

NQF state of play

 **Ukraine 2022**

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Overview

Introduction and context

1.1. Policy context

The NQF is a tool to support lifelong learning and relevant quality assured qualifications in Ukraine, but also serves European integration. Many links have been created during the last ten years between Ukraine and the EU through economic cooperation, labour migration and platform work. The Association Agreement that entered into force in 2017 established the basis for cooperation on the NQF to improve transparency and recognition of qualifications and skills ([1]) The Russian invasion and war in Ukraine resulted in six million people fleeing the war to the EU, millions have been displaced within the country, and millions have started to return to Ukraine. Since June 2022, Ukraine is a candidate country of the EU. Ukraine is now a member of the EQF Advisory Group and is preparing to link its qualifications to those of EU member states, through the referencing to the EQF, active use of EQF and NQF levels and linking data on qualifications and credentials. In the complex context where skills and qualifications are very important for keeping the country functioning, for integration with the EU and for supporting the development and reconstruction of the country, the NQF has gained relevance to promote access to learning, progression and mobility of individuals, and to support lifelong learning.

1.2. NQF legal basis

YEAR LEGISLATION MAIN POINTS WITH RELEVANCE FOR NQF

2011 NQF Decree ([2])	Establishes the NQF, sets objectives and provides level descriptors for a 10 level lifelong learning framework
2012 NQF Implementation Plan 2012-2015	Sets the main activities to implement the NQF Establishes Intersectoral Committee of different public bodies and social partner organisations to monitor and coordinate the implementation
2012 On the professional development of employees ([3])	This law provides the framework for the training and attestation of workers and is the basis for introducing validation of non-formal and informal learning (art.14) by training centres of the employment services and other training providers
2012 On the population ([4])	This law confirmed the right of unemployed people to have the employment of skills they obtained through informal learning validated
2014 Law on HE ([5])	Links concrete qualification types for HE to NQF levels

YEARLEGISLATION MAIN POINTS WITH RELEVANCE FOR NQF

2016 On approval of This order of the Ministry of Social Policy, adopted in 2016, Confirmation of initiated the implementation of validation of non-formal learning the Results of for guards, cooks and welders.

Non-formal

Vocational

Training of

Persons in

Working

Professions[\[6\]](#)

2016 NQF Updates and revises the implementation plan and establishes a Implementationnew intersectoral committee

Plan II 2016-

2020 ([\[7\]](#))

YEARLEGISLATION MAIN POINTS WITH RELEVANCE FOR NQF

2017 Law on Education ([8])	Regulates the education system as a competency-based system, and supports lifelong learning beyond formal education Stipulates that learning outcomes obtained through non-formal and/or informal education are recognized in the formal education system Provides the main principles for regulating the National Qualification System. Refers to the NQF as a systematic structure of competencies based on levels. Linked specific types of qualifications to 11 NQF levels, introducing pre-higher vocational education as an additional level Introduces sectoral qualification frameworks Introduces educational and professional qualifications, the latter as focused on the labour market, the former being the outcomes of formal education and full and partial qualifications. Educational standards are developed according to the National Qualification Framework, professional qualifications are linked to occupational standards Regulates the establishment of the National Qualifications Agency as a collegial body of key ministries and social partners and establishes its functions. The agency supports the introduction of the NQF, participates in regulation of the qualifications system, coordinates stakeholders, provides information to the public and creates and maintains the Qualification Registry; supports the development of occupational standards, participates in the development of educational qualifications, accredits qualification centres that validate the competencies in accordance with professional qualifications, etc. Information about issued documents concerning secondary, VET (vocational), VET (non-tertiary) and higher education is entered into the Single State Registry of Documents about Education (EDEBO) according to the procedure stipulated by the central authority in the area of education and science.
2018 Statute of the National Qualifications Agency ([9])	Defines the composition, operations and functions of the National Qualifications Agency (updated 2019 and 2022)

YEARLEGISLATION MAIN POINTS WITH RELEVANCE FOR NQF

2018 Methodology for developing occupational standards ([10])	National methodology for initiating, developing and approving and registration of occupational standards (updated in 2023)
2019 On Amendments to Certain Laws of Ukraine on Improving Educational Activities in the Field of Higher Education ([11])	Stipulates that the number of qualification levels of the NQF should correspond to the number of levels of the European Qualifications Framework
2019 On making changes to the Charter of the National Agency for Quality Assurance of Higher Education ([12])	After changing the statutes of the National Agency for Quality Assurance of Higher Education describing the functions and composition of the agency, the agency became operational Among other tasks the Agency agrees the standards of higher education for each specialty and establishes a single database of specialisations introduced by institutions of higher education
2020 On making changes to the appendix to the resolution of the Cabinet of Ministers of Ukraine dated 23 November, 2011 No. 1341 ([13])	Introduces the new level descriptors

YEARLEGISLATION MAIN POINTS WITH RELEVANCE FOR NQF

2021 On the approval of the Standard Regulation for qualification centres ([14])

Qualification Centres are authorised by the National Qualifications Agency to evaluate and recognise learning outcomes obtained through formal, non-formal or informal learning, award and/or confirm relevant professional qualifications, recognise relevant professional qualifications obtained in other countries, on the basis of the accreditation of each centre. Qualification Centres are entered into the Register of Qualification Centres as part of the Register of Qualifications. This regulation provides the main tasks, functions and right and responsibilities of qualification centres

2022 On the approval of the Regulations on the Register of Qualifications ([15])

The Register provides information on occupations; qualifications (full or partial, educational or professional), including for professional qualifications - links to the approved occupational standard; for educational qualifications - the list of learning outcomes from the education standard, and information on additional learning outcomes provided for by developers of related educational programmes; approved occupational standards and new applications for occupational standard; accredited qualification centres; including for which professional qualifications they are accredited; list of experts for the accreditation of qualification centres; documents/certificates issued on professional qualifications; list of data registration bodies and international and national classifiers

Submission of documents is regulated by laws on electronic document management and cyber security. All information contained in the Register, except for personal data and information with limited access, is public and open to users.

Policy objectives

2.1. NQF objectives

The objectives of the NQF have evolved over time. It started from the need for more relevant qualifications and quality assurance through European standards, also showing the desire for European integration and especially the link to the Bologna process. Through articulation with education reforms, the NQF is also becoming instrumental in supporting support wider reforms. The NQF supports lifelong learning and education reforms and aims to support a better coordination between education and labour market policies.

On the education side, the NQF supports competency-based education, and quality assurance in a decentralised education system in which providers are more autonomous. For higher education the aim is also to support convergence in the field of higher education within the Bologna process. This is emphasised by the association agreement that also states that the NQF should improve the transparency and recognition of qualifications and skills drawing, where possible, on the EU experience, and by helping young people acquire knowledge, skills and competencies outside the educational systems, including through volunteering, and recognising the value of such experiences. The NQF is clearly an instrument for EU integration. Through European cooperation the vocational training system can be brought more closely in line with the modernisation of EU VET structures via EU instruments. All these developments have been reinforced by the fact that Ukraine is now a candidate country and millions of refugees have moved to European countries and are planning to return to Ukraine.

The links between Ukrainian qualifications and the EQF have been strengthened recently by bringing the number of levels in line with the EQF, the self-certification against the QFEHEA ([16]) and the Comparison of the NQF with the EQF ([17]). Referencing to the EQF, mentioning EQF levels on Ukrainian qualifications and linking the databases of Ukrainian qualifications to Europass, will be the next steps.

On the labour market side, the development of occupational standards and professional qualifications, the introduction of validation of non-formal learning and independent assessment of candidates are seen as the most important tools to ensure that the workforce acquires and keeps up to date with identified skill needs. This is important as there is still a strong mismatch between supply and demand. Changes in the labour market because of the war and wider global developments also require more emphasis on supporting the recognition of the skills of adults, facilitate retraining and upskilling and creating new flexible forms of recognition and smaller qualifications.

2.2. NQF functions

One of the main tasks of the NQF is linking qualifications in the education and training system to the labour market. The NQF Decree described the harmonisation in approaches in qualifications and the education and training system as one of the main functions. Practically, this means that qualifications should be described in

learning outcomes in accordance with the NQF level descriptors and the domains of knowledge, skills, communication and autonomy and responsibility. In higher education this is practiced, with every qualification having a diploma supplement indicating the NQF and EQF level, but NQF levels are not yet widely used in general education and VET.

The NQF aims to be a tool for lifelong learning, so practical measures to improve access and progression are very important, particularly since regular learning paths have been disrupted due to COVID and the war, with many individuals displaced, abroad, or under Russian occupation. The NQF can play an important role in overcoming disruptions and avoiding dead ends. According to the Torino Process report 2023, permeability between learning pathways still leaves considerable room for improvement, particularly regarding VET. More mobility, work-based learning and more ways to assess and recognise skills are some of the measures that have been introduced to improve permeability. An important role here is foreseen for Qualification Centres that support the recognition of non-formal and informal learning through professional qualifications based on occupational standards. There is also a debate around more use of partial qualifications, which exist in legal terms, but which are not used practically, and the introduction of micro-credentials.

New occupational standards are being levelled to support the levelling of professional qualifications. In order to strengthen employability, a continued emphasis has been placed on enhancing educational standards and aligning training content with employers' needs. Where relevant and in particular for VET, post-secondary VET and higher education, qualifications should be based on occupational standards. Stakeholder involvement in the development of standards is mandatory and draft occupational standards need to be endorsed by social partners ([18]).

Core skills and key competencies also play an important role. A list of professional skills and qualifications in times of war has been adopted in 2022 to help meet the needs of employers. The most popular soft skills named by employers are responsibility (92.3%); stress resistance (77.6%); teamwork (72.4%); attentiveness (56.5%); computing skills (49.8%); foreign languages (48.5%); equipment operation (42.6%); learning ability (40.7%); and creativity (35.1%). Additionally, in light of Ukraine's European integration, the importance of understanding European standards and norms was underscored ([19]).

The NQF is also an important tool for recognition of diplomas obtained abroad. Credential evaluators in Ukraine use the EQF and the NQF as important tools to compare qualification levels, learning outcomes and quality assurance approaches ([20]). Building closer links to the EQF, European approaches to quality assurance and credit transfer, to the key competencies to lifelong learning and European competence frameworks are also tools to strengthen links with between the qualification system of Ukraine and those of other European countries. Key competencies play a particularly important role in general education reform, in accordance with the New Ukrainian School concept and in the modernisation of vocational education and reform of higher education.

Levels, learning outcomes and qualifications

3.1. NQF structure and level descriptors

In 2011 when the NQF was adopted, it had ten levels, 0-9. Following article 36 of the Law on Education, an additional level was introduced in 2017. In 2020 these were then brought in line with the EQF, moving from 11 to 8 levels ([21]). Vocational education qualifications are limited to levels 2-5, with several types of qualifications existing at level 5 covering vocational and higher education. HE qualifications span levels 5 to 8. Professional qualifications determined by the classifier of occupations can cover the complete spectrum of the NQF, but as levelling started only recently, in March 2023, we do not yet have professional qualifications at all levels.

There are four domain descriptors than span the eight levels of the NQF:

- a. Knowledge: has to be meaningful and focused on the field of specialisation, so that it can inform conscious, purposeful activities. Knowledge is divided into empirical knowledge (facts and ideas) and theoretical knowledge (conceptual, methodological);
- b. Skills: the ability to apply knowledge to perform tasks and solve problems. The skills/abilities are divided into cognitive skills (including logical, intuitive and creative thinking) and practical skills (including manual skill, the use of practical methods, materials and tools).
- c. Communication: interaction between persons in order to transmit information, coordinate actions, or undertake joint activities;
- d. Responsibility and autonomy: the ability of a person to apply knowledge and skills independently and responsibly.

Domain descriptors are quite similar to the EQF, but are described in greater detail. There are four domain descriptors, while the EQF has three only. The decision to add Communication was informed by the Dublin descriptors of the Qualifications Framework of the European Area for Higher Education[22] and emphasises collaboration with others. Although the concepts used to describe Skills are practically identical, there are more nuances in how the other domains are explained in comparison to the EQF. The definition of Knowledge, for example, focuses on application, while the EQF's definition of Knowledge stresses learning. Though the concepts of Responsibility and Autonomy are very similar in both, the EQF's main focus is on learners, while the Ukrainian NQF focuses on people in general, not just on learners.

3.2. NQF scope and coverage

The NQF in Ukraine is a tool for lifelong learning. Ukraine's legislation defines a qualification as a standardised set of acquired competencies (learning outcomes) recognised by an authorised entity and certified by a relevant document. Qualifications by content are classified into educational and professional, and by volume, into full and partial.

An educational qualification is a set of learning outcomes (educational requirements and competencies) established by an educational institution or other authorised subject of educational activity and certified by a relevant document. Educational qualifications are awarded, recognised and validated by educational institutions or other educational entities.

A professional qualification is a standardised set of acquired competencies (learning outcomes) recognised by a qualification centre, educational entity, or other authorised entity and certified by a relevant document, which allows the person to perform a certain type of work or carry out professional activities. Professional qualifications are assigned, recognised and confirmed by qualification centres, educational institutions and other entities authorised to do so by law. Professional qualifications primarily have a labour market function and are based on the Classifier of Occupations and, where available, on occupational standards.

Both educational and professional qualifications are sets of competencies or learning outcomes. The national qualifications system provides coherence between educational and professional qualifications and their compliance with labour market needs, and creates mechanisms for the recognition of qualifications acquired throughout life.

The qualification is considered complete if the person acquires a complete set of competencies defined by a standard. The qualification is considered partial if a person acquires part of the competencies defined by a standard. In principle for all qualifications, learning outcomes required can be achieved in formal, non-formal or informal settings.

Vocational education and higher education can, in a number of cases, lead to both educational and professional qualifications.

General education qualifications cover the following types: certificate of basic secondary education for special needs students, the certificate for basic secondary education and the certificate for complete secondary education, covering levels 1, 2 and 3 of the NQF ([23]). The certificate for complete secondary education is due to be placed at level 4 of the NQF soon to bring it in line with the agreed placement of end of school qualifications, giving access to higher education.

VET qualifications correspond to NQF levels 2, 3, 4 or 5. They include the diploma of skilled workers and the certificate of workers' assignment qualification - each spanning different levels; level 2 only for some certificates and level 5 only for some occupations. There is also the diploma for pre-higher education or professional junior bachelor (formerly junior specialist), at level 5.

Qualifications for higher education include junior Bachelor (level 5), Bachelor (level 6), Master's degree (level 7) and Doctor of Philosophy, Doctor of Arts and Doctor of Science (level 8). Different types of professional qualifications have not yet been specified.

Partial qualifications have been legislated and are already used in the recognition of professional qualifications, but not yet in the formal education system. There is a discussion to introduce micro-credentials, which have been piloted in some projects,

but they are not legislated yet.

The table below was one of the outcomes of the Comparison process of the EQF and the NQF and provides an overview of the qualification types per NQF and EQF level.

Table 1. **Overview of the National Qualifications Framework in Ukraine**

EQF Level	NQF Level Ukraine	Formal Education Qualifications	Professional qualifications
General secondary education	Vocational education and training	Pre-higher Professional Education	Higher education
8	8		Doctor of Philosophy Doctor of the Arts
7	7		Master
6	6		Bachelo
5	5		Diploma of skilled worker Certificate of skilled worker Professional Junior Bachelor (formerly Junior Specialist) Junior Bachelor
4	4	Certificate for complete secondary education ⁽¹⁾	Diploma of skilled worker Certificate of skilled worker
3	3		Diploma of skilled worker Certificate of skilled worker
2	2		Certificate of skilled worker
1	1		

3.3. Use of learning outcomes

In the Ukrainian NQF decree, learning outcomes are understood as covering a wide range of abilities, which makes their definition close to that of competence. In practice, learning outcomes are used as expected and planned (in qualification documents, standards, educational programs, etc.). 'Competence' is understood as a

person's proven ability to apply the achieved learning outcomes. The guidelines for developing higher education standards ([24]) describe competencies as open-ended and learning outcomes as measurable, assessable or observable.

Learning outcomes and competencies (the terms are sometimes used interchangeably) are a central part of education and training reforms in Ukraine. Learning outcomes have been introduced gradually since the early 2000s, but the real push came after they were legislated in 2014 and 2017 through the laws on higher education and education. It is mandatory to use learning outcomes for each new qualification. The Law on Education ([25]) regulates the use of learning outcomes in state educational standards and educational programmes. State educational standards specify mandatory learning outcomes in line with NQF level descriptors. This link with the NQF is checked during the approval process of these state standards. Educational programmes and individual qualifications are developed from state educational standards, and are, therefore, indirectly linked to the Ukrainian NQF. Learning outcomes are used in all standards. Procedures for the development of qualifications include the use of occupational standards, involvement of relevant stakeholders and external review by quality assurance bodies.

Occupational standards are used increasingly to guarantee the relevance of qualifications. By the end of July 2023, 282 modern occupational standards were included in the register, and this work is continuing. Occupational standards describe labour functions that group different learning outcomes. Learning outcomes are used for assessing professional qualifications, and where they exist for developing VET qualifications and higher education qualifications. Since September 2021, a methodology for levelling occupational standards exists that evaluates the learning outcomes (based on the standard as a whole) in each of the four domains (Knowledge, Skills, Communication, Autonomy and Responsibility); and assessment of learning outcomes for each group of labour functions (for each partial qualification) in each of the four domains. Professional qualifications are awarded by authorised awarding bodies (qualifications centres) on the basis of occupational standards. This can be done after a training programme as well as through the validation of non-formal and informal learning, based on an assessment of achieved learning outcomes by individuals and measured against the learning outcomes in a relevant occupational standard ([26]).

In higher education, the Law on Higher Education (2014) ([27]) linked higher education qualifications to the NQF, linked learning outcomes with quality assurance arrangements and introduced the diploma supplement that describes the learning outcomes of individual qualifications. In higher education, the use of learning outcomes is obligatory for educational programmes to be accredited ([28]). Assessment of learning outcomes is addressed in higher education standards ([29]) and related programmes. General requirements for the types of higher education qualifications (junior bachelor, bachelor, master, doctor of philosophy) are defined by the Law on Higher Education (Article 5). The formulation and use of learning outcomes are described in the methodology for developing higher education standards. All standards of higher education at all levels should contain a clear formulation of learning outcomes both at the level of the programme and for each individual discipline. Universities have published these learning outcomes in their course catalogues. Learning outcomes for higher education specialties are defined

nationally and programme learning outcomes are defined by higher education institutions. These learning outcomes include a description of the suitability for employment, problem-solving competence, adaptability, abstract thinking, problem-analysis, knowledge application, generating ideas, communication, project management and working with others, professional competencies of the specialty, and specific programme learning outcomes. The programme outcomes consider the requirements of the standard for the specialty, the relevant occupational standards and the general competencies that are defined at the level of the higher education institution. For each programme, a project team is established that defines the portrait of the future specialist with a list of competencies, determines specific learning outcomes, selects the best ways to provide students with opportunities to acquire these competencies and chooses the most effective forms of evaluation.

In general education, the New Ukrainian School concept reduced the curriculum from 19 subjects to 9 broader areas. State standards for primary, lower secondary and upper secondary education ([30]) set out the requirements for compulsory learning outcomes including key competencies and specific learning outcomes and benchmarks for the assessment of nine educational fields (language and literature, mathematics, natural sciences and technology, information technology, social and health care, history and civic studies, arts, and sports). The focus is first on maths and reading and literacy competencies and gradually integrates other descriptions of core competencies such as entrepreneurial competencies in line with the European EntreComp ([31]) framework and digital competencies in line with DigComp framework ([32]). These define model curricula that schools can adopt or adapt in order to make their own curricula. The Civic Education competence developed by the Council of Europe has also been integrated. Ukraine participated in PISA for the first time in 2019. It has used the PISA's concepts of reading, maths and science to inspire learning outcomes for lower secondary. Reading ability, for example, refers to finding information, understanding a text and evaluating and interpreting what has been read.

In formal VET, the first outcome-based educational and professional programmes date back to 2013 when the methodology for developing state VET standards for specific working professions was approved. A system-wide approach only came into force in 2021 with guidelines for the development of VET standards according to the competence-based approach. The new model of standards for VET ([33]) requires that learning outcomes describe key and professional competencies derived from occupational standards. Labour functions (units of occupational standards) can be used as the basis for units of learning outcomes and modular curricula. Learning outcomes-based curricula are gradually introduced. There are currently 71 such state standards ([34]). The idea is that the learning outcomes approach can be used more flexibly, allowing for alternating curricula in which training in schools and training centres is combined with authentic learning in the workplace. Educational programmes contain compulsory and optional elements, so that learners can tailor the programmes to better suit their needs and interests. Units of learning outcomes can facilitate entrance control and shorten VET programmes and make them more attractive for adults. So far, only full programmes are assessed; partial qualifications cannot be obtained in formal vocational education and training.

3.4. Quality assurance arrangements

Quality assurance has been a main objective of the NQF. All qualifications should define minimal requirements for the learner/holder in terms of learning outcomes. Educational qualifications should promote competency-based education and include key competencies. The systematic use of occupational standards is a guarantee to make qualifications relevant for the labour market.

New approaches are used for elaborating occupational standards, educational standards, and curricula (educational programmes). The focus has been on bringing standards more in line with European practices, moving from a curriculum focused subject-oriented approach to an outcome-based modular approach, strengthening the relevance of standards, strengthening assessment processes and programme accreditation of providers.

The most important quality assurance principles are legislated and safeguarded by two new institutions, the National Agency for Quality Assurance in Higher Education (NAQAHE), and the National Agency for Qualifications (NQA), both operational since 2019. Accreditation in Higher Education is aimed at programmes rather than institutions. Programme accreditation is also foreseen in vocational education, by verifying that programmes are in line with the state educational standards. The National Agency for Qualifications accredits qualification centres that deal with independent assessment of professional qualifications, including the validation of non-formal and informal learning. Independent assessment should ensure that individuals meet the learning outcomes in the standards. This can facilitate autonomy of providers for learning and set safeguards for assessment.

Qualifications that belong to the Ukrainian NQF are developed based on educational or occupational standards. The Ministry of Education and Science ([35]) is responsible for the development and approval of educational standards as well as the methodology for their development. Educational standards specify requirements for mandatory competencies and learning outcomes[36]. Educational programmes are developed based on the respective educational standards. During examination of higher education standards, compliance of the learning outcomes with the NQF descriptors is verified. The compliance of educational programmes with educational standards is confirmed during accreditation (in higher education) or programme approval (in general education and VET).

Occupational standards define requirements that match workers' skills and are used in the development of professional qualifications, VET and higher education standards. They are developed by relevant stakeholders, submitted for wider consultation and approved by the Ministry of Economy, while the National Qualification Agency or joint representative body of employers oversees their development ([37]). After approval they are registered in the Register of Qualifications. Occupational standards need to be updated regularly.

Procedures for the quality assurance of the education provision include internal (institutional) and external quality assurance with regard to education, as well as quality assurance with regard to quality assurance bodies ([38]). The bodies responsible for external quality assurance and their main function are listed below:

- a. the Ministry of Education and Science is responsible for the licensing of education providers;

- b. the State Service for Education Quality is responsible for the institutional audit, state control and monitoring, authorisation of VET institutions and their programmes, accreditation of pre-higher professional programmes, and approving educational programmes in general education;
- c. the National Agency for Quality Assurance in Higher Education is responsible for the accreditation of higher education programmes;
- d. the National Qualifications Agency is responsible for the accreditation of qualification centres dealing with the independent assessment of professional qualifications, including the validation of non-formal and informal learning.

In general education, model curricula are developed by the Ministry of Education and Science, based on state standards in secondary education ([39]). These have been informed by international competence frameworks such as DigComp ([40]) and EntreComp ([41]). In particular, the acquisition of key competencies is emphasised. All programmes are expressed in terms of learning outcomes, and programmes in general education are based on the model curricula. They must be approved by the State Service for Education Quality ([42]). General education providers are subject to licensing by regional educational authorities.

VET programmes are based on State VET Standards that are developed for specific occupations using occupational standards, if available ([43]), and involve stakeholders. The standards are approved by the Ministry of Education and Science after validation by the Ministry of Economy and other relevant public authorities in consultation with the joint representative body of employers. VET providers are authorised for specific programmes by the State Service for Education Quality's accreditation commission, which includes ministerial representatives, other public institutions, educational institutions, and social partners.

Professional qualifications issued by Qualification Centres are based on occupational standards ([44]) and are awarded according to the established procedure for assessment ([45]). The National Qualifications Agency accredits Qualifications Centres for specific professional qualifications ([46]).

Assessment of learning outcomes is an integrated part of quality assurance arrangements. In Ukraine, learning outcomes are mainly assessed for full qualifications. Assessment of learning outcomes is addressed in higher education standards ([47]) and related programmes. Occupational standards are used for assessing professional qualifications. This assessment can also focus on a set of competencies. In general education, learning outcomes and benchmarks for assessment are defined in the State Standards of Secondary General Education.

In formal VET, only full programmes are usually assessed, but partial qualifications can be assessed, including for retraining or upskilling purposes.

Institutional arrangements and stakeholder involvement

4.1. Governance and institutional arrangements for the NQF

In Ukraine, the policy lead for the NQF is with the Ministry of Education and Science and the Ministry of Economy of Ukraine. Two other bodies have been created especially to support the implementation of the Ukrainian NQF: the Interdepartmental Committee for the implementation of the NQF and the National Qualifications Agency.

Interdepartmental Committee for the implementation of the Ukrainian NQF

Established in 2010 to support coordination in developing the Ukrainian NQF, the Interdepartmental Committee (working group) was operational until 2019 and involved all the main stakeholders in developing and implementing the NQF in Ukraine. The working group was composed of representatives of all relevant ministries in the area of qualifications, Parliamentary Committees for Education and for Social Policy, Social Partners, the Chamber of Industry, State Employment Service, State Statistics Service, scientific research institutes and NGO's. It was responsible for preparing the NQF and for supporting its implementation, including ensuring interaction and coordination between stakeholders and institutions, preparing recommendations for mechanisms designed to implement the NQF, and engaging in developing legislation ([48]).

The National Qualifications Agency (NQA)

The National Qualifications Agency ([49]) was legislated through the Law on Education in 2017 ([50]). It was established in 2019 as a tripartite collegial body to strengthen coordination in the area of qualifications. It was co-founded by the Ministry of Education and Science, the Ministry of Economy and the Ministry of Social Policy in cooperation with social partners at the national level. The agency is the main body supporting the Ukrainian NQF implementation and the development of the professional qualifications system.

Stakeholder involvement

Since the beginning, many stakeholders have been involved in the development and implementation of the NQF and the qualification system, including the Cabinet of Ministers, the Ministries of Education and Science, of Economic Development and Trade, of Social Policy, of Regional Development, of Finance, of Culture, and of Agriculture and the Verkhovna Rada (Ukrainian Parliament), the National Academy of Pedagogical Sciences, the Academy of Sciences, the Institute of the Modernisation of Education, the State Employment Service, the VET Research Institute, regional training and methodological centres, the Federation of Employers, the Confederation of Employers, the Chamber of Industry, Professional Bodies, Economic Clusters, the Federation of Metallurgists, Sector Committees, lead enterprises, the State Railways, trade unions, universities, the ENIC NARIC centre, the National Agency for Quality Assurance in Higher Educations, NGO's such as the Institute for Professional Qualifications, and different training providers.

4.2. Roles and functions of actors and stakeholders

The Ministry of Education and Science is the main policy body in the area of qualifications. It has been collaborating closely with the Ministry of Social Policy and the Ministry of Economy and Trade. The Ministry of Social Policy has been in charge of developing and implementing validation of non-formal and informal learning, occupational standards, the Classifier of Professions, guidance and counselling, but many tasks have been taken over by the Ministry of Economy and Trade while others are transferred to the National Qualifications Agency. Article 38 of the Law on Education legislates the National Qualifications Agency as a collegial body, co-founded by government and social partners to strengthen coordination in the field of qualifications. According to the law, the National Qualifications Agency has 17 tasks ([51]).

The Agency:

- a. participates in the development of normative legal acts in the field of qualifications;
- b. ensures the interaction, coordination and efficiency of stakeholders in the field of qualifications;
- c. accompanies the introduction of the NQF in compliance with the requirements of the [Law on Education](#)
- d. carries out international cooperation in the field of qualifications, in particular with the aim of harmonising the NQF with similar international instruments;
- e. coordinates the assessment on effectiveness of state policies in the field of qualifications;
- f. provides forecasting of labour market needs for the adaptation and development of qualifications;
- g. provides information support to the NQF implementation;
- h. creates and maintains the Register of Qualifications;
- i. prepares a procedure for the development, commissioning and revision of occupational standards and submits it to the Cabinet of Ministers for approval;
- j. registers occupational standards and ensures open access to standards;
- k. coordinates the development of occupational standards;
- l. participates in the development of education standards;
- m. accredits qualification centres;
- n. develops criteria and procedures for the recognition of professional qualifications obtained in foreign countries;
- o. establishes requirements for procedures to award professional qualifications and, recognises results of non-formal and informal learning;

- p. interacts with quality assurance bodies and institutions of education;
- q. exercises other powers provided for by law.

The [statute of the National Agency for Qualifications](#) ([52]) was approved by the Cabinet of Ministers of Ukraine on 5 December 2018 and [revised in 2019](#) and 2022 ([53]). In accordance with paragraph 13 of the Statute of the NQA the agency has a board of 12 members, two each representing the Ministry of Education and Science Ukraine, the Ministry of Social Policy of Ukraine, and the Ministry of Economy and Trade, with three each from the Joint representative body of employers' organisations and the Joint Representative Body of All-Ukrainian trade union associations. In essence, the NQA is an institution of social dialogue. The NQA board was approved by a decision of the Cabinet of Ministers of Ukraine in April 2019. The tenure of the board was an initial three years, but has been extended to five years, although some original members have been replaced. The NQA became fully operational in November 2019, when it was registered as a state organisation in the Unified State Register of Legal Entities, natural persons-entrepreneurs and public formations. This allowed the Secretariat of the Agency to commence with its activities.

The key priorities for the first three years were:

- a. establishing communication and institutional ties with domestic and foreign stakeholders;
- b. developing the legal aspects and settings such as qualification (examination) centres;
- c. revising the process for developing occupational standards;
- d. launching the national register of qualifications, including its regulatory basis;
- e. identifying qualification needs in line with changing labour market demand;
- f. developing a new edition of the Classifier of Occupations.

The first three priorities have been fully achieved, the third is ongoing, with the last two priorities still at an early stage.

Recognising and validating non-formal and informal learning and learning pathways

5.1. Recognising and validating non-formal and informal learning and learning pathways

Implementation of VNFIL began under the responsibility of the Ministry of Social Policy and the State Employment Service. Three occupations, those of cook, guard and welder, were identified for implementation in three locations (Odessa, Rivne and Kiev), but between 2016 and 2022 only cooks received certificates via validation. By 2022, before the first qualification centres became operational, [650 people had become qualified](#) ([54]) across the three centres.

Although the years 2022 and 2023 were greatly affected by the war, a new chapter began in the validation of non-formal and informal learning, with the establishment of qualification centres. In 2021 the regulations of the accreditation of qualification centres were adopted. This opened the way to start the accreditation process and establish qualification centres for specific professional qualifications. The first qualification centres were established based on the training institutions that were already involved in the validation of cooks.

The law on professional development of employees (Law No 4312 of January 2012) introduced the establishment of recognition centres by the State Employment Service. In order to verify the employee's professional qualification, the recognition centres should work with training centres of the State Employment Service, VET institutions, enterprises, and other providers licensed to carry out educational activities for certain occupations. The certificate to be awarded could be for specific professional skills or for improvement. The procedure for evaluation was determined by the Ministry of Social Policy in consultation with the Ministry of Education and Science. In 2012 a new Law on Employment was adopted that stated that unemployed people are entitled to have their skills assessed. This legislation was followed by other regulations providing further guidance for implementation. In May 2013, the Cabinet of Ministers adopted the Resolution 'On the Procedure for validation of blue-collar occupations, non-formal and informal learning outcomes' Number 340. This was followed in December 2013 by Ministry of Social Policy Order Number 875/1776 which sets criteria for (private) assessment centres and the ministerial order 886 which sets list of occupations for assessment. During 2013-2014 the first pilot in Validation of Non-Formal and Informal Learning for Cooks was undertaken. The system became operational only in 2016 through Order Number 256 of the Ministry of Social Policy. The Odessa and Rivne training centres of the State Employment Services and the Higher Commercial College of the National Trade and Economic University in Kiev acquired the status of assessment centres. The latter was replaced by Higher Vocational School No 33, which has since seen the highest number of candidates.

As with the European guidelines and the VNFIL recommendation, a typical validation procedure consists of identification, documentation, assessment and certification according to 'The Guidelines on the process of assessment and recognition of the

outcomes of non-formal vocational training'. Successful candidates receive certificates approving the skills level (rozryad) ([55]) for the occupation of cook, which encompass skill levels three to six. This certificate is recognised by their employers.

The 2017 Law on Education has a strong focus on lifelong learning and makes several references to the recognition of non-formal and informal learning. The Law mentioned the establishment of Qualification Centres authorised to assess and recognise the learning outcomes for professional qualifications including those acquired through non-formal and informal learning (Article 34). The Ministry of Education and Science approved a typical regulation on Qualification Centres in April 2021 as the basic national regulatory document on validation that defines the main tasks and functions of Qualification Centres. The Qualification Centres are responsible for assessing and recognising learning outcomes acquired through formal, non-formal or informal education or by assignment and/or the confirmation of relevant professional qualifications, as well as the recognition of relevant professional qualifications obtained in other countries. Professional qualifications are based on occupational standards. By demonstrating that individuals have achieved the learning outcomes/competencies in a given occupational standard, they can obtain the corresponding professional qualification. Sometimes, they can only demonstrate a certain skill level or labour function within the occupational standard, in which case they can obtain a partial qualification. The qualification centre can confirm partial or full recognition of professional qualifications. In principle, professional qualifications can be awarded through the validation of non-formal and informal learning for all existing occupational standards, except for regulated professions.

By the end of July 2023, in the first year of operation, 31 qualification centres have been established, (20 having been accredited by the National Qualifications Agency and 11 that have received exemption of accreditation during martial law, in accordance with the Cabinet of Ministers Resolution 314 of 18 March 2022). These centres together issued 1 504 certificates for professional qualifications for a wide range of occupations. The period when validation existed for cooks only is in the past. In total, existing centres can now award certificates for 148 different professional qualifications. This number is increasing month by month. This evolution can be followed on the website of the National Qualifications Agency ([56]).

Generally, qualification centres operate within a specific sector. Centres may be a legal entity or an accredited division of a legal entity. The procedure on accreditation of qualification centres ([57]) was approved by a Resolution of the Ukrainian Cabinet of Ministers in September 2021. According to this resolution, the National Qualifications Agency is authorised to give accreditation to qualification centres.

The procedure for assessing, recognising and awarding professional qualifications in Qualification Centres includes:

- a. the qualification centre accepts the application for the professional qualification and other supporting documents submitted by the applicant on the acquired learning outcomes;
- b. an interview takes place with the applicant regarding the acquired learning outcomes, and relevant knowledge of occupational safety for the given occupation;

- c. based on the interview a decision is made on the possibility of conducting the assessment;
- d. the assessment is carried out; and
- e. based on the results, a decision is made regarding the confirmation procedure and issuance of the relevant document.

In cases where occupational standards are the basis for formal education, there is no need for assessing, recognising and awarding the professional qualifications in a Qualification Centre. Formal education graduates will receive a corresponding educational qualification in those cases.

According to a study jointly initiated by the State Employment Service of Ukraine, the Federation of Employers of Ukraine, the Ministry of Education and Science of Ukraine, the Solidarity Fund Poland, the European Bank for Reconstruction & Development, and the EU4Skills Programme 'Better Skills for Modern Ukraine', confirming full or partial professional qualifications in qualification centres emerged as the most prevalent form of employee training in 2022. The introduction of Qualification Centres proved instrumental in addressing staffing needs in sectors experiencing significant personnel shortages, such as the mining industry, utilities, and state-owned enterprises for housing and communal services ([58]).

Although the Qualification Centres and the issuing of professional qualifications are the most advanced and visible part of VNFIL initiatives in Ukraine, the Law on Education (2017) states that educational, professional and partial qualifications can be awarded on the basis of formal, non-formal and informal learning and that the state provides relevant services to facilitate this. In formal education, therefore, arrangements must be in place to validate non-formal and informal learning.

Some of these arrangements already existed before the Law on Education was adopted. This is particularly true for general education, where the possibility of taking external exams and following a personal programme always existed.

In VET, since 2014 an admission control procedure (*vhidnij kontrol*) ([59]) has been developed, adopted and introduced. It allows training institutions that also provide opportunities for professional upskilling and reskilling to shorten training periods based on experience. It seems quite widespread. Many examples can be found online from VET institutions and regional methodological centres for a wide spectrum of different profiles. Unfortunately, there is no central system to monitor its implementation.

In higher education and pre-higher vocational education developments are more recent. In accordance with the Law on Education requiring providers to make arrangements for the recognition of learning outcomes, obtained through non-formal and informal learning, the National Agency for Quality Assurance in Higher Education introduced accreditation requirements for validation that required higher education institutions to develop their institutional arrangements. However, these were not immediately translated into new practices. In the meantime the Ministry of Education and Science established a working group to develop a framework approach for validation in higher education and pre-higher vocational education. This has led to

ministerial order No. 130 of 8 February 2022 'On approval of the Procedure for recognition in higher and professional pre-higher education of learning outcomes obtained through non-formal and/or informal learning' ([60]). The order defines:

- a. general requirements
- b. the type of institutions and persons to whom it applies
- c. list and sequence of the validation and recognition procedures
- d. requirements for educational institutions
- e. application process and identification of appropriate learning outcomes
- f. assessment procedures
- g. how the outcomes affect the further learning.

Recognition may not exceed more than 25% of the learning programme, with two exceptions: a maximum of 35% in the case of IT, and a maximum of 50% for military sciences, national security, state border security (by amendment of December 2022). As in the case of the admission control in VET, the implementation is delegated to the level of providers that are developing their own arrangements. Thus, there is no overview on its current state of implementation.

5.2. Credit systems

In higher education ECTS is used. Apart from modules (units of learning outcomes) used in VET and higher education, there are partial qualifications for integrating different target groups into learning and the labour market. These include Ukrainian language proficiency tests. This modularised approach is opening the opportunities for a credit-based approach, but this is not yet currently on the agenda.

It seems clear that Ukraine has been inspired by European and international developments. There is a growing interest in micro-credentials in Ukraine. The National Qualifications Agency has initiated a public discourse and consultation on the introduction of micro-credentials. The academic community is also actively exploring the use of micro-credentials. The Law on Education has introduced partial qualifications, but these exist primarily on paper. It is however felt that with an increasing need for retraining and upgrading Ukraine could benefit from micro-credentials. ETF has been supporting their use in a pilot for reconstruction skills in the Dnipropetrovsk region ([61]).

5.3. Promoting lifelong learning

The NQF has become a policy instrument that is clearly changing education, training and lifelong learning policies.

The NQF was adopted by [Resolution No 1341 of the Cabinet of Ministers on 23 November 2011](#), confirming the NQF as a ten-level framework for lifelong learning, covering all learning from preschool to PhD, including adult learning. It was a unique framework at the time as it started from the first stage of learning at level 0, before the start of compulsory general education. The NQF facilitates higher education

reform, the reform of general and vocational education, lifelong learning and better coordination between education and labour market policies. In particular, it should provide coherence between educational and professional qualifications and their compliance with labour market needs and should create mechanisms for the recognition of qualifications acquired throughout life.

In 2017, the Law on Education reinforced the NQF as a tool to support lifelong learning, with a stronger focus on competencies, and on more relevant qualifications. It provided a much stronger legal framework for the NQF as a pillar for wider education and training reforms, moving towards a competency-based education system. It is very significant that the law places a strong emphasis on learners, and on the right to education and lifelong learning, including the possibility to follow individual learning programmes.

The strong emphasis on learning outcomes is integrated in national methodologies for developing occupational standards and new educational standards formats, and methodologies have been developed and are being implemented for higher education, general education and vocational education. The National Qualifications Agency organises annually a Forum on Human Capital Development, where the state of lifelong learning is discussed with representatives of many key institutions and stakeholders. Validation of non-formal and informal learning is developing.

It is expected that Ukraine will soon adopt a Law on Adult Education. The law should regulate the system of adult education, ensuring its mid-term development. The draft law builds on EU and Ukrainian experience and on the main recommendations on the development of lifelong education and adult learning. It identifies the components of the adult education system. It emphasises opportunities for the personal and professional development of individuals including social activities, that support economic and social developments at community, regional, and state level. It describes mechanisms supporting the establishment of a network of service providers in the field of adult education, diversification of activities, wide involvement of civil society, competition of educational programs, quality assurance of educational services, and recognition of learning outcomes obtained, in particular, through non-formal education. It describes the duties, powers and responsibilities of the state, of employers and of citizens. Local authorities and the state guarantee access and active participation in adult education. The role of the state is about promoting, facilitating and supporting adult education. Local authorities facilitate and ensure implementation, employers ensure the professional development of employees and citizens inform themselves about opportunities and participate in adult learning in order to keep themselves up to date. The legal basis for adult education centres is described in the law, and will be implemented in a decentralised way at local and regional levels. The state facilitates financial support and soft loans for adults to participate in adult education.

The current developments are an important step in the right direction, but the war, global developments and the impact of COVID have resulted in huge changes in the labour market, which has become much less predictable and more difficult to regulate. There is a need for flexibility and for recognising and combining learning experiences. There is a need to carefully evaluate the use of professional and educational qualifications on lifelong learning opportunities and adult learning,

including pathways from professional to educational qualifications and vice versa, and the possibility to use partial qualifications to accumulate learning experiences supporting horizontal or vertical progression.

Partial qualifications deserve more attention as they can be building blocks for lifelong learning and personalised pathways. In this sense there is a need to consider the position of micro-credentials in the NQF and the NQF register. Career guidance and counselling and lifelong learning opportunities will need to be integrated with the new qualifications system. There is a need for more information online to support individuals in making career decisions. It is therefore important that the register of qualifications becomes fully operational, bringing together all educational and professional qualifications, indicating how and where they can be obtained, and what career opportunities they may lead to.

NQF implementation and impact

6.1. Stage of implementation

Key legislation has been passed. The National Qualifications Agency has been established and is operational. New competency-based standards are used in general education, vocational education and training, and in higher education. The NQF is self-certificated against the Qualifications Framework of the European Area for Higher Education and compared to the EQF. The validation of non-formal and informal learning is operational for a growing number of occupations as more and more qualification centres are established. The NQF is also a tool for recognition, through the link with the EQF. However, the NQF is not fully operational yet.

Placement of qualifications in the NQF is not yet complete. The NQF register contains only data on occupational standards, qualification centres and professional qualifications. Educational qualifications are not part of the register yet, they are contained in the Single State Educational Database (EDEBO). It is difficult to link and compare educational and professional qualifications. Qualifications for general education are not levelled yet, while the levelling of vocational qualifications commenced in 2020. The data in the register are not interoperable allowing a link between data on qualifications and learning and career opportunities and providers, and there is thus far no link with the Qualifications Data Register, linking Ukrainian qualifications to those of other European countries. In education, partial qualifications are not yet being used in a significant way. The NQF has not yet been referenced to the EQF. In the labour market the *rozryadi*, skills or wage levels inherited from the Soviet tariff-qualifications system still play a prominent role, rather than the NQF levels. The NQF is meant to be a tool for more relevant and quality assured qualifications, but the descriptors play only a partial role in quality assuring qualifications.

6.2. Indicating EQF/NQF levels

NQF level descriptors have been brought into line with the EQF in 2020. Mentioning NQF levels on qualifications is the most tangible information for end users and employers. Ukrainian higher education qualifications have a clear reference to the NQF, and this has recently started also for vocational education qualifications, but this is not yet the case regarding qualifications for general education. Diploma Supplements in Ukraine follow the European format and contain information on the NQF level and corresponding QF EHEA levels, including even the EQF levels ([62]), although EQF levels should only be formally indicated after the referencing of the NQF to the EQF. As stated above, general education qualifications do not yet have NQF levels, while they have been recently introduced for new vocational education qualifications. Occupational standards are being levelled to the NQF since 2022, which facilitates the levelling of professional qualifications. There are plans to establish a digital credential register that would include Diploma Supplements in electronic format. Certificate supplements for Vocational Education Qualifications do not yet exist.

Ukraine became a Candidate Country in June 2022 and has joined the EQF Advisory

Group. In December 2022, Ukraine completed the self-certification against the Qualifications Framework of the European Area for Higher Education, and in February 2023 it completed the Comparison of the NQF with the EQF. Ukraine can begin preparations for referencing the Ukrainian NQF to the EQF. All qualifications that are considered part of the NQF should be levelled and become part of the register.

6.3. NQF dissemination

Information about NQF in Ukraine is communicated via:

- a. official websites (NQA, Ministry of Education and Science, Ukrainian ENIC, educational institutions, other interested organisations);
- b. social networks (e.g., NQAs' Facebook pages, other interested organisations);
- c. organising conferences, forums, round table discussions (NQA, interested educational institutions and other organisations); special reference should be made here to the yearly Human Capital Development Forum organised by NQA.
- d. visual materials and presentations (Ministry of Education and Science, Ukrainian ENIC);
- e. reference to an NQF level in Diploma Supplements.
- f. In Ukraine, the National Qualifications Agency (NQA) is primarily responsible for communicating on the NQF ([63]). The NQA website ([64]) includes sections with information about the national qualification system, resources, links to useful sources, related legislation, key documents and publications.
- g. NQA was recently established as the EQF NCP ([65]) and launched an NCP website ([66]).

The [Ministry of Education and Science](#)'s website provides information on the Ukrainian NQF implementation, including visuals representing the NQF, analytical and informational materials, sectoral councils, relevant legislation and reports. The Ministry also maintains online repositories of educational standards:

- a. General secondary education state standards ([67])
- b. VET standards ([68])
- c. Professional pre-higher education standards ([69])
- d. Higher education standards ([70])

The [Single State Educational Database](#) (EDEBO)[71] includes registers of educational establishments, educational credentials that have been issued, independent external certificates for access to higher education, student cards, and teachers who have been certified. The database allows for the verification of educational credentials that have been issued.

The ENIC-NARIC website ([72]) includes a visual representation of the NQF ([73]) and a description of Ukraine's education system ([74]). It also provides information about

relevant legislation and the NQF self-certification report.

The NQF is not yet used by career information and guidance services. Career guidance and counselling and lifelong learning opportunities will need to be integrated with the new qualifications system.

6.4. Qualifications databases and registers

The Law on Education foresees that the National Qualifications Agency will establish the register of qualifications. Before NQA was set up, a prototype of the register was developed with support of ETF that is compatible with Annex VI of the EQF Recommendation of 2017. Existing qualifications have been analysed and mapped.

A single national register of qualifications was adopted through a [regulation](#) of the Cabinet of Ministers on 16 June 2021

According to the regulation, the Register will provide information about:

- a. professional and educational qualifications, and qualification centres, providing open access within the registry
- b. occupational standards and standards under development, providing open access within the registry
- c. professional qualifications and part-qualifications that have been awarded to individuals (credentials), with limited access to respect privacy regulations.

The register ([\[75\]](#)) is available on the NQA website but is not yet fully operational, as educational qualifications have not yet been brought together with professional qualifications in a single database.

Below is an overview of the type of information that is expected to be part of the register:

Occupational standards, professional qualifications and qualification centres

Occupational standards define requirements that match workers' skills and are used in the development of professional qualifications, VET and higher education standards. They are developed by relevant stakeholders, submitted for wider consultation and approved by the Ministry of Economy, while the National Qualification Agency or joint representative body of employers oversees their development ([\[76\]](#)). After approval they are registered in the Register of Qualifications. The register contains basic data on occupational standards, but more detail can only be obtained from pdf documents. The register also provides access to draft standards and proposed changes. Professional qualifications are issued based on occupational standards. They can be obtained through assessment and certification in Qualification Centres. In cases where occupational standards are the basis for formal education, there is no need for assessing, recognising and awarding the professional qualifications in a Qualification Centre. Formal education graduates will receive a corresponding educational qualification in those cases. At the end of July 2023, the NQF register contained 281 occupational standards, and 31

qualification centres that could provide certification for 148 different professional qualifications. During the first year of operations 1 504 certificates had been awarded.

Educational qualifications and digital credentials

Educational qualifications are based on state educational standards. The [Ministry of Education and Science](#) maintains online repositories of educational standards.

In higher education, higher education institutions develop qualifications and educational programmes based on the state standards for higher education specialties ([77]). Higher Education qualifications can cover levels 5 - 8 of the NQF, covering junior bachelor, bachelor, master and doctorate degrees. There are 272 confirmed specialties published on the website of the MoES, which do not include level 5 specialties (for junior bachelor). 110 are for bachelor degrees, 101 for master degrees, 55 for doctorate degrees. For two specialties there is a unified state qualification exam that concerns Law and International Law. In the remainder of cases Higher Education Institutions function as the awarding bodies. For each speciality the pdf document of the Ministerial Order confirming the standard is included, but there are no data files.

Pre-higher vocational education and training is delivered by colleges, leading to a professional junior bachelor at level 5 of the NQF. This type of education used to belong to higher education before the Law on Higher Education was adopted in 2014, abolishing former Soviet degrees. There are 275 confirmed specialties published on the website of the MoES ([78]). For each speciality the pdf document of the Ministerial Order confirming the standard is included. For one specialty, road transport, there is a unified state qualification exam.

VET standards cover level 2-5 of the NQF. Since the new approach to VET standards and VET programmes in 2021, 71 new standards have been approved that are on the MoES website ([79]) (22 in 2021, 29 in 2022 and 20 in 2023). Before 2021 there were already many VET standards approved that are expressed in learning outcomes since 2013, and many of them are still in use, but they have not yet been updated to the new methodology. Between 2013 and 2020, 449 programmes have been developed.

State standards of general secondary education ([80]) are requirements for compulsory learning outcomes and competencies for a general secondary education applicant at the appropriate level. The purpose of general secondary education is the comprehensive development, upbringing and socialisation of individuals who are able to participate in society and can interact with nature, have a desire for self-improvement and lifelong learning, and are ready for making conscious life choices, self-realisation, responsibility, work and civic activity. According to the Law on Education, general secondary education has three levels of education - primary education, basic secondary education and specialized secondary education. These should correspond to levels 1, 2 and 4 of the NQF. There are state standards for primary ([81]), basic secondary ([82]) and for specialised secondary education, which are under development. State standards are approved by a resolution of the Cabinet of Ministers of Ukraine and are reviewed at least once every 10 years. Based on state standards, basic curricula, standard educational programmes and standard curricula are developed nationally, while education providers should use these to develop the

programmes and curricula in each institution.

Ukraine already has a system in place for digital credentials. The [Single State Educational Database \(EDEBO\)](#) ([83]) includes registers of educational establishments, educational credentials that have been issued, independent external certificates for access to higher education, student cards, and teachers who have been certified. The database allows for the verification of educational credentials that have been issued.

Conclusion

The Register of Qualifications has been regulated and implemented. The register brings together educational and professional qualifications. It plays a key role in the implementation of the NQF and supports lifelong learning, providing a single authoritative source for data on qualifications. The register is currently only populated with data that are linked to professional qualifications. It is important to add the educational qualifications that are part of the NQF. In order to improve its functionality, it is important to ensure that all data are converted from pdf documents so that they can be linked, and that direct links are created with the databases under the responsibility of the Ministry of Education. This will allow current data and interoperability. It is important that data fields are aligned with the European Learning Model version 3, to optimise interoperability. The prototype of the register developed with ETF already allows for this. As Ukraine has joined the EQF advisory group, it is expected to complete the referencing, to start mentioning the NQF and EQF levels on all certificates that are part of the NQF and to link its database of qualifications with Europass through the Qualifications Data Register. The register would appear to be the most urgent priority for making the NQF fully operational.

6.5. Use of NQF in recognition of foreign qualifications

In Ukraine, the recognition of foreign formal qualifications is based on the Lisbon Recognition Convention and on other international agreements. Ukraine has made approximately 20 bilateral agreements on recognition. Recognition is regulated based on procedures for Higher Education Degrees and documents in secondary education and in secondary vocational education.

The Ministry of Education and Science is responsible for recognition through the ENIC NARIC Centre ([84]). The Ministry of Education and Science can make recognition decisions that are valid throughout Ukraine. Higher Education Institutions can also make recognition decisions, but these are only binding within the specific institution. Although the recognition decisions from the Ministry of Education and Science are legally binding, higher education institutions and employers decide on admission to studies or work. Line ministries are responsible for issuing licenses for work in regulated professions, e.g. the Ministry of Health for health professions.

There is a central database of recognition decisions. Recognition processes can cover formal qualifications and periods of study abroad that have been certified in the formal education system. There is a separate arrangement with regard to PhDs. For professional qualifications, there is no system in place as yet, but it is foreseen that accredited Qualification Centres will deal with these in the future. If there is a substantial difference, the qualification can be partially recognised.

Before the war, the number of recognition requests grew more than sixfold, from 4 694 in 2016 to 29 744 in 2021. Most of these applications were handled by the Ministry of Education and Science, while the numbers dealt with directly by Higher Education Institutions increased in recent years. This reflects the growing popularity of Ukraine before the war as a destination for foreign students who came primarily from third countries.

The recognition process includes establishing the authenticity of the document, the status of the issuing educational institution and an assessment of elements to determine equivalent academic or professional rights. The qualifications framework and learning outcomes play a role in the assessment of the level, workload, quality, profile and learning outcomes of a qualification, in line with the EAR Manual. The NQF and overarching qualifications frameworks can be used to compare qualifications. This can shorten the recognition process, especially if there is a link to the EQF.

NQFs as transparency instruments confirm the level, learning outcomes and often the type of qualification. Databases on Higher Education Institutions are also very useful. Assessment is done indirectly through the EQF and the QF EHEA, as the NQF in Ukraine is not yet linked to the EQF.

The electronic network UaReNet has existed since 2020. It is a platform that encourages exchange between the Ministry of Education and Science, the ENIC NARIC Centre and Higher Education Institutions. Recognition offices in Higher Education Institutions are trained by the ENIC NARIC Centre to use the EAR HEIs Manual.

A [Procedure for recognition in Ukraine of professional qualifications obtained in other countries](#) was approved at a Government meeting on 2 June 2021 [85] It states that persons who have obtained professional qualifications in other countries can have them confirmed in Ukraine by applying to the competent authority, which are those Qualification Centres that have been accredited for the corresponding professional qualification in Ukraine.

6.6. Career guidance and counselling

Good information about relevant qualifications should guide and advise individuals on suitable learning and career opportunities, and there is therefore a direct link between the qualifications' framework and lifelong career guidance. A recent ETF Review of Career Guidance Services ([86]) praised Ukraine for the strong legal basis for career guidance in Ukraine across employment, education and youth sectors; for the 2008 Concept of the State System for Public Career Guidance and the 2018 Action Plan and for the fact that public career guidance services target all social groups and all age groups. However, learning about what works best and how to reach final beneficiaries of career guidance services in order to meet their needs is also recommended. The report underlined the need for professionalism among career guidance practitioners across relevant sectors and recommended developing occupational standard for career advisors and counsellors. In 2020, the Ukrainian Association of Career Guidance and Educational Advice initiated the development of the occupational standard for career guidance practitioners across the sectors (education, youth, employment, etc). The application was registered by the NQA but was unfortunately withdrawn by November 2022. The Inventory on the Validation of Non-Formal and Informal Learning in Ukraine recognised that Qualification Centres

publish detailed information on the procedures and guidance for applicants online, and can provide applicants with personal guidance.

There are many different online platforms and digital services from various stakeholders in existence that should be reviewed and consolidated in an integrated, needs-based way to meet the needs of various client groups. Here the link with the register and how it could be exploited for career guidance is an area that should be considered. This is also about how to adapt the information for specific target groups, so that they can work with it. This is not only about the type of data that are available in the Register and whether data on career opportunities, qualifications and learning can be linked, but also about providing access to the data for reuse by third parties, so that they can develop their own applications based on the data. Ukraine is establishing a Europass Centre and it is expected that this will help to widen the career and learning opportunities for Ukrainians, within Ukraine and abroad. The ETF Resource Hub for Ukrainians ([87]) who fled the war and are looking for learning opportunities, recognition and job opportunities in the EU is bringing together many information sources from member states and these could perhaps be integrated through time with online resources in Ukraine.

6.7. Awareness and use of NQF

There is an extended group of stakeholders representing public organisations, NGOs, training providers, and social partners, that are aware of the NQF and have been involved in its development and implementation. NQA is undertaking many initiatives to inform a wider public, to meet organisations, and to stimulate a public debate on qualifications. End users have not yet been reached apart from graduates in higher education who are informed about the NQF level of their qualification. It will be important to promote the use of the NQF further, in particular on the labour market, where the traditional skill/ wage levels (rozryadi) are better known.

6.8. Monitoring and evaluating the NQF

The focus thus far has been mainly on the development of the NQF. Until 2019 the Interdepartmental Committee for the implementation of the Ukrainian NQF monitored the implementation plans for the NQF development. However, there does not seem currently to be a framework for monitoring and evaluating the implementation of the NQF. An independent review is not (yet) foreseen. It is however important to define objectively verifiable indicators on the outcomes of the NQF in order to monitor its implementation and to use feedback in order to adapt and improve the mechanisms linked with the NQF. NQA is clearly a reference point for all issues regarding the NQF implementation, but the current executive and monitoring roles of the NQF implementation are perhaps too concentrated in one institution, thereby weakening effective monitoring.

6.9. Impact of the NQF

At the policy level and at the level of standards and curricula the NQF development process has had a strong influence in promoting relevant learning outcomes, ensuring stakeholder involvement and paying more attention to quality assurance of the qualifications of individuals. The introduction of learning outcomes in education is advancing, strengthening the emphasis on competence, rather than just knowledge.

Gradually new opportunities for training, retraining, learning, progression and mobility are created, e.g. through the Qualification Centres and new types of qualifications and partial qualifications. There is a growing mutual understanding of new approaches to learning and of the need to recognise them, in order to support lifelong learning and to avoid that individuals have to duplicate learning. Ukrainian qualifications and education and training have become closer to European practices, and support European integration. That said, it is difficult to estimate the impact of the NQF. Evidence of impact is not systematically collected. Currently, the impact on end users (teachers and trainers, career guidance professionals, HR officers in companies and organisations and of course learners) still seems to be somewhat limited.

Referencing to the EQF

7.1. Referencing to the EQF

Ukraine only recently joined the EQF Advisory Group and has not yet undertaken a referencing to the EQF. Referencing is expected to start in 2024 and should be completed in 2025.

The NQF has already been compared with the EQF. The purpose of comparing qualifications frameworks is not to persuade other QFs to comply with the EQF, but to thoughtfully evaluate whether various aspects of both frameworks are comparable and whether they could be sufficiently developed and implemented for the exercise to be meaningful. Eleven core topics for comparison and dialogue have also been identified. The Comparison report, which can be found on the Commission's Europass website, is the result of a pilot project to explore the value of comparing third countries' national qualifications frameworks (NQF) with the European Qualification Framework (EQF). Comparison is an important step in facilitating the recognition of qualifications and skills between EU member states and non-member states, improving cross-border career, employment and study opportunities for individuals, and ensuring companies and economies make better use of skills. The Comparison report demonstrates how Ukrainian qualifications compare with the EQF through the NQF. The Comparison report is the first of its kind and the in-depth comparison and analysis will prove to be a useful tool for practitioners, policymakers, educational institutions and citizens alike, both in Ukraine and beyond. The report is part of the European Commission's wider initiative to work with countries outside the EU, as outlined in the 2017 EQF Recommendation.

7.2. International cooperation

The Bologna Process is one of the main drivers for the development of the NQF. The independent [National Agency for Quality Assurance Agency in Higher Education](#) ([88]) has progressed with programme accreditation, new higher education standards and new curricula having been introduced. All programmes and their components are expressed in learning outcomes. In 2020 the agency joined the International Network of Quality Assurance Agencies for Higher Education and became an affiliated member of ENQA, the European Network. The National Qualifications Agency is also looking for international partnerships. Ukraine has self-certificated its NQF against the QF EHEA. Ukraine is an active partner in the ENIC NARIC network and has contributed actively to the development of the Global Recognition Convention. Ukraine joined the EQF Advisory Group in 2022 and will now be able to cooperate more actively within the framework of the European Education Area.

7.3. International donor support

Prior to 2019, a number of education projects, limited in size and scope, were implemented. The Tempus and Erasmus Plus Programmes for Higher Education have been a continuous source for cooperation in Higher Education. Additionally, the British Council has also given support to the development of the NQF and higher education reforms.

In general education, the Polish and Finnish governments have been providing bilateral support to implement the New Ukrainian School concept. In VET there has been a Twinning Project and some smaller bilateral initiatives, including cooperation to develop dual education. Estonia has implemented a project for the Volyn region, which provided school partnerships and curriculum development support and has been particularly important as a trailblazer for moving towards a competency based, decentralised VET system.

In order to assist the development and implementation of a competency-based education system and the NQF, the ETF provided bridging support that included principles for decentralisation, key competencies, the NQF implementation plan, the establishment of the National Qualifications Agency and the development of new standards and modular curricula.

The EU4Skills programme supports the Modernisation of Vocational Education, and the implementation of the NQF. This includes support for the development of the National Agency for Qualifications, the development and implementation of standards and VET curricula for 100 profiles and widening the offer of VNFIL. It further supports the NQF's comparison with the EQF and strengthens systemic changes to vocational and professional qualifications in Ukraine.

A World Bank loan of USD 200 million for the programme, ['Ukraine: Improving Higher Education for Results'](#) ([89]) should further help to boost the quality of the higher education sector, as well as its relevance to the labour market, including teaching and research facilities and the digital learning infrastructure. Ukraine has been a very active participant in the Tempus and Erasmus+ programmes, which have mainly benefitted higher education institutions, but are gradually opening up for cooperation in VET and lifelong learning.

Now that Ukraine has become an EU Candidate Country, it has joined the EQF AG and may also benefit from support for establishing a National Coordination Point for the EQF and participate in peer learning activities. Ukraine will also be supported in establishing a Europass Centre.

Important lessons and future plans

Despite the COVID crisis and the war in Ukraine, the implementation of the NQF has progressed significantly during the last two years. An important role in these developments has been played by the National Qualifications Agency as the key executive body. The NQF is implicitly becoming a key factor in defining standards, programmes and curricula. Validation is advancing now that Qualification Centres have been established and is covering gradually more and more professional qualifications. Also, in formal education validation is developing, although much of its implementation is decentralised, which makes it difficult to monitor and evaluate. The yearly Human Capital Development Forum keeps the qualifications system at the heart of the agenda on skills. European cooperation has intensified. The Comparison of the NQF and the EQF created a good dialogue on the NQF that helped to identify areas where progress can still be made. The NQF is becoming more and more European. Over the next period a Joint Action Plan will be agreed between the EU and Ukraine that should address the different recommendations in relation to the Ukrainian NQF reinforcing its links to the EQF as mentioned above.

This implies better access to information on qualifications and credentials and a more systematic use of the NQF as a tool to level qualifications and programmes. At the moment the NQF is used to inform state standards in education and these are then used to develop programmes and award qualifications, creating an indirect link between the NQF levels and individual qualifications, while state standards (such as the HE specialties) provide more generic information on qualifications than what is actually given to individuals. Individual general and vocational qualifications need to be levelled, e.g. by bringing the end of school qualifications in line with level 4 of the NQF and EQF and by ensuring each vocational qualification has a certificate supplement that clearly indicates its level and the most important learning outcomes.

Educational qualifications and professional qualifications are dealt with as separate silos and need to be connected better by bringing them all into the single register of qualifications. Information on occupations, skills, qualifications, programmes, providers and credentials are not interoperable, requiring pdfs to be converted into data where they are brought together in an integrated system. The classifier of occupations could be updated and linked to ESCO to ensure labour market information is expressed in terms that can be compared and used when developing qualifications and programmes. Partial qualifications and micro-credentials are important to facilitate retraining and upskilling and validation, in particular for adult learning. The war means that people have been displaced, have gone abroad and return to Ukraine and end up in new jobs. This requires an open qualification and training system than can recognise different experiences. On the labour market skills or wage levels (*rozryadi*) are still more used than the NQF, something that would need to be addressed.

Despite the efforts of the National Qualifications Agency, the NQF has not yet reached many end users (teachers and trainers, career guidance professionals, HR officers in companies and organisations and of course learners). Career guidance and counselling and lifelong learning opportunities will need to be better integrated with

the new qualifications system. There is a need for more information online to support individuals in making career decisions. It is therefore important that the register of qualifications becomes fully operational, bringing together all educational and professional qualifications, indicating how and where they can be obtained, and what career opportunities they may lead to.

Some of these issues can be accommodated in the cooperation framework of the EQF AG and the peer learning activities; others will require specific actions. The NQF will be referenced to the EQF in the coming two years, so that EQF levels can be introduced on certificates and diplomas and Ukrainian qualifications can be linked directly with the qualifications of other European countries through Europass.

National qualification framework (NQF)

NQF LEVEL	QUALIFICATION TYPES	EQF LEVEL
8	Doctor of Philosophy Category Higher education The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7). Doctor of the Arts Category Higher education The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).	8
7	Master Category Higher education The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).	7
6	Bachelor Category Higher education The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).	6

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Junior Bachelor**Category**

Higher education

The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).

Professional Junior Bachelor (formerly Junior Specialist)**Category**

Pre-higher Professional Education

The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).

Diploma of skilled worker**Category**

Vocational education and training

The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).

Certificate of skilled worker**Category**

Vocational education and training

The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).

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Diploma of skilled worker**Category**

Vocational education and training

The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).

Certificate of skilled worker**Category**

Vocational education and training

The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).

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3	Diploma of skilled worker Category Vocational education and training The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7). Certificate of skilled worker Category Vocational education and training The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7). Certificate for complete secondary education Category General secondary education The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).	3
2	Certificate of skilled worker Category Vocational education and training The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7). Certificate for basic secondary education Category General secondary education The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).	2
1	Certificate of basic secondary education for special needs students Category General secondary education The Ukrainian NQF is not yet referenced to the EQF. However, the NQF has already been compared with the EQF (see Section 7).	1

Acronyms

DigComp	European Digital Competence Framework for Citizens
EDEBO	Single State Educational Database
ENIC NARIC Centre	National Information Centres on Academic Recognition of Qualifications
ENQA	European Association for Quality Assurance in Higher Education
EntreComp	The European Entrepreneurship Competence Framework
EQF	European Qualifications Framework for Lifelong Learning
EQF AG	EQF Advisory Group
ESCO	Multilingual classification of European Skills, Competencies, and Occupations
ETF	European Training Foundation
EU	European Union
HE	Higher Education
HR	Human Resources
MoES	Ministry of Education and Science
NAQAHE	National Agency for Quality Assurance of Higher Education
NGO	Non-Governmental Organisation
NQA	National Qualifications Agency
NQF	National Qualifications Framework
PISA	OECD's Programme for International Student Assessment
QCs	Qualification Centres
QF EHEA	Qualifications Framework for the European Area for Higher Education
UaReNet	Ukrainian Network for the Recognition of Foreign Educational Qualifications
VET	Vocational Education and Training
VNFIL	Validation of Non-formal and Informal Learning

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Reports

NQF Inventory 2021	https://www.etf.europa.eu/sites/default/files/2021-11/ukraine.pdf
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Ministry of Education and Science	https://mon.gov.ua/eng
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