# DEVELOPMENT OF NATIONAL QUALIFICATION SYSTEM BASED ON EDUCATION SPHERE AND LABOUR MARKET INTERFACE

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### **Abstract**

This paper discusses issues of developing national and branch frameworks of qualifications. It provides ways of overcoming the existing gap between requirements of the labour market and employee's competences. It also provides a definition of the national system of qualifications and the branch system of qualifications and labour functions. It also offers requirements to developing professional standards and shows their importance for forming a university graduate's competence-based model. A professional standard should be considered as the backbone document for the development of educational programmes aimed at the formation of the key competences providing the demand for graduates in the labour market throughout the life.

#### Introduction

In the present day society there take place global transformations caused by the changing structure of economy and the increasing demand for qualified labour. The growing requirements to the level of training from the sphere of work often do not match professional competences of experts. There is observed the qualitative gap between the labour supply and demand. Qualification of workers does not completely satisfy employers, and the education system continues to develop in the independent logic which is not interfaced to the requirements of the labour market. The main causes of it are backwardness of the National system of qualifications and feeble interaction of the sphere of work and the education system.

The task of developing the National system of qualifications was defined by the President of the Republic of Kazakhstan Nursultan Nazarbayev in his article "Social upgrade of Kazakhstan: twenty steps to the society of universal labour". The President indicated the need "to stimulate the entire work" for the development of the National system of qualifications (NSQ) which has not only a normative value but is in fact the 'road map' for each profession". The NSQ will permit "to construct professional elevators for each specialty".

## **Analysis**

When developing the National system of qualifications it is necessary to make good use of international experience. It is necessary to reject the national isolation, to analyze the best practice of forming professional standards and their conjugation to educational standards. The system of qualifications existing nowadays does not reflect the employee's competence, one's ability to solve functional problems and to bear responsibility. Educational standards are not oriented at the formation of professional competences. In educational programmes of a bachelor's degree theoretical training prevails over practice. In the Republic of Kazakhstan, there is no monitoring system or evaluation of expert's professional competences. There are unresolved issues of qualifications' comparability and their recognition. The acting system of qualifications assignment based on the input parameters is inadequate to the requirements of the labour market. The existing gap between the requirements of the labour market and worker's competences and mismatch of qualifications to these requirements arouse employers' mistrust.

The resolution of the Government of the Republic of Kazakhstan No. 616 of 18.06.2013 approved the Plan of incremental development of the National system of qualifications including the National frame of qualifications, branch frames of qualifications, professional standards and the system of qualification confirmation.

The National system of qualifications is a set of mechanisms of legal and institutional regulation of supply and demand for expert's qualifications from the labour market.

The National frame of qualifications (NFQ) of the Republic of Kazakhstan representing a structured description of the qualification levels recognized in the labour market was developed taking into account the European frame of qualifications, it contains eight qualification levels. The NFQ defines a uniform scale of qualification levels for the development of the branch frames of qualifications and professional standards, providing inter-industry comparability of qualifications, and is the basis for the system of confirming compliance and assignment of experts' qualification. The principles of the National frame of qualifications development are: continuity, eligibility and sequential increasing the requirements to workers' competences, abilities and knowledge. They define the quality level and results of the executed activities. They are referred to the characteristics concretizing these or those worker's competences in his professional activity. The main criteria of assessing the competences of each qualification level are the degrees of independence, responsibility and complexity of the performed work.

The basis of professional activity is made by the worker's professional competences causing his adaptation to the changing situation in the society and in the labour market. Qualifications and competences are the result of acquiring by a person of a certain educational programme and professional practical experience.

The RK National frame of qualifications was approved in September, 2012, and in January, 2014 there were introduced some substitutions in its structure:

- "requirements to knowledge" for "knowledge";
- "requirements to abilities" for "abilities and skills";
- "requirements to labour functions" for "personal and professional competences".

The change in the part of substitution of "personal and professional competences" by "requirements to labour functions" does not meet the requirements of the State standard of higher education approved by the resolution of the Republic of Kazakhstan's Government of August 23, 2012 No. 1080 which endorses the development of special competences based on professional standards.

The Branch Frames of Qualifications (BFQ) represent a structured description of the qualification levels recognized in a branch. The BFQ classify the requirements to qualification levels depending on the complexity of the performed works and the nature of the used knowledge, abilities and competences. The branch frames of qualifications are developed in a specific branch of economic activity on the basis of the National frame of qualifications.

Introducing modification in the National frame regarding the requirements, namely to abilities and to labour functions, led to mismatch with the developed branch frames in which there are shown the requirements to skills, to personal and professional competences.

According to the Kazakhstan information-and-legal system of regulations "Adilet", there were approved 20 branch frames of qualifications, among them 12 Branch frames in the group of specialties "Technical Science and Technologies" in the following fields: "Geology"; "Metallurgy"; "Civil engineering"; "Light industry"; "Power industry"; "Information-communication technologies"; "Transport and communications"; "Mechanical engineering"; "Chemical production"; "Oil and gas branch"; "Geodesy and cartography, land management and cadaster"; "Construction and housing and communal services".

The analysis of the approved branch frames of qualification and their comparison to the NFQ shows that the requirements to knowledge in the BFQ practically duplicate the requirements to knowledge designated in the NFQ. Such coincidence needs to be considered as inability, when forming the BFQ, to consider specifics of a branch that will naturally be reflected negatively

in the formation of professional standards and in subsequent educational programmes in the competence-based approach format.

In the NFQ there are described the requirements to abilities, and in the BFQ the requirements to skills and abilities. On the whole the statements of the requirements have a general character, there is no reality considering the features of a branch.

In the Branch frame there take place the requirements to personal and professional competences though in the National frame there are defined the requirements to labour functions.

If to accept that the concept "competence" means the expert's ability to apply his knowledge, abilities and personal qualities to successful work, it is possible to consider these requirements comparably equivalent.

The basic feature of the requirements to competences of the Branch frame is that for each qualification level competences are evaluated by the main criteria: levels of independence, responsibility and complexity of the performed work. In the description of the criteria for different qualification levels there are no accurate requirements for different areas of professional activity.

A feeble place of the approved frames of qualification is the absence of the criteria requirements directly connected to professional activity. The requirements for the level of responsibility and complexity of the performed work are formulated by the general frame recommendations of such a type: responsibility for enhancing the own work, planning, developing and results of the processes of activity, the observance of the technical operation rules and security regulation.

The development of the National system of qualifications assumes the logically built correlation of the Branch frames of qualification with the requirements of the National frame of qualifications. Without such correlation it is impossible to develop quality professional standards.

The Head of State, Nursultan Nazarbayev noted: "One of the most important moments in the forming National system of qualifications is that professional standards developed within the NFQ shall become a reference point for the educational standards used at educational institutions in training specialists. There shall not be a gap between professional and educational standards".

Professional standards shall become the "road map" for each profession. Professional and educational standards need to be focused on professional competences.

A professional standard that is a multifunction normative document shall become the basis for:

- the development of uniform requirements to the content of professional activity, updating the qualification requirements;
- the formation of educational standards and programmes of all levels of professional education;
- the assessment of professional readiness and confirmation of the expert's qualification compliance.

Professional standards shall be developed on the basis of the framework of qualifications that is a kind of instrument of interfacing the sphere of work and the education system.

The process of the professional standard development shall be preceded by the analysis of work carried out for identifying the functions and requirements to the quality of their performance (in terms of knowledge, abilities and wide competences including the level of responsibility and independence) by workers of various skill levels and official hierarchy.

On the basis of the analysis of professional standards developed in Kazakhstan it is possible to note:

 in the majority of professional standards there are no qualification levels providing the existence of higher and postgraduate education. This circumstance limits the possibilities of higher school in the formation of practice-focused educational programmes in the competence-based approach format;

- there is absent the most essential component of qualification requirements: "personal
  and professional competences". This gap in total with the absence of elements of
  independence, responsibility and complexity of the performed work makes such
  professional standards of little use for the improvement of educational programmes
  of higher education;
- very often "skills and abilities" in professional standards are stated in the generalized, non-constructive format, they copy the BFQ and do not reflect professional specifics;
- in a number of professional standards there is provided an incomplete list of labour functions, therefore they turned into duty regulations;
- the requirements of the qualification levels assuming the existence of higher education are, as a rule, underestimated.

On the whole the developed professional standards are not completely harmonized with the framework of qualifications. Professional standards were developed quickly in the conditions of uncoordinated actions of the ministries and departments, imbalance of legal materials and standard and methodological recommendations on their development.

It is obvious that professional standards need, first of all, to be developed in those trajectories of training where there is observed high mobility of staffs. The market through the mechanism of professional standards defines the requirements to graduates, and the education system through educational standards, curricula and programmes forms the content of educational programmes adequate to the competence-based model of a graduate. In the Concept of continuous education the transition from the management of professions to the management of professional qualifications is very important. This problem is solved with the help of professional standards permitting to open the experts' professional activity according to the structure of the technological process and continuity of activity at various qualification levels in combination with the requirements to knowledge, abilities and competences. On the basis of professional standards and requirements of the real sector of economy there shall be formed the educational policy of the country and the system of experts certification. Professional and educational standards providing interrelation between vocational training and the requirements of the changing economy shall become the kernel of the National system of qualifications. The development of social partnership (higher education institution — business) shall become a strategic direction of training qualitative experts on the basis of the rational use of standards with pronounced professional competences.

The Memorandum of cooperation between the MES, the Ministry of Labour and the National Chamber of Businessmen signed on April 30, 2014 contains proposals for the introduction of new mechanisms of joint partner activity for high-quality training of demanded technical specialists for the industrial and innovative development of Kazakhstan. In the scale of the country and its regions it is necessary to adjust the monitoring of productivity of the higher education system:

- graduates employment in the aspect of the training trajectory;
- employers' satisfaction with the quality of specialists training;
- training compliance to the requirements of innovative economy;
- the efficiency of higher education institutions from the point of view of demand for graduates;
- the state order for training specialists compliance to the requirements of the labour market.

Education is a mirror where there are reflected all the sides of the Kazakhstan society with its mentality, national features and traditions. In higher education of Kazakhstan there are sharply manifested contradictions between: the increasing volume of information knowledge and the limited term of training; the ratio of the share of general education and special disciplines; the level of natural-science and vocational training; the ratio of the share of the core and institutional

components; the principle of unification and preservation of the educational system national features. The SES autonomous format with the volume variable component of the institutional component permits to consider reasonably and quickly the regional and branch features when designing educational programmes of higher education. It is necessary to pay attention on the fact that professional standards are mainly directed to the solution of the business problems corresponding to the present level of the development of production and economy. Therefore the problems of fundamental character and the system of education pass to the background, and as a result, the revaluation of the professional standards role in the solution of educational problems can lead to decreasing the education quality. It is difficult to disagree with this statement. It brings up to date the need of attracting as developers of professional standards not only professional experts in a certain branch of production but also representatives of the university system capable in the advancing plan to designate innovative aspects of the graduate's competence-based model.

Employers are not experts in education, they show in the professional standards what the worker must know and be able when he comes to perform the work within this or that profession. In fact, an employer specifies only that applied aspect of knowledge and abilities of a worker which, in opinion and experience of the employer, is necessary for performing concrete work and functions. And what is necessary for being able to possess this knowledge and abilities is the question for education. It is the sphere of education that is to solve what and in what sequence to study.

The problem of improving educational standards and educational programmes interfaced with requirements of professional standards should be dealt with not only on the level of higher learning but also on the level of the labour market. Today the share of employers in training does not exceed 1% while this indicator in the developed countries is at the level of 30%. The development of the National system of qualifications in the RK obliges the parity participation of the interested parties (the sphere of work and the education system) in the formation of the expert's qualification characteristic in the format of competences.

In Kazakhstan not every employer can accurately suggest and formulate recommendations to higher education institutions. A considerable part is focused only on the solution of tactical production tasks. Fewer large enterprises have a perspective strategy of the development and can make a real request for the demanded specialties and qualified graduate. It is impossible to be guided completely and unconditionally by momentary (tactical) inquiries of production (the regional labour market). The gap that exists nowadays between the higher education sector and the practice-focused activity of graduates needs to be resolved on the basis of the development of the national system of qualifications and professional standards developed in the community of professional associations and higher education institutions. Various vectors of interests of the higher education system and the sphere of work generates inadequacy of the structure and quality of training young specialists to the requirements of economy. In these circumstances the higher education sector is generally guided by the needs of entrants (their parents) who are customers of educational services. It promotes the emergence of imbalance between deficiency of graduates in a number of training trajectories and their surplus in specialties which are not in demand at the labour market.

The mass campaign for the development of professional standards (by 2018 there will be developed about 1 000 professional standards) should not turn into the imitation of innovative processes, the next propaganda stage of the reform. It is important that it became a platform for social dialogue for interfacing the requirements of the sphere of work and the education system.

A professional standard should be considered as the backbone document for the development of educational programmes aimed at the formation of the key competences providing the demand for graduates in the labour market throughout the life.

## Conclusion

Ideally the qualification requirements to experts of certain levels and the list of knowledge, abilities, skills and key competences projected in professional standards shall be interfaced with educational purposes and learning outcomes.

The development of professional standards is a peculiar consensus between professional associations of employers and the university community. Only professional standards accepted on the basis of the network interaction of professional associations of employers and the academic public of higher education institutions can become an innovative basis for updating educational standards of higher education and the reference point of the personnel policy for successful implementation of the State programme of industrial and innovative development.