

**NATIONAL REPORT: Tentative assignment of qualifications to the levels of
qualifications frameworks (preferably the EQF levels 3-5)**

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1. Guidance for the work on WP 11

The major goal of work package 11 is the assignment of qualifications to the levels of qualifications frameworks (preferably the EQF levels 3-5). The work packages 8, 9 and 10 delivered results that serve as the basis for the works on WP 11.

How can qualifications be assigned to the levels of qualifications frameworks (NQF, SQF and EQF), is the core question to be answered by WP 11.

The methods of learning outcome-oriented design of sectoral qualifications frameworks will be used as the basis for the exemplary and tentative assignment of qualifications to NQF, SQF and EQF.

Especially the results and the exemplary qualifications of WP 10 (either way 1 or way 2) shall be subject of the assignment to be carried out in WP 11. It is essential that not only a level (i.e. a number) is provided but also rather the process to get there is described transparently.

In addition to the described level assignments, references between the qualifications frameworks (national, sectoral and European) shall be created.

2. The state of NQF/EQF assignments in Slovenia

Referencing process in Slovenia is **not finished yet**, so at this moment we can't talk about **officially assigned qualifications to Slovenian qualifications framework** (hereinafter referred to as: **NQF**) or **referenced Slovenian qualifications levels to European qualifications framework** (hereinafter referred to as: **EQF**). Therefore, for the purpose of this analysis we are going to rely on draft report called *Referencing qualifications to NQF and levels to EQF*¹ prepared by National expert group². This is the first draft proposal of Slovenian referencing to EQF and placement of qualifications to NQF which needs to be further discussed with National Steering Committee and other relevant stakeholders and NOT as final outcome of the referencing process.

The NQF is a **framework of communication**³ with a *limited* scope for reform. Sectoral legislation and the classification system of education and training (hereinafter referred to as: KLASIUS) serve as a starting point for the classification of qualifications into the NQF. It consists of *ten levels*, making it possible to connect *education and qualification structures*. The coherence of both structures provides a basis for easier identification of qualifications and recognition of non-formal and informal knowledge/skills/competences. This element represents *reform* character of the framework (Referencing qualifications to ... 2011, pp. 1).

Because key reforms⁴ in VET (from 2001 on), GE (gimnazija, OŠ) and with Bologna process (from 2004 on) in HE already took place in Slovenia, the NQF does not aim to standardize curriculum documents in the field of Slovene education and training system! The proposal does NOT call for a curriculum reform along the entire educational vertical (ibid, pp. 4).

¹ Biloslavo, R., Pavlin, S., Skubic Ermenc, K. (2011). *Umeščanje kvalifikacij v SOK in ravni SOK v EOK* in EOVK. Delovno gradivo. Ljubljana: Center RS za poklicno izobraževanje.

² National expert group was nominated in June 2010 for the purpose of the "research" development of NQF (see also National Report, WP 3, pp. 2) by the National Steering Committee which is the highest decision making body for NQF (ibid).

³ The development of a national framework in the past period saw the emergence of two basic types in Europe: framework of communication and reform framework (Cedefop 2010; Slovenian Qualifications Framework Proposal (2010), pp. 5-6).

⁴ Learning outcome based occupational standards and curriculum (see also National Report, WP 10, pp. 2-3).

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As indicated in previous National Reports (see WP 3, pp. 3; WP 6, pp. 2, WP 7, pp. 2, WP 9, pp. 5 and 12) we assigned **three types of qualifications in NQF**:

- 1) Education
- 2) National vocational qualification
- 3) Supplementary qualification

In the table below we can see how these three types of qualifications correspond to NQF **VET**⁵ levels. Education is placed on left side of the table, because it is acquired in the formal educational system and gives public recognized (formal) education. On the right side of the table, national vocational qualification and supplementary qualification are placed, because these qualifications are acquired outside the formal educational system and do not provide public recognized (formal) education.

The table also shows how NQF levels are referenced to EQF.

Table 1: Qualifications in NQF and levels of NQF in EQF

Qualifications acquired in the formal education system	Qualifications acquired outside the formal education system	EQF level
LEVEL 3		3.
Final examination certificate (LOWER VOCATIONAL EDUCATION)	National Vocational Qualification certificate (NVQ, LEVEL 3)	
LEVEL 4		4.
Final examination certificate (UPPER VOCATIONAL EDUCATION)	National Vocational Qualification certificate (NVQ, LEVEL 4)	
LEVEL 5		4.
Vocational matura certificate (nation-wide secondary school leaving examination) (SECONDARY TECHNICAL EDUCATION)	National Vocational Qualification certificate (NVQ, LEVEL 5)	
General matura certificate (SECONDARY GENERAL EDUCATION)		
LEVEL 6		5.
Higher vocational education degree (HIGHER VOCATIONAL EDUCATION) ⁶	National Vocational Qualification certificate (NVQ, LEVEL 6)	

⁵ VET qualifications in NQF are placed from level 3 to level 6 (EQF, 3 to 5).

⁶ Pridobi se po letu 1996.

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Certificate testifying to successful completion of master craftsman examination
(SECONDARY GENERAL EDUCATION)
certificate testifying to successful completion of foreman examination
(SECONDARY GENERAL EDUCATION)
certificate testifying to successful completion of shop manager examination
(SECONDARY GENERAL EDUCATION)

The table is based on **exit** (and not entry) parameters. Thus, the table **does not** include the names for types of educational programmes (e.g. elementary **education**, secondary vocational education and similar), but completion of education and learning. Table incorporates TWO SEGMENTS OF QUALIFICATIONS, including appropriate NAMES OF OFFICIAL DOCUMENTS:

- The first segment includes TYPES OF EDUCATION applicants obtain in the state following their successful completion of publicly approved educational programmes.
- The second segment consists of NATIONAL VOCATIONAL QUALIFICATIONS testifying to work related vocational or professional capacity required to perform an occupation at a certain level of difficulty. Applicants obtain them either within the National Vocational Qualifications assessment and validation system or within the formal VET system.

Table does not include or shows supplementary qualifications because these qualifications are not defined at national level yet (see National Report, WP 7, pp. 4-6).

2.1. Methodology for the placement of qualification within the NQF

Methodological parameters for education (1) and national vocational education (2) are not fully identical.

Educational qualifications are described in terms of following parameters:

1. Type of education
2. Duration of education and credit assessment (where applicable)
3. Admission requirements
4. Providers
5. Learning outcomes (NQF levels)
6. Assessment and awarding of a final grade: assessment system, progression, conditions for the acquisition of an official document

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7. Transferability

Example 1:

QUALIFICATION (document)	
Type of education	
Duration	
Admission requirements	
Providers	
Learning outcomes (NQF levels)	
Assessment and awarding of a final grade	Assessment system Progression Condition for the acquisition of an official document
Transferability	

In contrast to the description of educational attainment, no admission parameters are included in the description of National Vocational Qualifications as these are irrelevant. The only exception (could) be admission requirements which are envisaged for some particular National Vocational Qualifications. The parameters indicating characteristics and quality of knowledge assessment and grading are added, which is the key parameter in the system of assessment and recognition of non-formal and informal learning.

Therefore, qualifications are described in terms of the following parameters:

1. Learning outcomes (NQF levels)
2. Admission requirements (when relevant)
3. Assessment
4. Providers (of procedures for the assessment and validation of vocational qualifications)
5. Assessors

Example 2:

QUALIFICATION
(document)

Learning
outcomes in
relation to NQF
descriptors

Admission
requirements

Assessment and
awarding of a final
grade

Providers

Assessors

2.2. Explanations for the learning outcomes

The key data providing the rationale for the placement of both type and individual title of qualification is the **level of difficulty and complexity of a learning outcome**.

It goes without saying that more **detailed descriptions of learning outcomes can be found in curriculum documents**. Thus, there is no reason to copy learning outcomes for placement purposes!

In addition, curriculum documents exhibit big differences. The biggest differences can be observed between both segments of qualifications as well as within individual segment (between grades and types of education):

- a. *Elementary education*: the Organisation and Financing of Education Act and the Elementary School Act exert influence on learning outcome contents with defined educational objectives. Learning outcomes are directly defined by curricula which are elaborated for every subject separately. The level and complexity of knowledge is most evident from operational objectives and standards of knowledge.
- b. *Secondary education*: in addition to the Organisation and Financing of Education Act, the Vocational Education Act and the Gimnazije Act also have an impact on learning outcomes. Educational programmes are of key importance as they already present more detailed educational objectives, and of course operational curriculum documents with different names and formats: grammar schools have curricula,

while VET programmes have curricula (for general education subjects) as well as catalogues of knowledge (for technical modules) based on occupational standards. Learning outcomes are also affected by matura catalogues and examination catalogues.

- c. *Higher education*: educational objectives are stipulated in educational programmes. In addition, every subject (or module) has its own curricula. The Higher Education Act and the Post-secondary Vocational Education Act also impact learning outcomes.
- d. *National Vocational Qualifications*: learning outcomes rest on occupational standards, which are supplemented by two additional documents: catalogues of standards of knowledge and skills as well as examination catalogues, whereas the National Professional Qualifications Act has an impact on learning outcomes.

There are also differences within four categories enumerated above. Big differences can be observed between curricula or catalogues of knowledge:

- e. both in terms of the implementation of learning objectives (relations between general or orientation objectives and operational objectives, form and structure of standards of knowledge)
- f. as well as in terms of structure itself (position and conception of competences, relation between informative, formative as well as upbringing /socialization objectives).

In the light of diversity and variety of solutions characterising the Slovene education and qualification system learning outcome descriptions in the NQF follow the logic devised to serve its purposes:

- it considers the progression of difficulty in accordance with level descriptors at ten levels,
- by analogy three substantive categories are considered (knowledge, skills and competences) based on elaborated definitions. The diversity of understanding and curriculum derivations is especially pronounced in the case of **competences**, which is why it is not possible to directly transfer the description of competences from curriculum documents to the description of qualifications elaborated for the purpose of qualification placement within the national framework.

Descriptions of qualifications (see examples in selected sectors) for the purposes of the Slovene Qualifications Framework are elaborated with the view to SYNTHESIZE key learning outcomes from all relevant legislative and curriculum documents. The outcomes most clearly demonstrating the image of a graduate, depth and breadth of her/his knowledge, aptitude and competence are defined as KEY learning outcomes.

3. Exemplary and tentative assignment of qualifications to NQF, SQF and EQF

Based on the presented qualification structures in the field of **metal, car and electrical sector** (see **WP 7, pp. 5-6**) and above described draft referencing placement of qualification into QF, methodology and use of learning outcomes in Slovenian qualification framework, we are going to place following qualifications into Slovenian qualifications framework.

3.1. Qualification **VEHICLE MECHANIC** in field of Car sector

Learning outcomes and description of qualification: see table 2 below

Level of certificate: NQF LEVEL 4, EQF LEVEL 4 and ISCED level 3 C

Table 2: VEHICLE MECHANIC

QUALIFICATION (certificate)	UPPER SECONDARY VOCATIONAL EDUCATION (a certificate of the final exam)
	Upper Secondary vocational education
Duration period	3-4 years, 180 credits
Admission requirements	Primary school education or lower secondary vocational education
Providers	<ul style="list-style-type: none"> - Vocational schools (which can perform the education programmes in cooperation with the employer and / intercompany education centre) - Centres for education of children and youngsters with special needs (these centres perform programmes tailored to the special needs of students) - Institutions for adult education
Learning outcomes	Knowledge: level 4

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(at the level of SQF)	Skills: level 4 Competences: level 4
Assessment and awarding	<p><u>Assessment system:</u> Examination and assessment are tools which help in determining students' vocational abilities, skills and competences, and their abilities in meeting the requirements for reaching credits in accordance with the educational programme. The assessment also includes the informally acquired knowledge which is duly proven. The students are assessed with grades from 5 (excellent) to 1 (poor).</p> <p><u>Progression:</u> Students' advancement to the next year depends on their success at the end of the school year which includes positive grades in all subjects and modules and successfully completed all other educational obligations determined by the educational programme. The student may be exceptionally promoted to the next year in case s/he has not obtained a positive grade in all subjects or modules.</p> <p><u>Final exam:</u> The educational programme is completed with the final exam by which i determined student's knowledge important for life and work, for further education and student's professional and personal development. The final exam may be taken by everyone who has successfully completed the final year of the educational programme or everyone who has reached the prescribed number of credit and has performed other activities defined with the educational programme.</p> <p><u>Conditions for the acquisition of an official document:</u> Successfully passing the examination.</p>
Transferability	<p>Rights/capability for further education: Vocational and technical education master craftsman exam, foreman exam and shop manager exam (SQF, level 5)</p>

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Example of qualification:

Title of qualification: CAR MECHANIC

Name of the educational programme: CAR MECHANIC

Learning outcomes

Participant in the education process:

<p>Knowledge</p>	<ul style="list-style-type: none"> - Is proficient of a foreign language at the level A2 according to the Common European Language Framework - Is acquainted with the forms, causes and areas of environment pollution as well as with the ways of conducting towards the environment in Slovenia and around the world - Has knowledge in mathematics - Has the basic knowledge of physical, chemical and biological laws and of the methods in examining the phenomena and processes in the nature - Has knowledge in perceiving, defining and producing written and oral non-literally texts. - Understands the art as an area of various genres, its importance to the cultural and creative approach as well as its applicability to the professional, personal and social life. - has a thorough knowledge and understands the principles (laws) in the mechanical engineering. - Acquires the fundamental knowledge in pneumatics, hydraulics, electro technology and electronics. - Knows the component parts, kits, devices and systems of the motor vehicles, materials for their producing and principles of functioning. - Understands the mechanics and technique of the motor vehicles and rolling stocks. - Has professional knowledge of the methods of measurement and control procedures. - Has an ability to realise the characteristics, structure and use of the metal and non-metal structures.
<p>Skills</p>	<ul style="list-style-type: none"> - Has been trained for preparation and performance of the rational intervention on the car - Has been trained for assessment and selection of the most economical methods for elimination of the problems in the car in accordance with customer's expectations, and safety, environmental and security regulations. - Is capable of providing maintenance and service to the car electric and electronic systems. - Plans and perform the checks and repairs of the engine, brakes, steering and electrical systems in the vehicle. - Is capable of diagnosing, installing, maintaining and repairing the constituent parts, units, devices and systems of the motor vehicles. - Has been trained for a correct use of the machines and devices and is acquainted with the regulations for reduction of the harmful effects to the environment.

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	<ul style="list-style-type: none"> - Is trained for various procedures of manual and mechanical procedures for cutting, moulding and combining metals and non-metals. - Knows how to use and draw simple working sketches of machine parts, component sketches of smaller units and schemes in accordance with the standardisation. - Individually uses the information-communication technology from the professional area - masters measure and control processes and applies measure (as well as computer guided) and control devices, tools and machines. - Develops general body endurance, movability, power, coordination of moves, speed, balance and accuracy.
Competences	<ul style="list-style-type: none"> - Is capable of a responsible and fair behaviour in the working environment - Is responsible regarding environment protection, own protection and safety at the workplace - Is trained for team work and cooperation in project works - Is trained for the use of knowledge and competences in new anticipated situations. - Develops the basics of business (costs control and calculations). - Develops a positive attitude towards the artistic and cultural heritage. - Develops capabilities of life-long learning.

3.2. Qualification ELECTRICAL ENGINEERING TECHNICIAN in field of Electrical sector

Learning outcomes and description of qualification: see table 3 below

Level of certificate: NQF LEVEL 5, EQF LEVEL 4 and ISCED level 3 B

Table 2: ELECTRICAL ENGINEERING TECHNICIAN

QUALIFICATION (certificate)	SECONDARY TECHNICAL EDUCATION (vocational matura certificate)
Type of education	Technical upper secondary education
Duration period	4 – 5 years, from 240 to 300 credits
Admission requirements	Completed primary school or lower vocational education
Providers	<ul style="list-style-type: none"> - Secondary technical and professional schools in cooperation with the employers, if a practical work on workplace is defined in the programme - Institutions for education of children and youngsters with special needs

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(provide programmes adopted to the needs of students with special needs)
- Institutions for adult education

Learning outcomes (at the level of SQF)
Knowledge: level 5
Skills: level 5
Competences: level 5

Assessment and awarding System of assessment:
The assessment is a method for defining students' knowledge of the vocational abilities, skills and competence, as well as the way s/he meets the criteria for receiving credits in accordance with the programme. In the assessment of students, the informally acquired knowledge is also considered if the student demonstrates it. The students are assessed with grades from 5 (excellent) to 1 (poor /insufficient)

Progression:
Students' advancement to the next year depends on their success at the end of the school year which includes positive grades in all subjects and modules and successfully completed all other educational obligations determined by the educational programme.

Matura exam:
The education programme is completed with the vocational matura. This is a method of defining students' knowledge in accordance with the goals of the education programmes. The students' success is assessed with: a) points and b) grades – the standard grades are from 1-5 or point grades from 1-8. The candidate successfully completed the vocational matura if s/he obtains all positive grades in all subjects.

Conditions for acquisition of an official document:
Successfully passed vocational matura

Transferability Matura/vocational course, higher secondary education (SQF level 6), upper secondary vocational education (SQF, level 7) and university education (SQF, level 7)

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Example of the qualification:

Title of the qualification: ELECTRICAL ENGINEERING TECHNICIAN

Name of the educational programme: ELECTRICAL ENGINEERING TECHNICIAN

Learning outcomes

Participant in the education process

Knowledge	<ul style="list-style-type: none"> - Is proficient of the foreign language at the level B1 according to the Common European Language Framework, - Is proficient of the Slovenian standard language and consciously applies it in the given communication situations and distinguishes the standard and non-standard use, - Is proficient of the mathematical solving of the technical problems from the professional area and knows to make an analytical and graphical presentations, - Is proficient of the technical terminology, - Is proficient in the technical documentation knowledge, - Knows materials and elements from the areas of electrotechnics, and correctly and safely uses tools, machines and devices, - Knows the fundamental elements of the software, rules for writing programmes and basic knowledge of syntaxes and semantics when writing programmes, - Knows instruments and measure methods for measuring the electrical and other physical values, for element analysis and systems in the area of the electrotechnics - Knows the functioning and maintaining of the electrical systems - Knows the electrotechnical components in the system application for regulations, steering and surveillance, - Knows to work with mechanical and programme equipment that supports the multimedia systems, - Knows the standards, technical regulations and other regulation in the field of electrotechnics in safety at the workplace, - Knows the principles of finance, accounting and bookkeeping and legislation.
Skills	<ul style="list-style-type: none"> - Develops abilities for understanding and communicating in Slovenian and other foreign language. - Uses current information-communication technologies. - Develops general body endurance, movability, power, coordination of moving, speed, balance and precision. - Masters technical-theoretical and practical knowledge and skills that are important for the application of complex tasks. - Masters occupational specific methods of solving tasks, problems and professional decision. - Is capable of planning simpler systems and produces a project work. - Knows the elements of the programming devices and knows how to solve less complex examples with the elements of programming devices.

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Competences	<ul style="list-style-type: none"> - Develops ability for life-long learning. - Cares for the personal development for successful cooperation in society. - Develops abilities for individual critical assessment and responsible attitude. - Develops a consciousness for the security of the environment, rational use of the energy and materials. - Develops a consciousness of work safety and health - Develops skills for project and team work. - Develops innovative and creative thinking. - Develops principles of the business thinking. - Develops communication characteristics.
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3.3. Qualification TOOL INDUSTRY WORKER in field of Metal sector

Learning outcomes and description of qualification: see detailed description in **WP 10** (*Occupational Standard and VET programme - Processor of metals/Toolmaker*)

Level of certificate: NQF LEVEL 4, EQF LEVEL 4 and ISCED level 3 C

4. Sources

Biloslavo, R., Pavlin, S., Skubic Ermenc, K. (2011). Umeščanje kvalifikacij v SOK in ravni SOK v EOK in EOVK. Delovno gradivo. Ljubljana: Center RS za poklicno izobraževanje.

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