriju znanosti (Research master's degree) Diploma o magisteriju znanosti (Research master's degree) Diploma o specializaciji (Specialisation following academic higher education) Diploma o specializaciji (Specialisation following higher education)	/	3
	10	Diploma o doktoratu znanosti (Doctorate) Diploma o doktoratu znanosti (Doctorate)	Diploma tretje stopnje (Doctorate)	

The table illustrates the distribution in the SQF of the former / discontinued qualifications and the current / continuing types of qualifications that are now awarded following the process of modernisation and reform of the system of higher education qualifications in recent years. Twelve types of qualifications are already discontinued, or will soon cease to be awarded; these remain as significant qualifications in Slovenia and are included in the SQF accordingly, but they are not necessarily fully compliant with the FQEHEA types. The five modern types and their related level descriptors have been established as fully compatible with the FQEHEA through the process described in the referencing Report. This compatibility is summarised in the following table:

Table 12: **Summary of the compatibility established between Slovenian higher education qualifications and the FQEHEA**

SQF level	Type of qualification	FQEHEA Cycle
6	Diploma o višji strokovni izobrazbi (Short cycle higher vocational diploma)	1 (short)
7	Diploma prve stopnje (VS) (Professional bachelor's degree) Diploma prve stopnje (UN) (Academic bachelor's degree)	1
8	Diploma druge stopnje (Master's degree)	2
10	Diploma tretje stopnje (Doctorate)	3

Criterion 10

Will SQF levels be included in certificates and diplomas?

The draft SQF Act envisages that SQF, EQF and QF-EHEA levels will be entered on every public document (Europass supplement, NVQ certificate, confirmation of supplementary qualification).

General questions

Is it correct to assume that private companies and providers in the non-formal sector will play a key role in this area; and will these be actively encouraged to link their programmes and certificates to the SQF?

The answer is affirmative. A proposal to place a supplementary qualification in the SQF can be prepared by a legal entity or government body on the prescribed form, which will contain: a) the standard of the supplementary qualifications (description of learning outcomes defined for the individual SQF level), b) the procedure for verifying and assuring the quality of learning outcomes and c) references of the proposer in the specific specialist field.

A review of the suitability of the qualification will be carried out by a group of experts for the placing of supplementary qualifications in the SQF. The proposal to place a supplementary qualification in the SQF and the opinion of the group of experts will be considered by the expert panel at the NCP for the EQF, which will approve (or reject) the placing of the supplementary qualification in the SQF. The minister responsible for labour will determine the placing of the supplementary qualification in the SQF. Following confirmation of the supplementary qualification, the NCP for the EQF will publish the qualification in the register of SQF qualifications.

08 ANNEXES

8.1. ANNEX 1: KEY TERMS[131]

The NATIONAL QUALIFICATIONS FRAMEWORK is a tool for the development and classification of qualifications within a commonly agreed system. Qualifications are classified into levels with regard to statutory criteria, learning outcomes and descriptors. Relationships between qualifications are shown and possibilities of horizontal and vertical transitions between qualifications are indicated. A qualifications framework contributes to improving quality, accessibility and the recognition of qualifications in the labour market both nationally and internationally. The unit of the SQF is the qualification.

QUALIFICATION means a formal outcome of an assessment and validation process which is obtained when a competent authority determines that an individual has achieved learning outcomes to given standards. Qualifications are obtained both within the formal education system and outside it. Depending on their type, qualifications can have value in the labour market, in the formal education system and in lifelong learning. Public documents such as certificates and diplomas are awarded as proof of qualifications.

A QUALIFICATION CATEGORY consists of qualifications that share a common purpose. The education system in Slovenia distinguishes between three categories of qualifications: educational qualifications, national vocational qualifications and supplementary qualifications.

A QUALIFICATION TYPE is a group of qualifications united by the same qualification category, the same qualification level and a related general purpose of qualification from the point of view of further education or employment.

A QUALIFICATION NAME is a word or group of words used to distinguish an individual qualification. The name of the qualification is formulated in accordance with the rules and practice typical of an individual category of qualifications.

LEVEL means a structural element of the qualifications framework and should be understood as a series of successive steps (developmental continuity) expressed as areas of generic outcomes by which it is possible to classify typical qualifications. Levels are a pragmatic artificial construct developed over a longer period.

STAGE is a term relating to the formal education system and the stages of education tied to it.[132]

KNOWLEDGE is the result of learning and the assimilation of concepts, principles, theories and practices. Acquisition of knowledge takes place in various settings: in the educational process, at work and in the context of private and social life.

SKILLS, in the context of the national qualifications framework, means cognitive skills (e.g. the use of logical, intuitive and creative thinking) and/or practical skills (e.g. manual, creative skills, use of materials, tools and instruments).

COMPETENCES relate to the ability to use and integrate knowledge and skills in educational, professional and personal situations. We distinguish between generic and vocationally specific competences. Competences are classified in the SQF in terms of complexity, autonomy and responsibility.

131 Prepared by members of the SQF expert group: Dr Roberto Biloslavo, Dr Klara Skubic Ermenc and Dr Samo Pavlin.

132 Individual stages are defined by Slovenian national legislation, while KLASIUS replaces them with the broader term 'level'.

LEARNING OUTCOME means knowledge, skills and competences standardised at a specific qualification level. It is a statement of what a learner at a given qualification level knows and is able to do on completion of a learning process.

Learning outcomes can be formulated in connection with courses, programme units, modules and programmes. Within such contexts, learning outcomes connect together to form a qualification.

An EDUCATIONAL QUALIFICATION is the result of formal education and indicates the stage and field of formal education acquired by an individual. A certificate or diploma is awarded as proof of qualification.

A NATIONAL VOCATIONAL QUALIFICATION is the vocational or professional competence necessary to perform an occupation or individual sets of tasks within an occupation at a specific level of complexity. A certificate is awarded as proof of qualification.

A SUPPLEMENTARY QUALIFICATION supplements the competence of a learner and is either common to a specific field or transversal and/or transferable to several fields. A supplementary qualification allows the individual to broaden his or her level of qualifications and competence and in this way increase competitiveness in the labour market. A supplementary qualification does not increase the level of the individual's educational qualification. A certificate is awarded as proof of qualification.

8.2. **ANNEX 2:** DESCRIPTORS OF SQF LEVELS[133]

	KNOWLEDGE	SKILLS	COMPETENCES
	Is the result of learning and the assimilation of concepts, principles, theories and practices. Acquisition of knowledge takes place in various settings: in the educational process, at work and in the context of private and social life.	*In the context of the national qualifications framework, skills are described as cognitive (e.g. the use of logical, intuitive and creative thinking) and/or practical (e.g. manual, creative skills, use of materials, tools and instruments).*	*Relate to the ability to use and integrate knowledge and skills in educational, professional and personal situations. Competences are classified in terms of complexity, autonomy and responsibility. We distinguish between generic and vocationally specific competences.*
Level 1	Elementary general knowledge enabling further systematic learning.	Basic literacy and the ability to learn information and concepts. Practical skills required to carry out simple, repetitive tasks or a short sequence of simple tasks.	Ability to operate in a specifically defined and highly structured setting.
Level 2	Basic general and applied knowledge covering understanding of the main social and natural concepts, processes and laws; serves as the basis for further learning and social participation.	Basic literacy and practical skills including the use of basic tools, methods and materials. Ability to carry out simple, repetitive tasks consisting of a small number of operations.	Ability to operate with limited autonomy on the basis of verbal or written instructions and to acquire new knowledge and skills in a predictable and structured setting. Taking a limited degree of responsibility.
Level 3	Predominantly practical, life- and vocationally relevant knowledge with some theoretical basis, acquired primarily through the study of examples, imitation and practice in the context of a specific discipline.	Basic literacy and practical skills on a limited scale including the use of appropriate tools, methods and materials. Application of known solutions to resolve predictable problems on a limited scale. Ability to carry out transparent and standardised tasks.	Ability to acquire new knowledge and skills in a structured context with appropriate guidance. Ability to operate with limited autonomy in a predictable and structured context on the basis of simple verbal or written instructions. Taking a limited degree of responsibility.

133 Prepared by members of the SQF expert group: Dr Roberto Biloslavo, Dr Klara Skubic Ermenc and Dr Samo Pavlin.

	KNOWLEDGE	SKILLS	COMPETENCES
Level 4	Predominantly vocational knowledge supplemented by knowledge of theoretical principles, particularly those from the relevant discipline. The study of examples and the integration and application of knowledge take precedence over the principles of systematic scientific organisation.	Application of knowledge to resolve various tasks and problems, including less typical situations. Wide-ranging and specialised skills in relation to the area of operation, including the use of appropriate tools, methods, different technological procedures and materials. Ability to carry out relatively transparent, less standardised tasks.	Ability to operate in a familiar and less familiar setting with a greater degree of responsibility and autonomy. Taking responsibility for characteristics and quality of products/services connected with work tasks or processes. Taking responsibility for own learning. Acquisition of new knowledge and skills in a supervised environment. This level is characterised by a certain entrepreneurial orientation and the ability to organise and work in teams.
Level 5	General and/or specialised knowledge acquired through knowledge of different academic and/or professional fields and theoretical principles. Represents a basis for further learning and slightly more advanced understanding of the discipline. Learning primarily takes place through analytical thinking.	Wide-ranging skills in relation to the area of operation, may also be specialised, including the use of appropriate tools, methods, different technological procedures, materials and theories. Evaluation and use of information to formulate decisions and solutions to various problems or atypical situations. Formulation of solutions in connection with well-defined abstract problems. Ability to carry out various, frequently non-standardised tasks.	Ability to operate in diverse and specific settings. Taking responsibility for the characteristics and quality of the work process and results, showing autonomy and a certain degree of initiative. Taking responsibility and initiative for the acquisition of new knowledge and skills. This level is characterised by an entrepreneurial orientation and the ability to organise and work in complex and heterogeneous teams.
Level 6	Technical and theoretical knowledge in a specific field and practical knowledge for the resolution of concrete tasks. Knowledge enables the resolution of more complex tasks in specific fields of the discipline.	Ability to carry out more complex operational/technical tasks linked to the preparation of works and control and management of work processes. Ability to carry out complex and usually specialised tasks in relation to the area of operation, including abstract thought and the use of appropriate tools, methods, different technological procedures, materials and theories.	Ability to operate in different and specific settings with elements of creativity. Autonomous activity characterised by taking responsibility for the work of individuals and groups, material sources and information. Ability to make basic connections and place issues in a general social context is also important. Identification of own learning needs and attention to knowledge transfer in a work setting.
Level 7	Advanced technical/theoretical and practical knowledge in a given field, supported by a broad theoretical and methodological basis.	Ability to carry out complex operational/technical tasks, including the use of methodological tools. Mastery of demanding and complex work processes through autonomous application of knowledge in new work situations. Ability to diagnose and resolve problems in various specific work settings linked to the education and training domain. A basis for original thinking/work and critical reflection.	Ability to operate in different settings and functions and articulate new knowledge. Taking responsibility for defining and achieving own work results and/or work results of a heterogeneous group in defined fields of work. Ability to devise and sustain arguments within specific work settings related to the field of education and training. Identification of own learning needs, ability to take the initiative for own learning, ability to transfer knowledge within a group.

	KNOWLEDGE	SKILLS	COMPETENCES
Level 8	Advanced theoretical, methodological and analytical knowledge with elements of research serving as a basis for highly complex professional work.	Mastery of highly demanding and complex work processes and methodological tools in specialised fields. Planning and managing the work process on the basis of creative resolution of problems related to the field of education and training. Capacity for original thinking/work and critical reflection.	Ability to carry out tasks independently and autonomously in mainly atypical settings in broader or multidisciplinary contexts. Ability to take responsibility for own professional development and instruct others. Taking responsibility for decisions relating to activities, processes and management of complex and heterogeneous groups.
Level 9	Advanced theoretical, methodological and analytical knowledge serving as the basis for original research/artistic work leading to the creation of new knowledge/works.	Planning, managing and carrying out works of the highest complexity, including participation in research projects/artistic projects of the highest standard and resolving theoretical and practical problems in special work situations. Capacity for complex original thinking/work and critical reflection.	Ability to carry out tasks autonomously in atypical settings and broader or multidisciplinary contexts in connection with basic and/or applied research/artistic work. Ability to take responsibility for own professional development and the development of the discipline. Ability to independently, professionally and ethically orient own learning and learning of others in different contexts.
Level 10	Advanced knowledge serving as the basis for autonomous, original research/artistic work or the development of the discipline at the highest level, which is connected with scholarly, professional or artistic recognition both nationally and internationally.	Planning, managing and carrying out works of the highest complexity, including participation in research projects/artistic projects, and resolution of the most complex theoretical and practical problems. Capacity for critical reflection, advanced abstract thinking and synthesising new and complex ideas.	Capacity for highly autonomous work/creative work of the highest standard, interpretation and the ability to find answers to abstract questions and questions of the greatest complexity in a professional, academic or artistic field. Ability to transfer knowledge via critical dialogue between a professional discipline and an academic discipline, and a capacity for responsible evaluation of the consequences of the application of new knowledge in different contexts.

8.3. ANNEX 3: COMPARISON OF SQF DESCRIPTORS AND EQF DESCRIPTORS[134]

In addition to the conceptual comparison of the two frameworks, we present below a more detailed comparison of the contents of SQF descriptors and EQF descriptors, where we compare the similarities and differences of the Slovenian and European qualifications frameworks at individual levels of knowledge, skills and competences.

Correspondences between EQF descriptors and SQF descriptors are shown in red (*knowledge*), purple (*skills*) and green (*competence(s)*). Differences between knowledge, skills and competences in the two sets of descriptors are shown in blue.

A comparison of the two frameworks by individual levels is given below.

Comparison of EQF level 1 with SQF level 1

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
1 level	**1 level**	Basic **general knowledge**	**Basic** skills required to carry out **simple tasks**	Work or study under **direct supervision in a structured context**	Elementary **general knowledge** enabling further systematic learning	**Basic literacy** and the ability **to learn information and concepts. Practical** skills required to carry out **simple, repetitive** tasks or a short sequence of simple tasks	Ability to operate in a **specifically defined and highly structured setting.**

Knowledge: The generic description is almost identical, although the SQF descriptor emphasises further systematic learning.

Skills: In the EQF these relate exclusively to carrying out simple tasks, while in the SQF this starting definition is polarised into 'basic literacy and the ability to learn information and concepts' and 'practical skills required to carry out simple, repetitive tasks'.

Competences: The essential differences between the two frameworks are that the EQF specifies study in a structured context alongside work, whereas the SQF combines the two concepts in the term 'operating'; and where the EQF refers to 'direct supervision', the SQF talks about a 'highly structured setting'.

We conclude that SQF level 1 corresponds to EQF level 1.

134 The comparison and analysis of SQF and EQF descriptors were prepared by two members of the SQF expert group: Dr Roberto Biloslavo and Dr Samo Pavlin.

Comparison of EQF level 2 with SQF level 2

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
2 level	2 level	Basic factual knowledge of a field of work or study	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and solve routine problems using simple rules and tools	Work or study under supervision with some autonomy	Basic general and applied knowledge covering understanding of the main social and natural concepts, processes and laws; serves as the basis for further learning and social participation.	Basic literacy and practical skills including the use of basic tools, methods and materials. Ability to carry out simple, repetitive tasks consisting of a small number of operations.	Ability to operate with limited autonomy on the basis of verbal or written instructions and to acquire new knowledge and skills in a predictable and structured setting. Taking a limited degree of responsibility.

Knowledge: The SQF defines knowledge at this level in a more structured manner than the EQF. While the EQF defines knowledge as the basic processing of information tied to a field of work or study, the SQF explicitly ties it to understanding 'natural concepts, processes and laws' as a basis for further learning. The SQF also defines knowledge as a basis for further learning and social participation, while this is not emphasised in the EQF. As a result we can compare knowledge in the SQF at this level to knowledge at EQF level 3.

Skills: The EQF emphasises the 'use of information in order to carry out tasks and to solve routine problems using simple rules and tools' while the SQF emphasises 'basic literacy' in relation to the 'use of basic tools, methods and materials'. Both frameworks emphasise the low degree of complexity of the tasks to be performed: carrying out 'simple, repetitive tasks' consisting of a small number of operations (SQF) and the solving of 'routine problems' using simple rules and tools (EQF).

Competences: The EQF simply raises the level in comparison to level 1 – supervision is no longer direct and the setting is only partly structured. The SQF descriptor is broader and places more emphasis on the lifelong learning aspect with the 'acquisition of new knowledge and skills' and written instructions. The SQF also already includes taking a limited degree of responsibility.

At level 2 we find correspondence between all three components of the descriptors, although in the knowledge category the SQF descriptor defines learning outcomes at a slightly more demanding level. The element of basic literacy is emphasised in the SQF.

Comparison of EQF level 3 with SQF level 3

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
3 level	3 level	Knowledge of facts, principles, processes and general concepts, in a field of work or study	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	Take responsibility for completion of tasks in work or study Adapt own behaviour to circumstances in solving problems	Predominantly practical, life- and vocationally relevant knowledge with some theoretical basis, acquired primarily through the study of examples, imitation and practice in the context of a specific discipline.	Basic literacy and practical skills on a limited scale including the use of appropriate tools, methods and materials. Application of known solutions to resolve predictable problems on a limited scale. Ability to carry out transparent and standardised tasks.	Ability to acquire new knowledge and skills in a structured context with appropriate guidance. Ability to operate with limited autonomy in a predictable and structured context on the basis of simple verbal or written instructions. Taking a limited degree of responsibility.

Knowledge: At this level the EQF describes knowledge very generically without an increase in requirements, while the SQF places knowledge at this level in its own context of education and work, emphasising the practical and vocational nature of knowledge, the limitation of its theoretical basis and the situational orientation of learning tied to a specific discipline.

Skills: At this level the EQF emphasises the practical nature of the accomplishment of tasks, which are based on the application of 'basic methods, tools, materials and information'. The SQF again adds the element of basic literacy and places skills in the context of the 'predictability' of problems and 'standardisation' of tasks.

Competences: The EQF descriptor for this level refers to the ability to take responsibility 'for completion of tasks in work or study', while the SQF descriptor at this level is based on 'limited autonomy of operation' and 'simple verbal and written instructions'.

SQF level 3 highlights the practical aspect of knowledge and skills and in this way builds on SQF level 2. SQF level 3 and EQF level 3 correspond in terms of degree of difficulty.

Comparison of EQF level 4 with SQF level 4

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
4 level	4 level	Factual and theoretical knowledge in broad contexts within a field of work or study	A range of cognitive and practical skills required to generate solutions to a specific problem in a field of work or study	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	Predominantly vocational knowledge supplemented by knowledge of theoretical principles, particularly those from the relevant discipline. The study of examples and the integration and application of knowledge take precedence over the principles of systematic scientific organisation.	Application of knowledge to resolve various tasks and problems, including less typical situations. Wide-ranging and specialised skills in relation to the area of operation, including the use of appropriate tools, methods, different technological procedures and materials. Ability to carry out relatively transparent, less standardised tasks.	Ability to operate in a familiar and less familiar setting with a greater degree of responsibility and autonomy. Taking responsibility for characteristics and quality of products/services connected with work tasks or processes. Taking responsibility for own learning. Acquisition of new knowledge and skills in a supervised environment. This level is characterised by a certain entrepreneurial orientation and the ability to organise and work in teams.

Knowledge: The EQF descriptor at this level is based on factual and theoretical general knowledge. The SQF places it in the context of a vocational (sectoral) orientation and emphasises that the 'study of examples and the integration and application of knowledge take precedence over the principles of systematic scientific organisation'.

Skills: At this level the EQF emphasises the practical orientation of solving specific problems. The SQF descriptor emphasises the 'diversity of tasks', the 'use of sector-specific tools' and 'less standardised tasks'.

Competences: The key difference between the descriptors at this level is that the EQF clearly indicates the ability to 'supervise the routine work of others' and 'take some responsibility for the evaluation and improvement of work or study activities'. The SQF descriptor at this level emphasises responsibility for the results of own work and learning and adds the ability to take part in teamwork and the possibility of developing enterprise initiatives. The complexity of the contextualisation of work and learning is similar in both cases.

The EQF includes at this level the supervision of the routine work of others, while the SQF includes the ability to organise and work in teams and generate enterprise initiatives. The complexity of knowledge and skills at EQF level 4 corresponds with that at SQF level 4. In both cases we may observe the vocational profiling of the descriptors and the predominantly practical orientation of work and tasks.

Comparison of EQF level 4 with SQF level 5

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
4 level	5 level	Factual and theoretical knowledge in broad contexts within a field of work or study	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	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	General and/or specialised knowledge acquired through knowledge of different academic and/or professional fields and theoretical principles. Represents a basis for further learning and slightly more advanced understanding of the discipline. Learning primarily takes place through analytical thinking.	Wide-ranging skills in relation to the area of operation, may also be specialised, including the use of appropriate tools, methods, different technological procedures, materials and theories. Evaluation and use of information to formulate decisions and solutions to various problems or atypical situations. Formulation of solutions in connection with well-defined abstract problems. Ability to carry out various, frequently non-standardised tasks.	Ability to operate in diverse and specific settings. Taking responsibility for the characteristics and quality of the work process and results, showing autonomy and a certain degree of initiative. Taking responsibility and initiative for the acquisition of new knowledge and skills. This level is characterised by an entrepreneurial orientation and the ability to organise and work in complex and heterogeneous teams.

Knowledge: The SQF descriptor defines this level in terms of 'knowledge of academic and/or professional fields and theoretical principles'. It emphasises preparation for further study and, above all, analytical thinking. In this context it does not differ significantly from the EQF descriptor, which places similar emphasis on the specialised and theoretical nature of knowledge in broad contexts within a field of work or study.

Skills: The SQF descriptor at this level indicates vocational profiling and introduces the element of operating in unpredictable and atypical situations and solving 'abstract problems'. In this context there are no deviations in comparison to the EQF. The difference is that the SQF places more emphasis on the comprehensiveness of knowledge of the procedures that lead to a conclusion. While the EQF emphasises skills for the solving of specific problems in the field of work or study, the SQF emphasises skills that extend into wider fields of activity and the resolution of different problems that go beyond typical situations and may also be abstract.

Competences: The EQF defines this level in terms of the ability to manage and supervise own work and the work of others. The emphases of the SQF descriptor are visible in 'diversity of settings', 'sense of initiative' and 'lifelong learning' or own career development. The element of enterprise orientation and initiative is repeated here. The SQF also emphasises operating in heterogeneous groups and different settings, not only in specific fields of work or study.

In the competences category, EQF level 4 shows a higher degree of difficulty than the SQF at the same level. On the other hand, the categories of knowledge and skills in the SQF descriptors at level 5 go beyond these categories at EQF level 4.

We therefore find that both SQF level 4 and SQF level 5 correspond to EQF level 4, in accordance with the best fit principle.

Comparison of EQF level 5 with SQF level 6

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
5 level	**6 level**	Comprehensive, **specialised,** factual and **theoretical knowledge within a field of work or study** and an **awareness of the boundaries of that knowledge**	**A comprehensive range of cognitive and practical skills** required to develop **creative solutions to** abstract problems	**Exercise management and supervision in contexts of work** or study **activities** where there is unpredictable change. Review and develop performance of self and others	Technical and **theoretical knowledge in a specific field** and practical knowledge for the resolution of concrete tasks. Knowledge enables the **resolution of more complex tasks** in specific fields of the discipline.	Ability to carry out more complex operational/ technical tasks linked to the preparation of works and **control of work processes.** Ability to carry out complex and usually **specialised** tasks in relation to the area of operation, including **abstract thought and the use of appropriate tools, methods, different technological procedures, materials and theories.**	Ability to operate in different and specific settings with **elements of creativity.** Autonomous activity characterised by taking responsibility for the work of individuals and groups, material sources and information. Ability to make basic connections and place issues in a general social context is also important. **Identification of own learning needs** and attention to knowledge transfer in a work setting.

Knowledge: At EQF level 5, knowledge is described as 'specialised', 'theoretical knowledge within a given field', with an awareness of the 'boundaries of that knowledge' which corresponds to the description of knowledge at SQF level 6, which describes knowledge as specialised (in the skills category), 'theoretical knowledge in a specific field' with identification of own learning needs (in the competences category). In the SQF, however, knowledge also enables the 'resolution of more complex tasks'.

Skills: In the EQF, skills at this level are described as 'a comprehensive range of cognitive and practical skills' required to develop 'creative solutions', which corresponds to the description of these skills in the SQF, which defines them in terms of abstract thinking and the 'use of appropriate tools, methods, technological procedures, materials and theories', and also 'elements of creative activity' (in the competences category).

Competences: Correspondence between the EQF and SQF at the level of descriptions of competences is evident from the fact that the former describes competence in terms of management and supervision in the

context of work activities, and the latter in terms of 'taking responsibility for the work of individuals and groups' and preparation and control of work processes (in the skills category). Competences in the SQF also emphasise 'forming basic connections and placing issues in a general and social context'. The latter can be equated with 'review(ing) and develop(ing) performance of self and others' in the EQF.

We conclude that the descriptors of SQF level 6 and EQF level 5 correspond.

Comparison of EQF level 6 with SQF level 7

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
6 level	7 level	**Advanced knowledge of a field of work or study**, involving a **critical understanding** of theories and principles	Advanced skills, demonstrating **mastery** and **innovation**, required to solve **complex and unpredictable problems** in a specialised field of work or study	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	**Advanced** technical/ theoretical and practical **knowledge in a given field**, supported by a broad theoretical and methodological basis.	Ability to carry out **complex** operational/ technical tasks, including the use of methodological tools. **Mastery of** demanding and **complex** work **processes** through autonomous application of knowledge **in new work situations**. Ability to diagnose and resolve problems in various specific work settings linked to the education and training domain. A basis for **original thinking/work** and **critical reflection.**	Ability to operate in different settings and functions and articulate new knowledge. **Taking responsibility for defining and achieving** own **work results** and/or work results of a heterogeneous group in defined fields of work. Ability to devise and sustain arguments within specific work settings related to the field of education and training. Identification of own learning needs, ability to take the initiative for own learning, ability to transfer knowledge within a group.

Knowledge: At EQF level 6, knowledge is defined as 'advanced knowledge of a field of work or study' involving a 'critical understanding' of theories and principles, which corresponds to the definition of knowledge at SQF level 7, which talks about advanced technical, theoretical and practical knowledge 'in a specific field' as a basis for 'critical reflection' (in the skills category).

Skills: At the level of skills, correspondences between the frameworks are apparent in the description of skills that demonstrate the 'mastery and innovation' required to solve 'complex and unpredictable problems' (EQF) and are the basis for 'original thinking/work' and the mastery of complex work processes in new work situations (SQF).

Competences: Correspondence between the frameworks at the level of competences is evident from 'taking responsibility for decision-making' and managing 'complex' activities or projects in the EQF and 'taking responsibility for determining and achieving (own) work results' and carrying out 'complex' tasks (in the skills category) in the SQF.

The description of competences at SQF level 7 and EQF level 6 does, however, reveal differences too. These can be seen in the fact that the EQF emphasises 'taking responsibility for managing professional development of individuals and groups', while the SQF emphasises 'ability to participate in reasoned discussion in specific work settings' and 'identifying own learning needs', 'taking the initiative for own learning' and 'ability to transfer knowledge in a group'. From this point of view these competences in the SQF are, in contrast to the EQF descriptors, primarily oriented towards the professional development of the individual.

Despite the differences identified in the competences category, we may conclude that there is correspondence between the knowledge and skills categories in the two frameworks.

Comparison of EQF level 7 with SQF level 8

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
7 level	8 level	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	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	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	Advanced theoretical, methodological and analytical knowledge with elements of research serving as a basis for highly complex professional work.	Mastery of highly demanding and complex work processes and methodological tools in specialised fields. Planning and managing the work process on the basis of creative resolution of problems related to the field of education and training. Capacity for original thinking/work and critical reflection.	Ability to carry out tasks independently and autonomously in mainly atypical settings in broader or multidisciplinary contexts. Ability to take responsibility for own professional development and instruct others. Taking responsibility for decisions relating to activities, processes and management of complex and heterogeneous groups.

Knowledge: The correspondence between EQF level 7 and SQF level 8 in the description of knowledge is expressed in 'highly specialised knowledge', in knowledge which is the 'basis for original thinking' and/or 'research' and is based on critical awareness in the EQF, and in advanced knowledge, the ability to formulate 'original thinking/work' (in the skills category) and knowledge 'with elements of research' based on critical reflection in the SQF.

Skills: The description of 'specialised problem-solving skills' at EQF level 7 corresponds to the mastery of very demanding processes/tools 'in specialised fields' and 'problem-solving' in the description of skills at SQF level 8, but there are also differences at this level because the EQF also emphasises the 'integration of knowledge from different fields.' The SQF does not explicitly mention this but it may be indirectly understood in the context of the ability to carry out tasks in 'multidisciplinary contexts' (in the competences category).

Competences: Correspondence between EQF level 7 and SQF level 8 at the level of competences is evident from the references to the ability to manage 'work (or study) contexts that are complex (and) unpredictable' and take responsibility for 'reviewing the (strategic) performance of teams' (EQF), and the ability to carry out 'tasks in normally atypical settings in broader or multidisciplinary context' and 'take responsibility for decisions pertaining to activities, processes and the management of groups' (SQF). The descriptions differ in that the SQF emphasises, more than the contribution to professional knowledge (EQF), the ability to take responsibility for own professional development and instruct others, which is closer to the wording of EQF level 6: take responsibility for managing professional development of individuals or groups.

We may conclude that SQF level 8 corresponds to EQF level 7.

Comparison of EQF levels 7 and 8 with SQF level 9

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
7 level	**9 level**	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	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	**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	Advanced theoretical, methodological and analytical knowledge serving as the basis for **original research/artistic work** leading to the **creation of new knowledge**/works.	Planning, **managing** and carrying out works of the highest complexity, including participation **in research projects/artistic projects of the highest standard** and **resolving theoretical and practical problems** in special work situations. Capacity for **complex original thinking**/work and **critical reflection**.	Ability to carry out tasks autonomously in **atypical settings and broader or multidisciplinary contexts** in connection with basic and/or applied research/artistic work. **Ability to take responsibility for** own professional development and the **development of the discipline. Ability to independently, professionally and ethically orient own learning and learning of others in different contexts.**

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
8 level	9 level	Knowledge at the most advanced frontier of a field of work or study and at the interface between fields	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	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	Advanced theoretical, methodological and analytical knowledge serving as the basis for original research/artistic work leading to the creation of new knowledge/works.	Planning, managing and carrying out works of the highest complexity, including participation in research projects/artistic projects of the highest standard and resolving theoretical and practical problems in special work situations. Capacity for complex original thinking/work and critical reflection.	Ability to carry out tasks autonomously in atypical settings and broader or multidisciplinary contexts in connection with basic and/or applied research/artistic work. Ability to take responsibility for own professional development and the development of the discipline. Ability to independently, professionally and ethically orient own learning and learning of others in different contexts.

A comparison of SQF level 9 with EQF levels 7 and 8 shows that the descriptors of SQF level 9 are to a certain extent comparable to both EQF levels. We nevertheless believe that a comparison of the descriptors indicates that it makes sense to compare SQF level 9 with EQF level 8 for the following reasons.

Knowledge: Correspondence between EQF level 8 and SQF level 9 is apparent in knowledge at the 'most advanced frontier' (EQF) and 'advanced theoretical, methodological and analytical knowledge' (SQF).

Skills: In both EQF and the SQF, skills at these levels are defined in terms of 'solving problems in research' (EQF) or 'participation in research projects/artistic projects of the highest standard and solving theoretical and practical problems' (SQF). The EQF also contains reference to 'extending existing knowledge', while the SQF refers to 'creating new knowledge/works'. Those skills described in the EQF as 'the most advanced and specialised skills and techniques' already appear at SQF level 8 as 'mastery of highly demanding, complex work processes and methodological tools'.

Competences: Correspondence between EQF level 8 and SQF level 9 is apparent in the demonstration of 'substantial autonomy' and the development of 'new ideas or processes' in contexts including research in the EQF, and in the ability to carry out tasks autonomously and the ability to formulate 'original thinking/work' (in the skills section) in connection with 'basic and/or applied research/artistic work' in the SQF, with the difference that the SQF also places special emphasis on the 'ability to independently, professionally and ethically orient own learning and learning of others in various contexts'. The SQF emphasises the role of the individual in the broader social context with an emphasis on professional and ethical conduct that is not to be found in the EQF.

We may conclude that SQF level 9 corresponds to EQF level 8 in accordance with the best fit principle, because it emphasises 'participation in original research projects/artistic projects of the highest standard' that 'create new knowledge' and/or artistic works of the highest standard.

Comparison of EQF level 8 with SQF level 10

EQF Levels	SQF Levels	EQF descriptors			SQF descriptors		
		KNOWLEDGE	SKILLS	COMPETENCE	KNOWLEDGE	SKILLS	COMPETENCES
8 level	10 level	Knowledge at the most advanced frontier of a field of work or study and at the interface between fields	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	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	Advanced knowledge serving as the basis for autonomous, original research/artistic work or the development of the discipline at the highest level, which is connected with scholarly, professional or artistic recognition both nationally and internationally.	Planning, managing and carrying out works of the highest complexity, including participation in research projects/artistic projects, and resolution of the most complex theoretical and practical problems. Capacity for critical reflection, advanced abstract thinking and synthesising new and complex ideas.	Capacity for highly autonomous work/creative work of the highest standard, interpretation and the ability to find answers to abstract questions and questions of the greatest complexity in a professional, academic or artistic field. Ability to transfer knowledge via critical dialogue between a professional discipline and an academic discipline, and a capacity for responsible evaluation of the consequences of the application of new knowledge in different contexts.

Knowledge: Correspondence between EQF level 8 and SQF level 10 is apparent in knowledge at the 'most advanced' frontier (EQF) and advanced knowledge for 'autonomous original research/artistic work' (SQF), although there is also a difference in the understanding of the application of knowledge, since the EQF also refers to knowledge 'at the interface between fields', something which is not mentioned in the SQF.

Skills: Correspondence between skills at EQF level 8 and SQF level 10 is apparent in the most advanced skills 'including synthesis' and the solving of 'critical problems' in the EQF and through the synthesis of 'new and complex ideas' and the solving of the 'most complex problems' in the SQF.

Competences: Correspondence between competences at EQF level 8 and SQF level 10 is apparent in the demonstration of 'substantial authority, innovation, autonomy, academic and professional integrity and sustained commitment to the development of new ideas or processes' including research in the EQF and a capacity for 'highly autonomous work/creative work of the highest standard, interpretation and the ability to find answers to abstract questions and questions of the greatest complexity' including 'research projects/artistic projects' (in the skills category) in the SQF, with the difference that the SQF also places particular emphasis on the 'ability to make a responsible assessment of the consequences of the application of new knowledge in various contexts' and the 'transfer of knowledge between a professional discipline and an academic discipline'. The latter confirms the difference in the description of competences already identified in a comparison of SQF level 9 and EQF level 8.

We may conclude that SQF level 10 corresponds to EQF level 8.

8.4. ANNEX 4: DESCRIPTIONS OF TYPES OF QUALIFICATIONS[135]

8.4.1. QUALIFICATIONS OBTAINED WITHIN THE FORMAL EDUCATION SYSTEM (WITH EXAMPLES)

8.4.1.1. BASIC EDUCATION WITH LOWER EDUCATIONAL CRITERIA

Type of qualification (document)	BASIC EDUCATION WITH LOWER EDUCATIONAL CRITERIA (basic school leaving certificate)
Category of qualification	Educational qualification
Type of education	Adapted programme with lower educational criteria.
Duration	9 years
Admission requirements	Enrolment in a special programme is on the basis of a placement decision
Type of institution	Basic school (with special departments or units with adapted programme) Basic schools with adapted programme Education centres for children with special needs (home education possible)
Learning outcomes (SQF levels)	Knowledge: 1 - Acquires **elementary** general knowledge in the following fields: Slovene (Hungarian, Italian) language; mathematics; foreign language; biology; chemistry; physics; history; geography; citizenship and ethics; art; music; sport; technology; home economics. Skills: 1 - harmoniously develops his/her cognitive, emotional, physical, spiritual, social, artistic powers and potential; - develops literacy and skills for understanding, communication and expression in the Slovene language (in areas with national minorities also in Italian or Hungarian); - develops literacy and general knowledge in the fields of written texts, science/technology, mathematics, information technology, social sciences and art; - develops the ability to communicate in foreign languages. Competences: 1 - develops capacity for further educational and vocational development with an emphasis on competences for lifelong learning; - is educated for sustainable development and active participation in democratic society, which includes self-knowledge and a responsible attitude towards the self, own health, other people, own and other cultures, the natural and social environment, future generations; - develops a spirit of enterprise, innovation, creativity.

135 The descriptions of types of qualifications were prepared by a member of the SQF expert group: Dr Klara Skubic Ermenc.

Assessment and completion	System of assessment: In the first triad (years 1–3) and second triad (years 4–6), students' knowledge is assessed using descriptive assessments, and in the third triad (years 7–9) using numerical grades. National assessment: At the end of the second and third triads, students' knowledge is tested by means of national assessment, which is designed to verify the standards of knowledge set out in the curriculum. Testing is voluntary. The results of national assessment serve as additional information on students' knowledge. Progression: Students in the first and second triads do not repeat years. Third-triad students progress to the next year if they achieve a positive assessment in all subjects at the end of the academic year. Condition for obtaining certificate: Basic schools issue certificates to students at the end of each year. Basic schools issue school leaving certificates to students who complete basic education. The school leaving certificate of a student who completes an adapted education programme with lower educational criteria contains the student's year 9 grades. If the student passes over to the basic school education programme for individual subjects, this is stated in the school leaving certificate.
Transitions	short upper secondary vocational education (SQF, level 3)

8.4.1.2. BASIC EDUCATION

Type of qualification (document)	BASIC EDUCATION (basic school leaving certificate)
Category of qualification	Educational qualification
Type of education	Basic education
Duration	9 years or 8 years (eight-year basic school)
Admission requirements	The child's sixth birthday must fall in the calendar year in which the child is enrolled at school. Deferment by one year is possible in special cases.
Providers	Basic school Education centres for children with special needs33 Adult education centre (home education possible)
Learning outcomes (SQF levels)	Knowledge: 2 - Acquires **basic** general knowledge in the following fields: Slovene (Hungarian, Italian) language; mathematics; foreign language; biology; chemistry; physics; history; geography; citizenship and ethics; art; music; sport; technology; home economics. Skills: 2 - harmoniously develops his/her cognitive, emotional, physical, spiritual, social, artistic powers and potential; - develops literacy and skills for understanding, communication and expression in the Slovene language (in areas with national minorities also in Italian or Hungarian); - develops literacy and general knowledge in the fields of written texts, science/technology, mathematics, information technology, social sciences and art; - develops the ability to communicate in foreign languages.

Learning outcomes (SQF levels)	Competences: 2 - develops capacity for further educational and vocational development with an emphasis on competences for lifelong learning; - is educated for sustainable development and active participation in democratic society, which includes self-knowledge and a responsible attitude towards the self, own health, other people, own and other cultures, the natural and social environment, future generations; - develops a spirit of enterprise, innovation, creativity.
Assessment and completion	System of assessment: In the first triad (years 1–3) of basic school, students' knowledge is assessed using descriptive assessments. In the second triad (years 4–6) and third triad (years 7–9) of basic school, students' knowledge is assessed using numerical grades. National assessment At the end of the second and third triads, students' knowledge is tested by means of national assessment, which is designed to verify the standards of knowledge set out in the curriculum. The results of national assessment serve as additional information on students' knowledge. At the end of the second triad, national assessment is voluntary for students; testing covers the mother tongue (Slovene, Hungarian, Italian), mathematics and a foreign language. At the end of the third triad assessment is compulsory for all students; testing covers the mother tongue (Slovene, Hungarian, Italian), mathematics and a third subject. Progression: Students in the first and second triads do not repeat years. Third-triad students progress to the next year if they achieve a positive assessment in all subjects at the end of the academic year. Condition for obtaining certificate: Basic schools issue certificates to students at the end of each year. The certificate is a public document. Basic schools issue school leaving certificates to students who complete basic education. The basic school leaving certificate contains the student's year 9 grades and the student's results from national assessment at the end of the third triad.
Transitions	short upper secondary vocational education (SQF, level 3), upper secondary vocational education (SQF, level 4), upper secondary technical and general secondary education (SQF, level 5)

8.4.1.3. SHORT UPPER SECONDARY VOCATIONAL EDUCATION

Type of qualification (document)	SHORT UPPER SECONDARY VOCATIONAL EDUCATION (final examination certificate)
Category of qualification	Educational qualification
Type of education	Short upper secondary vocational education
Duration	2–3 years, 120 credits
Admission requirements	Basic education or SQF level 1
Providers	Vocational schools (also in combination with employers and/or an inter-enterprise education centre) Education centres for children and adolescents with special needs (providing programmes adapted to the special needs of students) Adult education centres
Learning outcomes (SQF levels)	Knowledge: level 2, partly 3 Skills: level 3 Competences: level 3
Assessment and completion	System of assessment: Students' vocational abilities and skills and the fulfilment of conditions to obtain credits in accordance with the education programme are established through testing and assessment. Assessment also takes into account non-formally acquired knowledge that can be adequately demonstrated. Students are assessed using scores from 5 (excellent) to 1 (inadequate). Progression: Students can progress to a higher year if at the end of the academic year they achieve a positive assessment in all subjects and modules relating to the year and have met other requirements (with regard to the programme and the school's operational curriculum). Condition for obtaining certificate: In order to complete education and obtain an educational qualification, students must achieve positive assessments in all the requirements defined by the programme. They must also pass a final examination. The final examination consists of an examination in the Slovene language and the preparation of a product or service with an oral presentation.
Transitions	Access to upper secondary vocational education (SQF, level 4).

Example of qualification

8.4.1.3.1. Woodworker

Name of qualification	OBDELOVALEC/OBDELOVALKA LESA
Type of qualification	Short upper secondary vocational education
Category of qualification	Educational qualification
Type of education	Short upper secondary vocational education
Duration	2 years, 120 credits
Admission requirements	- completion of at least year 7 of nine-year basic school and completed basic school requirements or - basic education in adapted programme with lower educational criteria
SQF level **Learning outcomes (vocational competences)**	3 The certificate holder is able to: - assist in the measurement and sorting of sawn timber; - prepare sawn timber for natural and technical drying processes; - use basic workshop documentation; - safely use hand tools and small power tools; - work safely with basic woodworking machines and appliances; - use materials and energy economically; - produce simple joinery products to a high quality; - carry out simple procedures for the surface treatment of wood and wood panels. The certificate holder has supplemented key vocational knowledge and abilities with key general knowledge in accordance with national standards.
Assessment and completion	System of assessment: Students' vocational abilities and skills and the fulfilment of conditions to obtain credits in accordance with the education programme are established through testing and assessment. Assessment also takes into account non-formally acquired knowledge that can be adequately demonstrated. Students are assessed using grades from 5 (excellent) and 1 (inadequate). Progression: Students can progress to a higher year if at the end of the academic year they achieve a positive assessment in all subjects and modules and have met other requirements (with regard to the programme and the school's operational curriculum). Condition for obtaining a public document: In order to complete education and obtain an educational qualification, students must achieve positive assessments in all the requirements defined by the programme. They must also pass a final examination. The final examination consists of the preparation of a product or service with an oral presentation.
Providers	Vocational and technical upper secondary schools and adult education institutions. For details see: https://krka1.mss.edus.si/registriweb/ProgramPodatki.aspx?ProgramID=5718

8.4.1.4. UPPER SECONDARY VOCATIONAL EDUCATION

Type of qualification (document)	UPPER SECONDARY VOCATIONAL EDUCATION (final examination certificate)
Category of qualification	Educational qualification
Type of education	Upper secondary vocational education
Duration	3–4 years, 180 credits
Admission requirements	Basic education or short upper secondary vocational education.
Providers	Vocational schools (also in combination with employers and/or an inter-enterprise education centre). Education centres for children and adolescents with special needs (providing programmes adapted to the special needs of students) Adult education centres
Learning outcomes (SQF levels)	Knowledge: level 4 Skills: level 4 Competences: level 4
Assessment and completion	System of assessment: Students' vocational abilities and skills and the fulfilment of conditions to obtain credits in accordance with the education programme are established through testing and assessment. Assessment also takes into account non-formally acquired knowledge that can be adequately demonstrated. Students are assessed using scores from 5 (excellent) to 1 (inadequate). Progression: Students progress to the next year if at the end of the academic year they achieve a positive assessment in all subjects or modules and have met other requirements defined by the education programme. Exceptionally, students can progress to a higher year even without achieving a positive assessment in all subjects or modules. Final examination: The educational programme concludes with a final examination to test knowledge relevant for life and work, further education and vocational and personal development. The final examination may be sat by anyone who has successfully concluded the final year of the education programme or obtained the prescribed number of credits and met other requirements defined by the education programme. Condition for obtaining certificate: Passing the final examination.
Transitions	Access to further education: Upper secondary technical and vocational-technical education; master craftsman/foreman/shop manager examination (SQF level 5)

Example of qualification

8.4.1.4.1. Catering/hotel worker

Name of qualification	GASTRONOM HOTELIR/GASTRONOMKA HOTELIRKA
Type of qualification	Upper secondary vocational education
Category of qualification	Educational qualification
Type of education	Upper secondary vocational education
Duration	3 years, 180 credits
Admission requirements	- basic education or - short upper secondary vocational education
SQF level **Learning outcomes (vocational competences)**	4 The certificate holder is able to: - make spatial arrangements, prepare and serve simple dishes and beverages, and charge for services; - clear tables, and maintain and store inventories and foods; - communicate in business situations in Slovene or a selected foreign language; Elective: - prepare cold and hot appetisers, soups, soup accompaniments and noodles, stews, meat dishes, bases and sauces, side dishes, vegetable dishes, salads and desserts, and prepare portions based on specific standards; - compile and prepare daily menus and dishes to special order, taking into account the nutritional values of foods; - compile and prepare menus for special occasions, Slovene national dishes and dishes from other countries; - prepare and serve non-alcoholic and alcoholic beverages, hot drinks and bottled wines; - serve regular meals to resident and non-resident guests, - serve special meals at the primary location and outside the primary location (catering); - provide comprehensive care and a range of tourism services for guests in smaller operations, observing the principle of conservation of cultural heritage; - implement the principles of environmental and sustainable development in the range of tourism services; - Make, repair and maintain various simple textiles and decorative goods; - incorporate Slovene national dishes in daily menus, and prepare and serve them; - prepare, package, declare, transport and maintain cold and hot dishes at the appropriate temperature until sale; - prepare different types of pizzas; - prepare and bake different types of bread, cakes and small pastries; - flambé, marinade, chop, fillet and prepare portions in front of guests; - prepare and serve various types of mixed drinks; - advise and recommend wines appropriate for the menu and serve sparkling, late-harvest and aged wines; - make small decorative items and arrange them with regard to purpose and in accordance with aesthetic principles, - make fashion accessories, jewellery and commemorative gifts; - provide home security and in-home services in accordance with the needs of the elderly. Certificate holders supplement their key vocational knowledge and abilities with key general knowledge in line with national standards.

Assessment and completion	System of assessment: Students' vocational competences and skills and the fulfilment of conditions to obtain credits in accordance with the education programme are established through testing and assessment. Assessment also takes into account non-formally acquired knowledge that can be adequately demonstrated. Students are assessed using scores from 5 (excellent) to 1 (inadequate). Progression: Students may progress to a higher year if at the end of the academic year they achieve a positive assessment in all general education subjects and relevant vocational modules set out in the school's operational curriculum, and have completed all extracurricular activities and practical on-the-job training, or progress on the basis of a programme faculty decision. Condition for obtaining a public document: Students must successfully (i.e. with positive scores) complete general education subjects, compulsory and elective vocational modules, and the open part of the curriculum. They must also complete extracurricular activities, practical on-the-job training and final examination. **Final examination** comprises a written and oral examination of Slovene, a product/service, and an oral presentation.
Providers	Vocational and upper secondary technical schools and adult education institutions. For details see: https://krka1.mss.edus.si/registriweb/ProgramPodatki.aspx?ProgramID=5749&Page=1
Transitions	Upper secondary technical and vocational-technical education; master craftsman/foreman/shop manager examination (SQF level 5)

8.4.1.5. UPPER SECONDARY TECHNICAL EDUCATION

Type of qualification (document)	UPPER SECONDARY TECHNICAL EDUCATION (vocational matura certificate)
Category of qualification	Educational qualification
Type of education	Upper secondary technical education
Duration	4–5 years, 240–300 credits
Admission requirements	Completed basic or short upper secondary vocational education
Providers	Secondary technical and vocational schools in conjunction with an employer if the education programme specifies practical training through work. Education centres for children and adolescents with special needs (providing programmes adapted to the special needs of students). Adult education centres
Learning outcomes (SQF levels)	Knowledge: level 5 Skills: level 5 Competences: level 5
Assessment and completion	System of assessment: Students' vocational abilities and skills and the fulfilment of conditions to obtain credits in accordance with the education programme are established through testing and assessment. Assessment also takes into account non-formally acquired knowledge that can be adequately demonstrated. Students are assessed using scores from 5 (excellent) to 1 (inadequate). Progression: Students progress to the next year if at the end of the academic year they achieve a positive assessment in all subjects or modules and have met other requirements defined by the education programme.

Assessment and completion	Matura examination: Education programmes end with the vocational matura. The vocational matura tests students' knowledge in accordance with the objectives defined by education programmes. Candidates' success in the vocational matura is assessed using: a) points and b) assessments, which can be grades from 1 to 5 or point scores from 1 to 8. Candidates must achieve a positive score in all subjects in order to pass the vocational matura. Condition for obtaining certificate: Passing the vocational matura examination
Transitions	Matura/vocational course, short-cycle higher vocational education (SQF level 6), professional higher education (SQF level 7) and academic higher education (SQF level 7)

Example of qualification

8.4.1.5.1. Computer technician

Name of qualification	TEHNIK/TEHNICA RAČUNALNIŠTVA
Type of qualification	Upper secondary technical education
Category of qualification	Educational qualification
Type of education	Upper secondary technical education
Duration	4 years, 240 credits
Admission requirements	Basic or short upper secondary vocational education
SQF level **Learning outcomes (vocational competences)**	5 The certificate holder is able to: - read, plan, draft, monitor and amend technical documentation in accordance with the prescribed rules for ICT use; - apply concepts regarding the organisation of work and economics in a technical field; - program simple applications on programmable devices, and program, install and wire programmable relays; - make required settings to an operating system and provide basic user support for the use of software; - assemble, maintain, troubleshoot and service hardware; - wire various types of electrical and communication installations, connect users and perform basic maintenance tasks; - connect elements of electrical installations in switchboards, distribution and connecting devices, and select and switch electrical protections; - establish, maintain, protect and ensure the restoration of network services; Elective: - record, archive and present sound, pictures and video in digital format; - prepare photographs and videos in terms of design; - provide advice in the use of electronic certificates and signatures; - protect information and communication systems against intrusions and harmful programs; - install and manage systems and user software; - work with users, suppliers and clients; - plan the development of simpler programs; - produce and test minor elements of major programs; - archive and restore databases, create complex inquiries; - write server procedures and triggers for the introduction of business rules and exception handling;

SQF level **Learning outcomes (vocational competences)**	- use digital photography devices; - design websites and other documents for electronic media; - plan and program microprocessor boards; - control, capture and regulate microprocessor boards; - manage hardware and software for filming, editing and showing AV content; - use computer formats to record text, graphics, video, sound and other media content; - manufacture and maintain simple pneumatic, electro-pneumatic and hydraulic controls; - program, install, start up, monitor and control the functioning and measurement of and rectify faults in simple, automated multi-device units.
Assessment and completion	System of assessment: Students' vocational competences andali nižja poklicna izobrazba.oloèenih kriterijev, ki omogoèajo hiter in širok vpogled v naravo svake posamezne kvalifikacije. skills, and the fulfilment of conditions to obtain credits in accordance with the education programme are established through testing and assessment. Assessment also takes into account non-formally acquired knowledge that can be adequately demonstrated. Students are assessed using scores from 5 (excellent) to 1 (inadequate). Progression: Students may progress to a higher year if at the end of the academic year they achieve a positive assessment in all general education subjects and relevant vocational modules set out in the school's operational curriculum, and have completed all extracurricular activities and practical on-the-job training, or progress on the basis of a programme faculty decision. Condition for obtaining a public document: Students must successfully (i.e. with positive scores) complete general education subjects, compulsory and elective vocational modules, and the open part of the curriculum. They must also complete extracurricular activities, practical on-the-job training and a vocational matura. The **vocational matura** comprises a compulsory section (written and oral examination of Slovene and computer science) and a selective section (written and oral foreign language or mathematics examination, and product/service and an oral presentation).
Providers	Vocational and technical upper secondary schools and adult education institutions. For details see: https://krka1.mss.edus.si/registriweb/ProgramPodatki.aspx?ProgramID=6317&Page=1
Transitions	Matura/vocational course, short-cycle higher vocational education (SQF level 6), professional higher education (SQF level 7) and academic higher education (SQF level 7)

8.4.1.6. UPPER SECONDARY GENERAL EDUCATION

Type of qualification (document)	UPPER SECONDARY GENERAL EDUCATION (general matura certificate)
Category of qualification	Educational qualification
Type of education	General education
Duration	4 years, 240 credits
Admission requirements	Completed basic education
Providers	Gimnazija
Learning outcomes (SQF levels)	Knowledge: level 5 - Acquires knowledge necessary for further education at the higher education level. - Acquires essential knowledge in a wide range of science, technology and arts disciplines: mathematics, Slovene, physics, chemistry, biology, geography, history, philosophy, psychology, foreign language, information technology and other (depending on the school profile or the choice of the student). Among other things: - is familiar with modern scientific concepts, understands the interdependence of phenomena, elements, - knows the rules of standard literary Slovene, - has studied a foreign language to level B2 of the Common European Framework of Reference for Languages, - is familiar with scientific language, has a good command of physical units for important physical quantities, is able to discuss own experiments and illustrate them with graphs, tables and mathematical expressions, - has a comprehensive understanding of biological concepts and the connections between them, natural processes and the use of chemical methods in nature study, - understands the most important factors, phenomena and processes of natural geography and social geography, - can think in geographical terms about landscapes and people (describe a selected landscape and locate its position and role at the national, international and global level), - is familiar with historical phenomena and processes from the perspective of the period in which they occurred and from the perspective of the present day, - is familiar with ways of life and scientific achievements and their influence on economic processes, social relations and the environment in different historical periods, - knows fundamental concepts and laws in psychology, philosophy and sociology, - has a rational and critical understanding of sport as a social phenomenon. Skills: level 5 - Practices cognitive skills such as observation, acquisition of knowledge, comparison, forming logical conclusions, generalisation. - Develops abilities to apply simple research methods to obtain, arrange, interpret and communicate scientific or technical information. - Is capable of producing effective, intelligible and linguistically correct oral and written texts in the appropriate register in his/her mother tongue. - Develops multilingual capacity. - Applies knowledge in the resolution of problems in connection with the sustainable use of natural resources, preservation of biodiversity and a high-quality environment. - Uses digital technology to develop own knowledge and articulate it. - Learns reflection on knowledge and values, identifies and develops problems.

Learning outcomes (SQF levels)	- Develops sensitivity to artistic experience and expression. - Develops motor and functional skills. Competences: level 5 - Develops a capacity for autonomous critical judgement and responsible conduct. - Develops complex lifelong learning capacity. - Develops skills in interpersonal relations and learns effective communication, cooperation and quality and responsible relations. - Develops responsibility for the natural environment and own health. - Develops capacity for innovation.
Assessment and completion	System of assessment: Students' attainment of the standards of knowledge defined by catalogues is established through testing and assessment. Students are assessed using scores from 5 (excellent) to 1 (inadequate). Progression: Students progress to the next year if at the end of the academic year they achieve a positive assessment in all subjects. Matura examination: The matura examination is taken following the successful completion of the fourth year gimnazija or after completion of a matura course. Candidates' success in the general matura is assessed using: a) points, b) percentages, c) grades from 1 to 5 or point scores from 1 to 8. Candidates must achieve a positive score in all subjects in order to pass the general matura. The school issues successful candidates a general matura certificate and an attestation of success in the general matura examination. Condition for obtaining certificate: Passing the matura examination.
Transitions	matura/vocational course programmes (SQF level 5), short-cycle higher vocational education (SQF level 6), professional higher education (SQF level 7), academic higher education (SQF level 7)

8.4.1.7. MASTER CRAFTSMAN

Type of qualification (document)	MASTER CRAFTSMAN (Master craftsman's examination certificate)
Category of qualification	Educational qualification
Type of education	Upper secondary technical education[125]
Learning outcomes (SQF levels)	Knowledge: 5 Skills: 5-6 Competences: 6
Admission requirements	Fulfilment of one of the following conditions: - The candidate has obtained a upper secondary vocational qualification (any specialisation) and has at least three years' experience in the field in which he/she wishes to sit the master craftsman's examination. - The candidate has obtained a upper secondary technical qualification (any specialisation) and has at least two years' experience in the field in which he/she wishes to sit the master craftsman's examination. - The candidate has obtained a short-cycle higher vocational or professional higher education qualification (any specialisation) and has at least one year's experience in the field in which he/she wishes to sit the master craftsman's examination.
Assessment	The candidate sits a master craftsman's examination, which consists of four units: - a practical unit - a specialised theoretical unit - a business and economics unit - a teaching/instruction unit Candidates who pass all four units of the examination obtain the master craftsman's qualification.
Providers	Chamber of Crafts and Small Business of Slovenia
Assessors:	Members of examination boards for each examination unit separately; appointed by the minister responsible for education; the appointment may be renewed every 4 years

Example of qualification

8.4.1.7.1. Chef

Name of qualification	KUHARSKI MOJSTER/ KUHARSKA MOJSTRICA
Type of qualification	Master craftsman
Category of qualification	Educational qualification
Type of education	Upper secondary technical education
Admission requirements	Fulfilment of one of the following conditions: - the candidate has obtained a upper secondary vocational qualification (any specialisation) and has at least three years of experience in his/her profession, - the candidate has obtained a upper secondary technical qualification (any specialisation) and has at least two years of experience in his/her profession, or - the candidate has obtained a short-cycle higher vocational or professional higher education qualification (any specialisation) and has at least one year of experience in his/her profession.

136 See also section 2.3.8.

SQF level **Learning outcomes (vocational competences)**	5 The candidate: - has mastered all culinary work processes, - participates in the purchase, ordering and receipt of ordered foods, - prepares dishes according to the most demanding procedures and logically links regular meals and specialities according to the principles of healthy eating, - harmoniously links, recommends and serves the appropriate wines with regular meals and specialities, - ensures a safe work environment and supervises the implementation of occupational safety regulations, - ensures the implementation of sanitary-hygiene regulations (HACCP system), - communicates in accordance with business etiquette with co-workers and guests in Slovene and at least one foreign language, - prepares written offers of catering services using modern information and communication technologies and demonstrates mastery of other catering-related computer software, - organises and manages the culinary work process, - ensures rational and efficient operations, - takes the initiative to create and prepare new dishes, - demonstrates mastery of marketing and ensures successful sales, - monitors and masters new trends in the preparation of dishes using the latest technologies, - drafts development and financial programme proposals, - rationally allocates and organises human resources to maintain social security and a positive climate, - drafts proposals for the advancement of co-workers, - introduces new workers to their jobs and ensures their professional growth, - carries out practical on-the-job training for students, and - controls the quality of services.
Assessment and completion	System of assessment: The candidate sits a master craftsman's examination, which consists of four units: - a practical unit - a specialised theoretical unit - a business and economics unit - a teaching/instruction unit Assessors: Members of examination boards for each examination unit separately. Appointed by the minister responsible for education. Appointment may be renewed every 4 years. Condition for obtaining a public document: The candidate must pass all (four) units of the individual parts of the master craftsman's examination in order to obtain the title of master craftsman.
Providers	Chamber of Crafts and Small Business of Slovenia

8.4.1.8. SHORT-CYCLE HIGHER VOCATIONAL EDUCATION

Type of qualification (document)	SHORT-CYCLE HIGHER VOCATIONAL EDUCATION[126] (diploma of short-cycle higher vocational education)
Category of qualification	Educational qualification
Type of education	short-cycle higher vocational education
Duration	2 years, 120 credits
Admission requirements	- general or vocational matura - master craftsman/foreman/shop manager examination, three years' work experience and a test of knowledge of general education subjects at the level required for the vocational matura in upper secondary technical education.
Providers	Higher vocational school in cooperation with employers providing practical training.
Learning outcomes (SQF levels)	Knowledge: level 6 Skills: level 6 Competences: level 6
Assessment and completion	System of assessment: Students' knowledge is assessed by means of practical exercises and seminar papers, and also via products, projects, performances, services and otherwise, and by examinations. Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Students progress to the second year if at the end of the academic year they have met all requirements defined by the study programme. Condition for obtaining certificate: A diploma is issued to students who meet all the requirements under the higher vocational study programme and pass the diploma examination (diploma thesis and oral defence).
Transitions	Access to further education: first-cycle study programmes (SQF, level 7)

Example of qualification

8.4.1.8.1. Information science engineer

Name of qualification	INŽENIR INFORMATIKE/INŽENIRKA INFORMATIKE
Type of qualification	Short-cycle higher vocational education
Category of qualification	Educational qualification
Type of education	Short-cycle higher vocational education
Duration	2 years, 120 credits (ECTS)
Admission requirements	Matura or vocational matura (previously final examination); or Master craftsman's, foreman's and managerial examination, with an additional test of knowledge at the vocational matura level

137 After 1996.

SQF level **Learning outcomes (vocational competences)**	6 The student is able to: (general competences) - use acquired knowledge to communicate successfully both in the domestic and international environments, - record and analyse a problem and anticipate operational solutions in an organisation's processes, - master standard methods, procedures and processes, and technological processes, - manage and resolve specific work problems relating to processes using standard technical methods and procedures, - develop a moral and ethical sense for honesty, accuracy and conscientiousness at work, - link knowledge from various areas when using and developing new applications, (vocationally specific competences) - provide advice and technical support to users in the use of information and communication technologies, - install, maintain and service information and communication equipment, - plan and upgrade networks, - install and administer servers, - plan, create and administer data collections, - plan, develop and introduce comprehensive software solutions, - create passive and active websites, - introduce the latest developments from the information and communication technologies sector to business systems, - document information and communication technology, - provide users ICT training.
Assessment and completion	System of assessment: Students' knowledge is assessed by means of practical exercises and seminar papers, and also via products, projects, performances, services and otherwise, and by examinations. Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Students progress to the second year if they have successfully completed compulsory modules, subjects and practical training (including practical exercises, seminar papers, projects, examinations, etc.) from the first year, totalling at least 45 credits. All obligations from practical exercises and training must be completed in full. Condition for obtaining certificate: Students receive a diploma when they have completed the following: all compulsory modules and subjects totalling 68 credits, two compulsory modules totalling 28 credits, an elective module totalling 14 credits, a free elective subject (5 credits) and a diploma thesis (5 credits).
Providers	Higher vocational school in cooperation with employers providing practical training.
Transitions	Access to further education: first-cycle study programmes (SQF, level 7)

8.4.1.9. PROFESSIONAL AND ACADEMIC HIGHER EDUCATION

Type of qualification (document)	PROFESSIONAL AND ACADEMIC HIGHER EDUCATION[127] (diploma awarded on completion of a first-cycle study programme)
Category of qualification	Educational qualification
Type of education	Professional and academic higher education
Duration	3 to 4 years, 180 to 240 credits
Admission requirements	Matura, vocational matura with additional examination, final examination before 1 June 1995, short-cycle higher vocational education according to criteria for transitions.
Providers	Universities, faculties, academies of art, professional colleges.
Learning outcomes (SQF levels)	Knowledge: level 7 Skills: level 7 Competences: level 7
Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year. Diploma thesis: The study programme may provide that the student shall submit a diploma thesis on conclusion of studies. The diploma thesis may be in the form of a written thesis or other product, performance, presentation, etc. The diploma thesis must be the result of the autonomous work of the candidate. The diploma thesis may be accepted and marked after the student has met the other study requirements prescribed by the study programme. Condition for obtaining certificate: A diploma is issued to students who meet all the obligations under the programme.
Transitions	Access to further education: second-cycle master's study programme (SQF, level 8).

138 Since 2004, first Bologna cycle.

Example of qualification

8.4.1.9.1. Computer and information science engineer

Name of qualification	DIPLOMIRANI INŽENIR/DIPLOMIRANA INŽENIRKA RAČUNALNIŠTVA IN INFORMATIKE (VS)
Type of qualification	Professional higher education
Category of qualification	Educational qualification
Type of education	Professional higher education (first bologna cycle)
Duration	3 years, 180 ECTS credits
Admission requirements	Final examination (prior to 1 June 1995) for any four-year upper secondary school programme or Vocational matura, or Matura
SQF level **Learning outcomes**	7 The student: (general competences) - is able to develop critical, analytical and synthetic thinking, - can define, understand and creatively address professional challenges in computing and information science fields, - can share knowledge, technical understanding and written expression in his/her native language and one foreign language, - can search for sources and critically assess information, - observes security, functional, economic and environmental protection principles, - can use acquired knowledge to independently resolve technical and scientific problems relating to computing and information science, and enhance previous knowledge, - can work in a professional group, (subject-specific competences) - possesses basic theoretical and practical computer and information science knowledge and skills, - understands and integrates computer and information science knowledge in other relevant technical and vocational fields (e.g. electrical engineering, medicine, etc.), - possesses practical knowledge and skills in the application of computer and information technologies, - independently performs less complex and complex developmental engineering tasks in more specific areas, and independently resolves specific, well-defined tasks in other areas relating to computer and information science, - can continue studies in the second cycle.
Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Completion of all examinations from the previous year. Additional conditions for enrolment in the second year include a systematic medical check-up and, in the case of foreign students, passing a Slovene language examination. Condition for obtaining a public document: To complete their studies, students must meet all requirements for all subjects (totalling 174 credits) and practical training, and submit and successfully defend a diploma thesis (6 credits).
Providers	University of Ljubljana, Faculty of Computer and Information Science
Transitions	second-cycle master's study programme (SQF, level 8).

8.4.1.9.2. Computer and information science engineer

Name of qualification	DIPLOMIRANI INŽENIR/DIPLOMIRANA INŽENIRKA RAČUNALNIŠTVA IN INFORMATIKE (UN)
Type of qualification	Academic higher education
Category of qualification	Educational qualification
Type of education	Academic higher education (first bologna cycle)
Duration	3 years, 180 ECTS credits
Admission requirements	Matura or vocational matura with additional examination, or final examination prior to 1 June 1995
SQF level **Learning outcomes**	7 The student: (general competences) - is able to develop critical, analytical and synthetic thinking, - can define, understand and creatively address professional challenges in computing and information science fields, - can share knowledge, technical understanding and written expression in his/her native language and one foreign language, - can search for sources and critically assess information, - observes security, functional, economic and environmental protection principles, - can use acquired knowledge to independently resolve technical and scientific problems relating to computing and information science, and enhance previously acquired knowledge, - can work in a professional group, - develops professional responsibility and ethics. (subject-specific competences) - possesses basic theoretical and practical computer and information science knowledge and skills, - understands and integrates computing and information science knowledge in other technical areas and professionally relevant fields (e.g. economics, organisation sciences, etc.), - possesses practical knowledge and skills in the use of software, hardware and information technologies, - can independently perform less complex and complex developmental engineering and organisational tasks in areas relating to own work, and independently resolve specific, well-defined tasks in computer and information science areas, - can continue studies in the second cycle.
Assessment and completion	<u>System of assessment:</u> Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). <u>Progression:</u> All requirements met for the current year and all examinations completed from previous years. An additional condition for enrolment in the second year in the case of foreign students is passing a Slovene language examination. <u>Condition for obtaining a public document:</u> To complete their studies, students must meet all requirements for all subjects in which they have enrolled, and prepare and defend a diploma thesis.
Providers	University of Ljubljana, Faculty of Computer and Information Science
Transitions	second-cycle master's study programme (SQF, level 8).

8.4.1.10. MASTER'S DEGREE

Type of qualification (document)	MASTER'S DEGREE / 2ND BOLOGNA CYCLE (professional master's degree)
Category of qualification	Educational qualification
Type of education	Master's degree
Duration	1 to 2 years (60 to 120 credits).
Admission requirements	In the case of combined first and second cycle: matura, vocational matura with additional examination, final examination before 1 June 1995; otherwise: a completed first-cycle study programme
Providers	Universities, faculties, academies of art, professional colleges.
Learning outcomes (SQF levels)	Knowledge: level 8 Skills: level 8 Competences: level 8
Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year. Condition for obtaining document: Master's students must submit a master's thesis at the end of their studies if so provided by the study programme. This thesis must demonstrate that the candidate has mastered the field to which the thesis relates and methods of scholarly research and development work.
Transitions	Access to further education: third-cycle doctoral study programmes (SQF, level 10)

Example of qualification

8.4.1.10.1. Master's degree in computing and information technology

Name of qualification	MAGISTER INŽENIR/MAGISTRICA INŽENIRKA RAČUNALNIŠTVA IN INFORMACIJSKIH TEHNOLOGIJ
Type of qualification	Master's degree
Category of qualification	Educational qualification
Type of education	Master's degree
Duration	2 years, 120 ECTS credits
Admission requirements	- a first-cycle (Bologna) study programme comprising at least 180 ECTS credits from relevant professional fields; or - a first-cycle (Bologna) study programme comprising at least 180 ECTS credits from other scientific or technical fields, and additional study requirements from other computer science topics totalling at least 24 credits; or - a professional higher education programme, adopted before 11 June 2004, in the field of computer and information sciences; or - a professional higher education programme, adopted before 11 June 2004, from other scientific or technical fields, and additional study requirements from other computer science topics totalling at least 24 ECTS credits

SQF level **Learning outcomes**	8 The student: (general competences) - is able to think analytically and break down complex problems and situations; - understands technical, technological and developmental problems; - can participate in project teams with creative contributions and well-argued positions from the profession; - is able to be technically critical and responsible, and demonstrate initiative and independence in decision-making and participate in major development projects or their management; - understands methodologies, methods and techniques used in development and technological/manufacturing projects and is able to integrate and enhance them; - keeps pace with the current state of technology and constantly updates associated knowledge; - can master development approaches and introduce technical and technological improvements, devices and services, and master the associated patent engineering; - can analyse and synthesise complex solutions in development or technological/manufacturing projects, and implement, control and manage those solutions; - possesses the technical, theoretical and empirical basis necessary to continue studies in third-cycle (doctoral) programmes and participate in research, primarily in all computer and information science fields, (subject-specific competences) - possesses broad knowledge of computing and information technologies, consolidated by the seven compulsory subjects in the first and second semesters: Algorithms, Principles of Programming Languages and Development of Programming Systems, Web Technologies with Multimedia, Basics of Intelligent Methods and Computer Processing of Signals and Images; - possesses in-depth understanding of computer systems, their architectures, virtualisation, advanced operating systems, the web, and intelligent services and communication structures; - possesses advanced knowledge in the fields of modelling, and mathematical-analytical, statistical and optimisation bases for computer solutions; - masters the development and quality of software solutions, mobile and ubiquitous computing, the principles of information systems, application servers and the field of security and protection; - demonstrates understanding of and the ability to develop and provide components that bring a great deal of added value to the broad segment of computer-supported products, - can perform key management tasks in technological/manufacturing and development projects, and possesses the capacity to continue studies at the third cycle or doctoral level.
Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Students progress to the second year if they have met first-year requirements and accumulated at least 42 ECTS credits. Condition for obtaining document: Master's degree students must meet all requirements defined by the study programme, and thus accumulate 120 ECTS credits, to complete their studies.
Providers	University of Maribor, Faculty of Electrical Engineering and Computer Science
Transitions	third-cycle doctoral study programmes (SQF, level 10)

8.4.1.11. ACADEMIC HIGHER EDUCATION

Type of qualification (document)	ACADEMIC HIGHER EDUCATION[128] (diploma awarded on completion of a university study programme)
Category of qualification	Educational qualification
Type of education	Master's degree
Duration	4 to 6 years
Admission requirements	- Matura, - vocational matura with additional examination, - final examination before 1 June 1995.
Providers	Universities, faculties, academies of art.
Learning outcomes (SQF levels)	Knowledge: level 8 Skills: level 8 Competences: level 8
Assessment and completion	System of assessment: Examination performance is scored as follows: excellent (10), very good (9 and 8), good (7), adequate (6) and inadequate (1 to 5). In order to pass the examination, the candidate must obtain a grade between adequate (6) and excellent (10). Progression: Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year. Diploma thesis: The study programme may provide that the student shall submit a diploma thesis on conclusion of studies. The diploma thesis may be in the form of a written thesis or other product, performance, presentation, etc. The diploma thesis may be accepted and marked after the student has met the other study requirements prescribed by the study programme. Condition for obtaining document: A diploma is issued to students who meet all the obligations under the programme and pass the diploma examination.
Transitions	Access to further education: third-cycle doctoral study programmes (SQF, level 10)

Example of qualification

8.4.1.11.1. Computer and information science engineer

Name of qualification	UNIVERZITETNO DIPLOMIRANI INŽENIR/UNIVERZITETNO DIPLOMIRANA INŽENIRKA RAČUNALNIŠTVA IN INFORMATIKE
Type of qualification	Academic higher education
Category of qualification	Educational qualification
Type of education	Academic higher education
Duration	4 years
Admission requirements	- Matura, - vocational matura with additional examination, - final examination before 1 June 1995.

139 After 1993 and before 2004

SQF level **Learning outcomes**	8 The student: **Knowledge:** - Possesses knowledge of the theoretical basis of computer science, discrete mathematics and computer mathematics, and broad knowledge of the basics of information technology and computer science. - Possesses knowledge of direct mathematics (logic, combinatorics, graph theory), probability and statistics, cryptography and coding theory, numerical methods and other computing-related mathematical contents. **Skills:** - Is capable of research, innovation and the development of new knowledge from the specialist sphere of computer science and computer mathematics. - Is capable of transferring and applying theoretical knowledge into practice and problem-solving. - Is able to develop information technologies. - Is able to use new technologies. - Is capable of research in the field of mathematics and computer science. - Is capable of interdisciplinary collaboration. - Is able to communicate with colleagues and experts from related disciplines. - Is able to keep abreast of theoretical and specialist literature in his/her own field. **Competences:** - Develops capacity for lifelong learning and acquisition of new knowledge. - Develops capacity to adapt to rapid changes in the discipline. - Develops capacity for autonomous specialist work and work in an (international) group. - Develops professional ethical responsibility. - Develops the ability to work in a group.
Assessment and completion	System of assessment: Examination performance is scored as follows: excellent (10), very good (9 and 8), good (7), adequate (6) and inadequate (1 to 5). In order to pass the examination, the candidate must obtain a grade between adequate (6) and excellent (10). Progression: Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year. Diploma thesis: The study programme may provide that the student shall submit a diploma thesis on conclusion of studies. The diploma thesis may be in the form of a written thesis or other product, performance, presentation, etc. The diploma thesis may be accepted and marked after the student has met the other study requirements prescribed by the study programme. Condition for obtaining document: A diploma is issued to students who meet all the obligations under the programme and pass the diploma examination.
Providers	University of Ljubljana, Faculty of Computer and Information Science
Transitions	third-cycle doctoral study programmes (SQF, level 10)

8.4.1.12. SPECIALISATION FOLLOWING ACADEMIC HIGHER EDUCATION

Type of qualification (document)	SPECIALISATION FOLLOWING ACADEMIC HIGHER EDUCATION[129] (diploma o specializaciji)
Category of qualification	Educational qualification
Type of education	Specialisation following academic higher education
Duration	1 to 2 years
Admission requirements	An academic degree and fulfilment of other conditions
Providers	Universities, faculties, academies of art
Learning outcomes (SQF levels)	Knowledge: level 9 Skills: level 9 Competences: level 9
Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate); 5–1 (inadequate). In order to pass the examination, a candidate must score between 6 (adequate) and 10 (excellent). Progression: Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year. Condition for obtaining document: Specialisation students must submit a specialist thesis at the end of their studies and successfully defend it.
Transitions	Rights to further education: third-cycle doctoral study programme (SQF, level 10).

Example of qualification

8.4.1.12.1. Specialist (in the field of supervision)

Name of qualification	SPECIALIST/SPECIALISTKA ZA SUPERVIZIJO
Type of qualification	Specialisation following academic higher education
Category of qualification	Educational qualification
Type of education	Specialisation following academic higher education
Duration	2 years
Admission requirements	University diploma in social pedagogy, special pedagogy, classroom teaching, pedagogy, psychology, social work or other social sciences specialisation (with a programme containing a total of at least 240 hours of psychology subjects and 120 hours of education subjects) and fulfilment of the following conditions: - proficiency in one world language - at least one year involved in a relevant supervision process while working - supervisees (at least 15 meetings) - three years' work experience in the field of those activities in which - education represents a significant component, including at least two years' experience leading teams.

140 Before 2004

SQF level **Learning outcomes**	9 The candidate is able to select and organise experiences and transform them into teaching material in a manner that incorporates the objectives, content, forms of work and, above all, personality functions in a specific assignment. The candidate is able to: methodically lead supervision of staff in different educational institutions and for application in various fields of educational work; implement individual and group supervision and team supervision, management supervision and peer supervision (intervision). The candidate has the relevant knowledge and experience to design an individual and group process that leads to a gradual increase in reflection and generalisation of experiences. The candidate is able to perform the educational, support and leadership functions of supervision in various fields of work organise the supervision process, introduce it to new fields and participate in the development of new theoretical models.
Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: solid results); 7 (good); 6 (adequate); 5–1 (inadequate). In order to pass the examination, a candidate must score between 6 (adequate) and 10 (excellent). Progression: Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year. Condition for obtaining document: Candidates complete their studies when they have successfully completed all study requirements and prepared and successfully presented their specialist thesis before the relevant committee.
Providers	University of Ljubljana, Faculty of Education
Transitions	Third-cycle doctoral study programme (SQF, level 10).

8.4.1.13. MAGISTERIJ ZNANOSTI/UMETNOSTI

Type of qualification (document)	MAGISTERIJ ZNANOSTI/UMETNOSTI[130] (diploma o magisteriju znanosti)
Category of qualification	Educational qualification
Type of education	MSc/MA education
Duration	2 to 3 years, 120 credits
Admission requirements	An academic degree and fulfilment of other conditions; in some cases a professional degree and fulfilment of other conditions.
Providers	Universities, faculties, academies of art, professional colleges.
Learning outcomes (SQF levels)	Knowledge: level 9 Skills: level 9 Competences: level 9

141 Because the descriptions of pre-Bologna programmes did not include general and subject-specific competences in terms of learning outcomes, we used the descriptions of graduate profiles in pre-Bologna programmes that best describe learning outcomes (i.e. what a candidate knows or is able to do).

Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: of results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year. Condition for obtaining document: Master's students must submit a master's thesis at the end of their studies. This thesis must demonstrate that the candidate has mastered the field to which the thesis relates and methods of scholarly research. A master's thesis may also be the result of the work of several candidates or a research group; if so, the contributions of individual candidates must be clear.
Transitions	Access to further education: third-cycle doctoral study programmes (SQF, level 10)

Example of qualification

8.4.1.13.1. Magisterij znanosti (information systems and decision–making)

Name of qualification	MAGISTER/MAGISTRICA ZNANOSTI
Type of qualification	Magister znanosti
Category of qualification	Educational qualification
Type of education	MSc/MA education
Duration	2 years, 120 credits
Admission requirements	University diploma, knowledge of at least one foreign (world) language and fulfilment of at least one of the following conditions: - an average test and exercise score of at least 7.5 at the university level and examination passes in at least two subjects from the fields of information science, computer science, economics, organisational science or management; - an average test and exercise score of at least 7.5 at the university level and a special test of knowledge, the content and scope of which is determined by the relevant faculty, - notable success in research work while studying or subsequently (evidenced by an award or other suitable public recognition for academic or professional work, etc.), - the required university qualification and at least three years' work experience and relevant achievements in a professional field (documented independent work on a project or part of a project in the computer and information science field); - an MBA; - completed postgraduate studies in any specialisation.
SQF level **Learning outcomes**	9 Graduates are competent to work in the field of the development, use and management of information systems, resolve the management problems of enterprises and other major business systems, and resolve management problems using information technologies. Graduates are introduced to research and the application of theoretical knowledge in resolving specific information technology and computing problems.

Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: of results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year. Condition for obtaining document: Candidates complete their studies when they have successfully completed all examinations and seminars, and prepared and successfully presented their master's thesis before the relevant committee.
Providers	University of Ljubljana, Faculty of Computer and Information Science
Transitions	Third-cycle doctoral study programmes (SQF, level 10)

8.4.1.14. DOCTORATE

Type of qualification (document)	DOCTORATE (doctoral diploma)
Category of qualification	Educational qualification
Type of education	Doctoral education
Duration	3 years, 180 credits
Admission requirements	Academic degree, master's degree, specialisation following academic degree, specialisation following professional degree (before 2004); Master's degree (field)
Providers	universities, faculties and academies of art.
Learning outcomes (SQF levels)	Knowledge: level 10 Skills: level 10 Competences: level 10
Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: of results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Students may enrol in a higher year if by the end of the academic year they have met all requirements defined by the study programme for enrolment in a higher year. Condition for obtaining document: Doctoral candidates must submit a doctoral thesis at the end of their studies. This thesis must demonstrate that the candidate has mastered the field to which the thesis relates and methods of scholarly research. A doctoral thesis may also be the result of the work of several candidates or a research group; if so, the contributions of individual candidates must be clear.
Transitions	/

Example of qualification

8.4.1.14.1. Doctorate (in the field of computing and information science)

Name of qualification	DOKTOR/DOKTORICA ZNANOSTI
Type of qualification	Doctorate
Category of qualification	Educational qualification
Type of education	Doctoral education
Duration	3 years, 180 ECTS credits
Admission requirements	Candidates shall have: a) a diploma from a second-cycle study programme; or b) a diploma from a study programme referred to in Article 36(4) of the Higher Education Act, if the programme is assessed at 300 credits; or c) a diploma from a former undergraduate university study programme (study programmes adopted before 11 June 2004) from the fields of computer and information science, computer science and mathematics, mathematics or electrical engineering.
SQF level **Learning outcomes**	10 The student: (competences of doctoral candidates) - can analyse, synthesise and anticipate solutions and the consequences of factors in computing, - can critically assess events in the fields of computing and information science, and in broader terms in society, - is able to autonomously search for and obtain professional knowledge and integrate it with existing knowledge, - demonstrates autonomy in professional and research work, - uses mathematical and computer tools in specific research, - is able to place computing and information science in a broader social context and communicate in the field of global computer science and society, - is able to create a hierarchy that breaks a problem down into sub-problems and combine partial solutions using engineering techniques.
Assessment and completion	System of assessment: Examination performance is scored as follows: 10 (excellent); 9 (very good: above-average knowledge but with some mistakes); 8 (very good: of results); 7 (good); 6 (adequate: knowledge satisfies minimum criteria); 5–1 (inadequate). In order to pass an examination, a candidate must achieve a grade between adequate (6) and excellent (10). Progression: Students may advance to a higher year if they accumulate 42 credits in the current year, or at least 30 credits based on a mentor's recommendation in exceptional circumstances. In any case, students must sit for an examination from a topical subject. All first- and second-year structured study requirements must be met for progression to the third year. Condition for obtaining a public document: Candidates must meet all requirements prescribed by the study programme and successfully defend a doctoral dissertation, thereby demonstrating their mastery of the field and the scientific research method.
Providers	University of Primorska, Faculty of Mathematics, Natural Sciences and Information Technologies
Transitions	/

8.4.2. QUALIFICATIONS OBTAINED OUTSIDE THE FORMAL EDUCATION SYSTEM

8.4.2.1. Assistant cleaner

Name of qualification	POMOČNIK/POMOČNICA ČISTILCA/ČISTILKE PROSTOROV
Type of qualification	National vocational qualification, SQF level 2
Category of qualification	National vocational qualification
Admission requirements	/

SQF level
Learning outcomes
	2
	The candidate:
	- plans, prepares, carries out and controls own work,
	- makes rational use of energy, material and time,
	- protects health and the environment,
	- develops enterprising characteristics, skills and behaviour,
	- communicates with co-workers and managers,
	- manually cleans premises:
	  - carries out daily cleaning of floors and other surfaces, room and office furniture, wastepaper baskets, glass surfaces and working surfaces within arm's reach,
	  - carries out dry cleaning of floor coverings with a vacuum cleaner,
	  - empties wastepaper baskets and separates waste into the appropriate containers,
	  - restocks with paper sanitary products and changes rubbish bags,
	  - cleans toilets and sanitary equipment and installs air fresheners,
	  - cleans the area around rubbish bins and yard in accordance with the cleaning plan,
	  - makes economical use of cleaning products and implements,
	  - reports on the state of equipment,
	  - knows the types and properties of materials that determine the type of cleaning,
	  - knows the principles of waste separation,
	  - knows how to operate a vacuum cleaner correctly.

Assessment and completion	System of assessment: VALIDATION. During the counselling process, the candidate prepares a portfolio. The relevant committee assesses the portfolio and recognises the catalogue content in part or full. If the committee is unable to recognise all catalogue content, it assigns tasks to the candidate for verification. METHOD OF VERIFICATION Service with an oral presentation. Assessors: Verification and assessment are carried out by committees for the verification and validation of national vocational qualifications, appointed by the National Examination Centre (NEC). Committee members must be licensed by the National Examination Centre. A list of licence-holders can be found online at: http://www.nrpslo.org/baze-podatkov/licence-za-clane-komisij.aspx/43172051. Condition for obtaining a public document: The candidate demonstrates attainment of the knowledge, skills and competences defined in the catalogue of standards of vocational knowledge and skills.
Providers	Providers of procedures for identifying and validating NVQs are entered in a register of providers maintained in the relevant collection of the national reference point for vocational qualifications. Providers include: vocational schools, enterprises, inter-enterprise training centres, adult education centres, chambers of commerce, etc. For details see: http://www.nrpslo.org/ris/previewizvajalec.aspx?npk=43172051

8.4.2.2.Assistant cook

Name of qualification	POMOČNIK/POMOČNICA KUHARJA/KUHARICE
Type of qualification	National vocational qualification, SQF level 3
Category of qualification	National vocational qualification
Admission requirements	- Completed basic school requirements, and - medical certificate by means of which the candidate demonstrates that no medical impediments exist to obtaining the vocational qualification.
SQF level **Learning outcomes**	3 The candidate: - plans, prepares, carries out and controls own work, - makes rational use of energy, material and time, - protects health and the environment, - communicates with co-workers, - cleans food, - prepares food for cold and hot appetizers, - prepares soups, soup noodles, additives, stews, side dishes, vegetable dishes and salads, - prepares simple desserts, - prepares fast food, - prepares pizzas, and - maintains hygiene and order in the kitchen.
Assessment and completion	System of assessment: VALIDATION. During the counselling process, the candidate prepares a portfolio. The relevant committee assesses the portfolio and recognises the catalogue content in part or full. If the committee is unable to recognise all catalogue content, it assigns tasks to the candidate for verification. METHOD OF VERIFICATION The candidate demonstrates his/her mastery of tasks in a practical exercise. The practical exercise is followed by an oral presentation. Assessors: Verification and assessment are carried out by committees for the verification and validation of national vocational qualifications, appointed by the National Examination Centre (NEC). Committee members must be licensed by the National Examination Centre. A list of licence-holders can be found online at: http://www.nrpslo.org/baze-podatkov/licence-za-clane-komisij.aspx/81100041 Condition for obtaining a public document: The candidate demonstrates attainment of the knowledge, skills and competences defined in the catalogue of standards of vocational knowledge and skills.
Providers	Providers of procedures for identifying and validating NVQs are entered in a register of providers maintained in the relevant collection of the national reference point for vocational qualifications. Providers include: vocational schools, enterprises, inter-enterprise training centres, adult education centres, chambers of commerce, etc. For details see: http://www.nrpslo.org/ris/previewizvajalec.aspx?npk=81100041

8.4.2.3. Software technician

Name of qualification	VZDRŽEVALEC/VZDRŽEVALKA PROGRAMSKE OPREME
Type of qualification	National vocational qualification, SQF level 4
Category of qualification	National vocational qualification
Admission requirements	/
SQF level **Learning outcomes**	4 The candidate: - plans and organises own work - makes rational use of energy, material and time - ensures the quality and efficiency of own work in the working environment in accordance with standards - protects health and the environment - develops enterprising characteristics, skills and behaviour, - is able to communicate with co-workers and clients - works as part of a group, - uses information and communication technologies - uses computer equipment and software - protects the privacy of users and their data - installs and maintains software - provides support to personal computer users - installs and maintains software on a network
Assessment and completion	System of assessment: VALIDATION. During the counselling process, the candidate prepares a portfolio. The relevant committee assesses the portfolio and recognises the catalogue content in part or full. If the committee is unable to recognise all catalogue content, it assigns tasks to the candidate for verification. METHOD OF VERIFICATION Practical verification with an oral presentation. Assessors: Verification and assessment are carried out by committees for the verification and validation of national vocational qualifications, appointed by the National Examination Centre (NEC). Committee members must be licensed by the National Examination Centre. A list of licence-holders can be found online at: http://www.nrpslo.org/baze-podatkov/licence-za-clane-komisij.aspx/80244301. Condition for obtaining a public document: The candidate demonstrates attainment of the knowledge, skills and competences defined in the catalogue of standards of vocational knowledge and skills.
Providers	Providers of procedures for identifying and validating NVQs are entered in a register of providers maintained in the relevant collection of the national reference point for vocational qualifications. Providers include: vocational schools, enterprises, inter-enterprise training centres, adult education centres, chambers of commerce, etc. For details see: http://www.nrpslo.org/ris/previewizvajalec.aspx?npk=80244301

8.4.2.4. Website creator

Name of qualification	IZDELOVALEC/IZDELOVALKA SPLETNIH STRANI
Type of qualification	National vocational qualification, SQF level 5
Category of qualification	National vocational qualification
Admission requirements	Two (or more) previously created dynamic websites (created in an editing system using a database) with the associated documentation (record of basic premises, plan of the contextual structure, architecture of the user interface, graphic image obtained from a website designer, technical implementation plan, i.e. implementation of individual functionalities, installation instructions, secure archiving of the website/ web pages, brief user instructions, etc.) that are accessible to the committee on the internet, at least one of which can be edited and amended during the practical part of verification (e.g. the editing of content, the adding of pictures, changes to graphic templates, changes to styles, colours and backgrounds, etc.).
SQF level **Learning outcomes**	5 The candidate: - plans, prepares, implements and checks own work in the creation of websites - plans the rational use of time and space in the server medium - ensures the quality and efficiency of own work in the working environment in accordance with standards - protects health and the environment - develops enterprising characteristics, skills and behaviour, - uses information and communication technologies - protects the privacy of users and their data - uses computer tools effectively, and monitors new software tools and the development thereof - takes a systematic approach to the search for solutions to problems that arise - participates in and leads a group that creates websites - works with clients in defining and performing tasks related to the creation of websites - creates websites - drafts instructions for use of websites tailored to users - maintains, refreshes and updates websites
Assessment and completion	System of assessment: VALIDATION. During the counselling process, the candidate prepares a portfolio. The relevant committee assesses the portfolio and recognises the catalogue content in part or full. If the committee is unable to recognise all catalogue content, it assigns tasks to the candidate for verification. METHOD OF VERIFICATION: - Oral presentation and the editing of previously created dynamic websites (see admission requirements). - Practical exercise with an oral presentation. In the practical exercise (selected by the committee), the candidate demonstrates mastery of tools used to create websites and mastery of work with existing websites (assessment, improvement, incorporation of elements). A candidate may be exempted from the practical exercise at the committee's discretion. Assessors: Verification and assessment are carried out by committees for the verification and validation of national vocational qualifications, appointed by the National Examination Centre (NEC). Committee members must be licensed by the National Examination Centre. A list of licence-holders can be found online at: http://www.nrpslo.org/baze-podatkov/licence-za-clane-komisij.aspx/16182141 Condition for obtaining a public document: The candidate demonstrates attainment of the knowledge, skills and competences defined in the catalogue of standards of vocational knowledge and skills.
Providers	Providers of procedures for identifying and validating NVQs are entered in a register of providers maintained in the relevant collection of the national reference point for vocational qualifications. Providers include: vocational schools, enterprises, inter-enterprise training centres, adult education centres, chambers of commerce, etc. For details see: http://www.nrpslo.org/ris/previewizvajalec.aspx?npk=16182141.

8.4.2.6. Computer systems and networks specialist

Name of qualification	STROKOVNI SODELAVEC/STROKOVNA SODELAVKA ZA RAČUNALNIŠKE SISTEME IN OMREŽJA
Type of qualification	National vocational qualification, SQF level 6
Category of qualification	National vocational qualification
Admission requirements	General secondary or technical upper secondary education
SQF level **Learning outcomes**	6 The candidate: - plans, prepares and controls own work and the work of a group - makes rational use of energy, material and time - ensures the quality and efficiency of own work in the working environment in accordance with standards - protects health and the environment - develops enterprising characteristics, skills and behaviour, - uses information and communication technologies - communicates with clients, service providers and co-workers - analyses the current situation, prepares solutions to improve the functioning of computer systems and networks, and protects data and participates in the implementation of solutions - protects the privacy of users and their data - installs and configures hardware and systems software - administers local computer networks - maintains information system security - prepares elements for calculations and offers - documents own work - controls the use of computer systems and networks - ensures the uninterrupted and optimal functioning of computer systems and networks
Assessment and completion	System of assessment: VALIDATION. During the counselling process, the candidate prepares a portfolio. The relevant committee assesses the portfolio and recognises the catalogue content in part or full. If the committee is unable to recognise all catalogue content, it assigns tasks to the candidate for verification. METHOD OF VERIFICATION Practical verification with an oral presentation of specialised theoretical knowledge. Assessors: Verification and assessment are carried out by committees for the verification and validation of national vocational qualifications, appointed by the National Examination Centre (NEC). Committee members must be licensed by the National Examination Centre. Licences may be found at the following website: http://www.nrpslo.org/ris/previewizvajalec.aspx?npk=16182141 Condition for obtaining a public document: The candidate demonstrates attainment of the knowledge, skills and competences defined in the catalogue of standards of vocational knowledge and skills.
Providers	Providers of procedures for identifying and validating NVQs are entered in a register of providers maintained in the relevant collection of the national reference point for vocational qualifications. Providers include: vocational schools, enterprises, inter-enterprise training centres, adult education centres, chambers of commerce, etc. For details see: http://www.nrpslo.org/ris/previewizvajalec.aspx?npk=40266171

8.5. ANNEX 5: STATEMENT OF THE THREE INTERNATIONAL EXPERTS ON THE REPORT

Edwin Mernagh,

Consultant in Qualifications Systems Development.
Director, Edwin Mernagh Consulting

Background in vocational education; development officer with National Qualifications Authority of Ireland, 2001-2007; contributed to the development of the Irish national framework; represented Ireland in the development of EQF and ECVET; has supported the development of national qualifications frameworks in UAE, Slovenia, Turkey and Greece; has contributed to the referencing or alignment of national frameworks for Ireland (to the UK frameworks, to EQF and to the Australian AQF), for UK (to EQF), for Australia (to European qualifications systems), for Slovenia (to EQF); has undertaken many research and development tasks for the European Commission, CEDEFOP and OECD.

Sirkka-Liisa Kärki,

Counsellor of Education. M. Sc. in Education, Head of Vocational Education and Training Unit in the Finnish National Board of Education (FNBE)

At National level responsible for developing of VET-qualifications system, National requirements and National core curricula of qualifications and their implementation as well as EQF/NQF and ECVET implementation and other development processes in Upper secondary VET. At European level the Finnish representative in the EQF- Advisory Group and a member ECVET Steering Committee and the Finnish representative in the ECVET User's group.

Elisabeth Frank,

Federal Ministry of Science and Research Austria, Directorate General I (Universities, Universities of Applied Sciences)

Master degree in teacher education

Responsible for EQF and NQF coordination within the Federal Ministry of Science and Research which is in charge of the development process and the implementation of the NQF in HE sector; responsible for the development of proposals of the Austrian NQF structure in coordination and cooperation with the stakeholders of the tertiary sector; member of relevant working groups on the Austrian qualifications framework (f.ex. NQF advisory council, NQF project group, NQF steering group etc.).

Dublin, 14/03/2013

This statement encompasses the opinions of a group of three international participants in the process of referencing the Slovenian Qualifications Framework to the European Qualifications Framework for Lifelong Learning. We were invited to become involved as advisers in the process of development of the SQF, and we attended all of the significant events that marked stages in that development process. We therefore had a strong familiarity with the Slovenian education system and the emerging framework before the referencing began. We continued to participate actively throughout the referencing. The process has therefore been open to critical international opinion from the beginning and through to the final conference on 19 June 2012.

This Report contains two sections that address different purposes: one deals with the matter of referencing to the EQF levels and the other deals with establishing the compatibility of the reformed Slovenian higher education qualifications with the FQEHEA. It was a big challenge for the authors of the Report to combine these two objectives.

The referencing of the Slovenian Qualifications Framework to the EQF has been undertaken in a professional way and the Report on the process is comprehensive.

We note that changes in the legislative arrangements for the SQF occurred during the development process and we are aware that the legislative status of the SQF is still not finalized: our validation of the Referencing Report is in the context of the eventual completion of the adoption of the SQF into law on the basis described in the present Report.

The Referencing Report of the Slovenian Qualifications Framework has been prepared very carefully. It provides a good and transparent overview of the Slovenian education system.

It demonstrates that the SQF is a comprehensive framework and has the capacity to promote lifelong learning as well. It illustrates how the SQF is suited to the requirements of the Slovenian education system: the goals of the SQF are clear, relevant and based on the national situation of Slovenia. We note that the intended primary role of the SQF is communication, with a small element of reform.

The link to non-formal learning can be seen both in national vocational qualifications and supplementary qualifications in the future, which are possible to achieve in non-formal settings.

The terminology used in the Report is defined very clearly.

The description of the levels in SQF is clear and coherent. The correspondence between the SQF levels and the eight levels of EQF has been done very systematically and transparently using methodological, structural and conceptual comparisons as well as comparisons between the SQF and EQF descriptors. There are also examples of qualifications and how their learning outcomes match to SQF level descriptors.

We are satisfied that all of the criteria for EQF referencing have been addressed. We note that every effort was made to deal with issues raised by us about the penultimate draft of the Report and we acknowledge that this was not an easy task.

www.nok.si