



European Training Foundation

NATIONAL QUALIFICATIONS FRAMEWORK – KAZAKHSTAN



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1. INTRODUCTION AND CONTEXT

1.1 NQF snapshot

Kazakhstan first adopted an NQF in 2012, then produced a revised and newly approved version in 2016. The KZ QF has eight levels, accommodating qualifications from general, VET, adult, and higher education.

The National Council for the Development of Social and Labour Spheres, an inter-ministerial group, steers development and implementation of the NQF.

Kazakhstan is a member of the Bologna Process, and so participates in the Qualifications Framework of the European higher education area.

Kazakhstan has an established NQF structure and level descriptors, has adopted its NQF, has designated governing institutions and allocated key functions to stakeholders and so is at the adoption stage.

1.2 Policy context

Kazakhstan participates in the EU's European Education Initiative (EEI) in Central Asia, which fosters cooperation in education in the region. In 2020, the EU and Kazakhstan signed the Enhanced Partnership and Cooperation Agreement, whose remit includes education and training.

Kazakhstan has experienced high economic growth over the last 10 years, strongly influenced by oil and gas prices. In 2019, its GDP growth was 4.5%¹. The country is seeking to diversify its economy, to reduce its current over-reliance on raw materials and resources.

The country has a high activity rate at 70% in 2018; a high employment rate of 66.6% in 2018; and low unemployment, 5% in 2018, and only 3.7% for young people.

Although the country's population is growing, it is also ageing, as the younger cohort contracts.

Kazakhstan 2050, the country's strategy for socio-economic development, calls for attracting inward investment and increasing Kazakhstan's competitiveness in new markets. Kazakhstan's State Programme for Development of Education and Science 2020-2025, the Strategic Plan for Development of the Republic of Kazakhstan (RK) by 2025, and the State programme for Industrial-Innovative development of RK 2020-2025, provide the framework and set directions for the country's continuing VET reform.

40.3% of students at upper secondary level attend vocational programmes (2018).

Covid 19 required quick solutions from the country's education and training system. All schools and colleges moved to distance education from early March 2020. The system largely reacted with speed and efficiency, making available online education platforms, public TV networks, and providing equipment and training to teachers. Enrolments and exams also moved online, providing vocational colleges with considerable autonomy on student assessment. At the same time, the situation revealed

¹ Bureau of National statistics of RK.

major differences among VET providers in their digital readiness. The use of blended learning is expected to increase post-pandemic.

1.3 NQF legal basis

There are 3 principal legal acts on the NQF:

- Joint Order 8022 of 19 October 2012, adopted by the Ministries of Health and Social Development and Education and Science, approved an 8-level NQF. It also specified the other components of the National Qualifications System, namely the Sectoral Qualifications Frameworks and occupational standards;
- the Labour Code of 2016 also addressed the NQF, Sectoral Qualifications Frameworks and assessment;
- the NQF was formally confirmed on 16 March 2016 by the tripartite committee for social partnership and regulation of social and labour relations.

On 18 June 2013, Ministers adopted an implementation plan for the National System of Qualifications under government regulation number 616.

2. POLICY OBJECTIVES

2.1 Education and training reforms

Since 2008, Kazakhstan has launched a series of initiatives aimed at modernising and improving the quality of its education and training system, to support the country's policies of accelerated industrialisation, economic modernisation, and innovation.

Kazakhstan's State Programme for Development of Education and Science 2020-2025 provides the framework within which the country pursues VET reform, including the implementation of the KZ QF. Objectives of the Programme include improving permeability and lifelong learning orientation of the education and training system, modernising teachers' pre-service and in-service education, updating curricula, modernising VET providers' external and internal quality assurance, and expanding independent certification of VET graduates.

Pathways to HE are open for graduates from both general and vocational education and are conditional on passing the Unified National Test. Since 2018, VET graduates applying to higher education institutions have been granted a reduction in duration of their HE studies in fields related to their VET specialisation. Both government and employers want to see more VET graduates as general education graduates often struggle to find work. The Ministry of Education continues to fund more VET places.

The Ministry is also encouraging flexibility of VET provision, so that colleges and other providers can modify up to 50% of the curricula (up to 80% in dual education), as opposed to the previous system, in which curricula was highly centralised.

In 2016, the World Bank and the Ministry of Healthcare and Social Development launched the project Skills and Jobs, running to 2021, which supports development of the National Qualifications System.

In 2017, an interdepartmental Committee under the Deputy Prime Minister established the programme for productive employment and the National Qualifications System, including a new classifier for

employment and 70 new occupational standards. In 2018, new methodologies for Sectoral Qualifications Frameworks and for occupational standards development were adopted.

2.2 Aims of NQF

The KZ NQF has been designed as a single structure for the classification of qualifications. It will include all quality-assured qualifications achieved through all education and training programmes spanning general secondary, higher education, vocational education, and adult education. It also recognises outcomes achieved through experience in the workplace or other non-formal and informal environments.

The NQF is intended for various groups of users including citizens, employers, and educational authorities. Its objectives are to:

1. classify and compare qualifications from different educational sectors;
2. act as a reference to develop learning outcomes for individual qualifications;
3. inform, via its level descriptors, development of occupational and educational standards and curricula;
4. support development of assessment materials;
5. provide a benchmark for recognition in the country of foreign qualifications and for recognition of Kazakh qualifications abroad, by serving an instrument of comparison.

3. LEVELS, LEARNING OUTCOMES AND QUALIFICATIONS

3.1 NQF scope and structure

The KZ QF is an 8-level structure. Descriptors are knowledge, skills and competences, competencies (personal and professional) and ways of achievement.

The NQF accommodates qualifications from general education, VET, post-secondary, higher education, and adult education.

Currently, levels 6 to 8 are reserved for degrees awarded in higher education. Levels 2 to 4 are reserved for general secondary education or VET qualifications. Level 5 is reserved for post-secondary education. The recently introduced Applied Bachelor's degree is placed at Level 5, but its level descriptors are currently identical to those for academic bachelors awarded by higher education institutions that sit at level 6.

Related instruments and references include the national classifier of occupations (adopted in 2018 with references to ISCED levels); the unified classifier of types of economic activities; the Union-wide classifier of workers' professions; the unified tariff-qualifications manual of workers' professions; the qualifications manual; the state compulsory educational standards in TVET and the state compulsory educational standards in higher education, both created in 2012 (with amendments in 2016); the classifier of VET occupations and qualifications (since September 2020 it has been aligned with ISCED and NQF levels); and the classifier of higher education qualifications.

The country is implementing a gradual transfer from qualification characteristics described in the classifiers to occupational standards. Now these systems function in parallel. There is not yet a mechanism to ensure inclusion of labour market needs in curricula. Occupational standards are used, but for some curricula only.

Kazakhstan has 36 sectoral qualification frameworks (SQFs), whose main function is to certify industry personnel i.e. people already working in the sector. Between them, the 36 SQFs cover the 8 levels in the KZ QF. For example, the SQF for processing and production of oil and gas covers Levels 2 to 8, while in IT the SQF comprises levels 3 to 8. Each SQF has its own level descriptors; in addition, some have sub-levels. Each SQF includes:

- the SQF passport, covering sector analysis and reference to sector-specific types of economic activities from the unified classifier of types of economic activities;
- a description of the SQF, with sector-specific level descriptors;
- maps of vocational qualifications, which specify their relationship to: ISCO codes, the national classifier of occupations, and the unified classifier of types of economic activities for each covered qualification.

The inclusion of micro-credentials has not been proposed yet.

3.2 Types of qualifications

Qualification types enable classification of different qualifications which are placed at the same level but differ significantly in terms of their functions, learning outcomes, volume and/or orientations.

One significant new qualification type in the country is the Applied Bachelor's Degree, at Level 5, offered in VET colleges and combining study and practical work. It leads graduates to careers in occupations defined as "mid-level specialist". However, the Applied Bachelor's programmes vary in length in practice, from two to four years and other durations in between, therefore they do not always conform to the short-cycle higher education qualification defined in the Bologna Process.

The State Programme for Development of Education and Science 2020-2025 aims to integrate the Applied Bachelor's degree programmes with HE programmes.

So far, these qualifications are available in education, health, transport, logistics, communications, and energy. By 2019, 48 VET colleges were offering this new type of qualification.

3.3 Quality assurance of qualifications

Since 2012, there has been a process for developing new and updating existing curricula for TVET. Curricula development is conducted on a modular, competency-based approach, considering occupational standards, sectoral standards, and standards of the international WorldSkills movement. In the absence of WorldSkills standards and professional standards for any qualification, employers' legal documents containing labour functions and job responsibilities are used, and mandatory consultations with the employer are held.

The Minister of Education's Order of 31 October 2018 established state standards for all levels of education. For VET, it specifies requirements for the learning outcomes- based content of education, maximum volume of study, level of qualification and duration of studies. The requirements for the

qualification levels of VET graduates are defined by curricula, or basic or professional qualifications based on occupational standards².

External quality assurance of qualifications at the level of VET providers is implemented through several processes: licencing, accreditation, external evaluation, certification. However, there is currently no comprehensive approach to ensuring the quality of education and Kazakhstan's State Programme for Development of Education and Science 2020-2025 addresses the issue of moving from quality control to quality assurance. Accreditation of educational organizations in Kazakhstan is carried out on a voluntary basis and at the expense of educational organizations (which many colleges cannot afford).

Accreditation of providers and programmes has progressed but needs to look more at validating qualifications and at assessment procedures, paying special attention to adapting to learning outcomes approaches. The register of accreditation organizations includes 6 Kazakhstan and 4 foreign agencies. External evaluation of the system of quality assurance of education is carried out by the state authorities on the compliance of the educational process with normative documents and legislative norms, fulfilment of license indicators.

Independent certification is currently implemented on a voluntary basis in many sectors. By 2020, 36 certification centres were established and included in the Register maintained by Atameken. 26 of the Centres are run by associations of employers, 9 by enterprises and 1 by a VET institution with support of enterprises.

The roadmap for the development of the NQS 2019-2025 includes piloting of a certification and validation system in priority sectors.

3.4 Use of learning outcomes and standards

The Order of the Minister of Education, adopted on 31 October 2018, establishing state standards for all levels of education, specifies that the content of education at all levels must be learning outcomes based.

Further, the legal act adopting the NQF in 2016 frames qualifications in outcomes terms: "Qualification is an official recognition of the acquired competences for the labour market and further education and training, giving the right to carry out work".

Occupational standards are essential for defining qualifications and learning outcomes and are probably the most advanced single feature of the country's reform of its national qualification system. By early 2021, 582 occupational standards had been approved.

The World Bank, and the Ministry of Education, cooperating on the project "KZ Skills and Jobs", are working with the sectors to develop new sets of sectoral qualifications and occupational standards.

In December 2019, the Minister of Education and Science updated the Classifier of VET occupations and qualifications – since September 2020 the classifier has reflected both ISCED and NQF levels.

Occupational standards are being actively used in updating curricula.

² <http://adilet.zan.kz/rus/docs/V1800017669#z1221>

By 2022, Kazakhstan plans to update all teacher training curricula in line with occupational standards. For example, the continuing professional development courses for VET teachers are aligned with overall VET reform and modernisation, including outcomes. Elements related to learning outcomes orientation, competency-based approaches, and use of occupational standards are integrated in such programmes.

Where there is insufficient use of occupational standards by sectors, by enterprises (for human resource management) and for in-service training purposes, this is partly due to heavy procedures in the validation of standards, as well as by the lack of methodological support.

3.5 Credit systems

In higher education, Kazakhstan is a member of the Bologna Process. The country has a national credit system which is comparable with ECTS, based on rules developed by the Ministry of Education and Science.

Until recently, credit was confined to HE only. However, in 2018 the Minister of Education and Science issued an order to begin implementing a credit system VET³, based on the adaptation of the European ECVET system.

4. INSTITUTIONAL ARRANGEMENTS AND STAKEHOLDER INVOLVEMENT

4.1 Governance and institutional arrangements for the NQF

In 2019, the National Council for Qualifications was created, an interministerial advisory body reporting to the Government, to lead development and implementation of the NQF. It drafted a roadmap, which sets out actions for implementation of the National Qualifications System in Kazakhstan by 2025. In late 2019, the Council was integrated into the National Council for the Development of Social and Labour Spheres.

In qualifications, the Council identifies needed actions in strengthening links between the labour market and education and training.

The Council is chaired by the Deputy Prime Minister and comprises the following ministries:

- Labour and Social Protection;
- Agriculture;
- National Economy;
- Education and Science;
- Industry and Infrastructure Development;
- Culture and Sports;
- Digital development, innovation, and aero-space industry;
- Health
- Finance
- Ecology, Geology and Natural Resources

³ <http://adilet.zan.kz/rus/docs/V1800017554#z15>

- Commerce and Integration
- Energy.

Plus, among stakeholders:

- the National Chamber of Entrepreneurs, called “Atameken”;
- the Transport and logistics Union “Kazlogistics”, Association of oil and energy organisations “Kazenergy”.

The Ministry of Education with the support of different entities such as Talap (previously known as Kasipkor), the methodological innovation centre supporting VET development, and the Centre for the Bologna Process, which supports higher education reforms, is responsible for developing and validating competency-based education standards for all levels of education. Line ministries work with sectoral social partnership committees. Sectoral committees and sector experts of professional associations, with methodological support from Atameken and the World Bank, develop Sectoral Qualifications Frameworks and occupational standards.

Atameken is responsible for validating occupational standards.

4.2 Roles and functions of actors and stakeholders

24 sector councils operate to oversee skills development in their respective industries. They have also led development of the significant numbers of occupational standards. Businesses are gradually becoming more engaged in VET, including in qualifications and curricula.

From business, most prominent in qualifications development is the National Chamber of Entrepreneurs, or Atameken. It leads development of the sectoral qualifications frameworks, occupational standards, and the accreditation of Centres for the Certification of Specialists. These tasks were formalised in the 2016 Labour Code.

In 2020, Atameken created a dedicated subcommittee on qualifications, which will coordinate the relevant expertise to develop and propose new qualifications.

5. RECOGNISING AND VALIDATING NON-FORMAL AND INFORMAL LEARNING AND LEARNING PATHWAYS

5.1 VNFIL arrangements

A form of validation already operates in some industry sectors – currently, 36 centres use occupational standards to assess and certify specialists. However, this is not formal certification.

The new Concept for Lifelong Learning sets a series of objectives for building a system of lifelong learning through validation of formal, non-formal and informal learning outcomes. The Concept would allow people to access learning at any stage of their life and - through any formal, informal, or non-formal provision - to accumulate recognised and potentially certified lifelong learning credits, building up a bank of skills and competences.

Accordingly, the Ministry of Education adopted Order N° 508 on 28 September 2018. It specifies rules for validation of adults' learning outcomes acquired through non-formal learning. The Ministry drew on analyses of existing systems and practices in other countries to develop the Order.

Further, the Education Law grants official status to recognition of non-formal learning.

In March 2021, Kazakhstan validated the list of regulated occupations that will need to undergo obligatory independent certification for graduates as of 2021. It includes 72 occupations, of which 70 are in health care, 1 in accounting, 1 in auditing. Currently, Kazakhstan regulates professional activities in 202 occupations.

6. NQF IMPLEMENTATION AND IMPACT

6.1 Key achievements and main findings

The country's strong economic growth and consequent need to develop relevant qualifications has propelled the NQF forward. In particular, the strength of industry in the country has contributed to a focus on labour market relevance, especially via occupational standards.

Atameken has helped to increase the role of different sectoral stakeholders. There is a very active group of sectoral actors, albeit some feel that they are not sufficiently involved in implementing changes in the education system.

6.2 Qualifications registers and databases

Atameken manages a register of occupational standards, and lists Certification Centres, of which there are now 36.

Kazakhstan maintains a State Classifier of VET occupations and qualifications, which reflects both ISCED levels and NQF levels. Currently, there are 213 occupations and 693 qualifications listed.

But there is no national register or database bringing together sectoral standards and frameworks. Sectoral qualifications frameworks and validated occupational standards are uploaded on Atameken website in a static, file-based, form that does not allow searching by specific profession, job function or developer.

6.3 Career information and guidance

In Kazakhstan, careers guidance is provided by schools, careers centres, national and regional chambers of entrepreneurs, youth policy institutes, employment centres and others. But there is no coordinated strategy, nor a single agency for career guidance.

A World Bank project, "Promoting Productive Innovation", working with a local enterprise, developed a unified information system for skills forecasting and careers guidance, Bagdar (www.bagdar.kz). Bagdar provides information on available occupation fields and qualifications classified by sectors and subsectors; advice on required knowledge, skills and competencies; relevant educational institutions; and current and forecasted demands for these occupations.

A new tool is "Atlas", launched in 2020, by the Ministry of Labour. It forecasts what new occupations and skills will be needed, and which will be redundant, using a foresight methodology; it includes a

careers guidance component. The government intends that Atlas become a reference and orientation for education providers and individuals.

6.4 Recognition of foreign qualifications

Kazakhstan has a functioning system for the assessment and recognition of foreign academic qualifications at associate degree, and bachelor's and master's levels, which is supported by legislation and in line with the Lisbon Recognition Convention. Kazakhstan ratified the Lisbon Convention in 1998 and brought it into force in early 1999.

The country's Bologna Process and Academic Mobility Centre deals with recognition and equivalence requests for degrees, adhering to the Rules for Recognition and Nostrification⁴ of Education Documents. It provides an expert evaluation, decision and recommendation on recognition of the qualification.

7. REFERENCING TO REGIONAL FRAMEWORKS /OTHER FRAMEWORKS

7.1 Referencing to regional frameworks

Kazakhstan joined the European Higher Education Area, or the Bologna Process, as a full member in March 2011. Bologna requires that members develop a QF in higher education based on learning outcomes and that it adopt the short-cycle, bachelor's, master's and doctorate degree system of classification. More than 60 universities in the country participate. Overall, Kazakhstan is at an early stage of implementing its Bologna requirements and has not yet self-certified its NQF against the Bologna framework.

The country has recently intensified its cooperation with Russia within the Eurasian Economic Union (EEU). Within the EEU, Kazakhstan and the Russian Federation lead in the development of qualification systems and it is expected that the coordination between the reforms in the five EEU countries will be strengthened. In the recently adopted document "On priorities of Eurasian economic integration until 2025," the five countries agreed on measures to support integration in labour migration, including achieving comparability of education systems and skills and qualifications.

7.2 International cooperation

The country's Bologna Process and Academic Mobility Centre represents Kazakhstan in ENIC-NARIC networks.

Kazakhstan has been Central Asia's major beneficiary of Erasmus+ since 2014.

Kazakhstan participates in the EU's European Education Initiative in Central Asia, which fosters cooperation - both between Central Asia and the EU, and among the CA countries themselves - in order to strengthen educational reforms in the region.

⁴ Nostrification – the process of granting recognition to a degree from a foreign university.

A notable action within the Initiative was the Central Asian Education Platform (CAEP) project, which included both broad policy dialogue and technical development components, including on NQFs.

7.3 International donor support

The EU, GIZ and, especially, the World Bank have contributed significantly to qualifications reform in Kazakhstan. The World Bank is now working with national authorities and actors on the “KZ Skills and Jobs Project”, 2016-21. It will support the development of certification and validation methodological tools; drafting of a law on vocational qualifications; harmonisation of qualifications with the countries of the EEU, CIS, and EU; piloting of qualifications in transport, construction and metallurgy sectors; and setting up of a national qualifications authority.

Kazakhstan is a member of ASEM, the Asia-Europe Meeting, a political dialogue forum which aims to enhance relations and various forms of cooperation between its partners, including in education and training.

8. IMPORTANT LESSONS AND FUTURE PLANS

Kazakhstan has made important steps in developing its National Qualifications System. The country’s high industrial capacity and strong private sector have been fundamental in achieving progress. Atameken, the key representative of enterprises, plays an important part in the NQS.

Significantly, progress is most visible in development of occupational standards, where industry plays a major role.

That said, governance structures are complex and coordination among different actors and different sectors of education and training is not always ensured. Higher education and VET could be more strongly linked.

Although outcomes are used in occupational standards, they are not yet systematically applied in teaching and learning and assessment. Methodological links between occupational standards and educational standards, programmes, and assessment should be strengthened.

The NQF descriptors should be reviewed. There is a risk of fragmentation with a very high number of sectoral qualifications frameworks. A priority is ensuring that programmes for the new Applied Bachelor’s degree qualification consistently align with Bologna requirements. Descriptors for these qualifications should be revised to conform with Level 5 of the KZ QF.

The NQS is perhaps seen too narrowly as the sum of the NQF, SQFs, occupational standards and independent assessment centres. An integrated concept for the NQS, explaining its broader VET reform function, could be developed.

Kazakhstan would benefit from developing a unified national register of qualifications accessible to the public, supported by information on available programmes, educational institutions and certification processes.

9. MAIN SOURCES OF INFORMATION

World Bank KZ Skills and Jobs project reports, <https://projects.worldbank.org/en/projects-operations/project-detail/P150183>

The national chamber of entrepreneurs of the Republic of Kazakhstan "Atameken", <https://atameken.kz/en/>

ETF, Torino Process 2018-2020 Kazakhstan: <https://openspace.etf.europa.eu/trp/torino-process-2018-2020-kazakhstan-national-report>

State Programme for Development of Education and Science of RK 2020-2025: <https://primeminister.kz/ru/gosprogrammy/gosudarstvennaya-programma-razvitiya-obrazovaniya-i-nauki-respubliki-kazahstan-na-2020-2025-gody-9114129>

Protocol on NQF validated by tripartite committee for social partnership and regulation of social and labour relations, 16.03.2016: https://atameken.kz/uploads/content/files/%D0%9D%D0%B0%D1%86%D0%B8%D0%BE%D0%BD%D0%B0%D0%BB%D1%8C%D0%BD%D0%B0%D1%8F%20%D1%80%D0%B0%D0%BC%D0%BA%D0%B0%20%D0%BA%D0%B2%D0%B0%D0%BB%D0%B8%D1%84%D0%B8%D0%BA%D0%B0%D1%86%D0%B8%D0%B9_2016.pdf

Methodological recommendation for development and registration on SQFs, 2016: <https://atameken.kz/uploads/content/files/%D0%9C%D0%B5%D1%82%D0%BE%D0%B4%D0%B8%D0%BA%D0%B0%20%D0%9E%D0%A0%D0%9A%202016.pdf>

Atlas of new occupations and competences in RK: <https://www.enbek.kz/atlas/en>

Bagdar unified information system for skills forecasting and careers guidance: <https://www.bagdar.kz/>

Order N° 508 of the Minister of Education and Science of RK of 28.09.2018 on VNFIL rules: <https://www.ektu.kz/files/law/MonRk/v1800017588.28-09-2018.rus.pdf>

ABBREVIATIONS

ECTS European Credit Transfer and Accumulation System

ECVET European Credit System for Vocational Education and Training

EEU Eurasian Economic Union

EHEA European Higher Education Area

EQF European Qualifications Framework

- GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit (German development agency in international cooperation)
- HE higher education
- KZ QF Kazakhstan National Qualifications Framework
- NQS National Qualifications System
- ISCED International Standard Classification of Education
- RK Republic of Kazakhstan (RK)
- TVET Technical and vocational education

Where to find out more

Website

www.etf.europa.eu

Online platform

<https://openspace.etf.europa.eu>

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