## **Overall landscape – National Higher Education (HE), research and QA context (with focus on Doctorate level)**

#### Brief presentation of the HE and research system

## Country size, number of HE students, number of HEIs, type of HEIs (public/private, general or very specific), missions of the HEIs...

**Ukraine** is a state in Eastern Europe and partly in Central Europe located in the south-western part of the East European Plain. Its area is 603, 628 sq. km.

Ukraine ranks eighth in Europe in terms of population. According to the latest census of population, over 48.4 million people live in Ukraine, including 77.8% of Ukrainians and 17.3% of Russians. A share of the urban population is 67.2%. The official language in Ukraine is Ukrainian.

According to the Constitution, all citizens are provided with an access to free education. Complete general secondary education is compulsory in public schools, which constitute the overwhelming majority. Free higher education in public and municipal educational institutions is implemented on a competitive basis.

There are 288 higher educational institutions of higher accreditation levels in Ukraine. They include 196 institutions of state ownership, 80 institutions of private ownership and 12 institutions of municipal ownership.

A mission of higher educational institutions (academic institutions) of Ukraine is as follows: to create, systematize, store and disseminate modern scientific knowledge in order to improve the quality of life of people; to train specialists of European and world level in terms of intellectual and personal development. Higher education institutions of Ukraine realize their mission through main areas for development, which include social & pedagogic, international educative & training, scientific & research, innovative productive & business activities and others. These areas are put into practice through particular steps of development.

The main document that initiated the reform of quality assurance systems in Ukraine should be considered the Decree of the President of Ukraine on June 25, 2013 No 344/2013 "On Approval of the National Strategy for the Development of Education in Ukraine until 2021", which for the first time formulated the task of developing a system of indicators of quality education at the national level, reflecting the conditions, processes and educational outcomes. The greatest contribution to the legislative regulation of quality assurance systems has the Law of Ukraine "On Higher Education" dated July 1, 2014.

The best of today is the detailed description of the provisions of the Law of Ukraine "On Higher Education" (hereinafter referred to as the Law) contained in (unfortunately not adopted) the Draft Strategy for the Reform of Higher Education in Ukraine until 2020, in which a separate section 3.2 "Creation of a Quality Assurance System for Higher Education" is dedicated. By this document the essence of higher education reform is directly called the establishment of a system for the provision and continuous improvement of the quality of higher education that meets EHEA recommendations and standards, takes into account best international practices and serves as the main technology for achieving the answer the educational system requirements and needs of society and personality. The key tasks of such reform are:

a) institutionalization of the system of providing higher education quality at the national, regional and local levels with the participation of state, public and professional players;

b) involvement of external and internal stakeholders in the development of new "rules of the game" (a set of legal acts and methodological developments) that can guarantee the stable functioning and development of the system of quality assurance in higher education;

c) the formation of an environment in which the improvement of the quality of higher education will become a central theme of public discourse, where the formation of a new professional ethos will become a unifying front for participants, and new media platforms will provide the necessary publicity and transparency.

Among the first steps were called:

- development of *standards of higher education*<sup>1</sup> with the active participation of stakeholders;
- the development of a methodological basis and the provision of practical assistance to higher education institutions in establishing an internal quality assurance system, including through the establishment and maintenance the *standards of educational activity*<sup>2</sup>.

The first task is now gradually solved with the participation of the Scientific-Methodical Council of the Ministry of Education and Science of Ukraine and its commissions and subcommittees on specialties. Today, more than 30 percent of the standards for the bachelor's degree have already been publicly discussed, and standards are being developed intensively for the educational level of the master's degree and the educational-scientific level of the doctor of philosophy. Instead, the formation of modern quality assurance systems for higher education has not yet made visible progress - the work of the National Agency for the Quality Assurance of Higher Education has already been delayed, and higher education institutions have not yet received any methodological assistance in the formation of the internal system quality assurance in higher education. In this review, we will try to provide an analysis of the relevance / inconsistency of the Standards and Recommendations on Quality Assurance in the European Higher Education Area from May 2015 (hereinafter ESG 2015).

- On August 20, 2018 110 draft standards have been developed for the educational level of the Bachelor; 90 draft standards - for the educational level of the Master.

- On August 20, 2018 190 draft standards for educational levels Bachelor and Master have passed public discussion.

- 71 draft standards for educational levels for Bachelor and Master have passed all stages of approval.

- On October, 4, 2018 by the order of the Ministry of Education and Science were approved 10 new standards of Bachelor's level of higher education for specialties: "Ecology", "Physics and Astronomy", "Cyber Security", "Shipbuilding", "Metallurgy", "Automation and Computer-Integrated Technologies" "Biotechnology and bioengineering", "Agronomy", "Tourism" and "Railway transport", as well as 1 standard master's degree for the specialty "Ecology".

The Ministry of Education and Science of Ukraine is the main body in the system of central executive bodies that ensures the formation and implementation of the state policy in the spheres of education and science; academic, scientific, technical and innovative activities; transfer of technologies as well as ensures the formation and implementation of the state policy in the sphere of state control over the activity of educational institutions, enterprises, agencies and organizations that provide services in the field of education or carry out other activities related to the provision of such services regardless of their subordination and form of ownership.

<sup>&</sup>lt;sup>1</sup> set of requirements for the content and results of educational activities of HEIs and scientific institutions at each level of higher education within each specialty (Law "On Higher Education", Article 10)

<sup>&</sup>lt;sup>2</sup> set of minimum requirements for personnel, educational, methodological, logistics and informational ensurance of educational process of a HEI and a scientific institution (Law "On Higher Education", Article 9)

**The National Agency for Higher Education Quality Assurance (NAHEQA)** is one of the governing bodies in the sphere of higher education, the creation of which is provided for in the Law of Ukraine on Higher Education.

The National Agency of Higher Education Quality Assurance (NAHEQA) is a permanent collegiate body authorized by the legislation of Ukraine to implement state policy in the field of higher education quality assurance.

The Agency has assumed certain regulatory and control functions of the MES; replaced the Higher Attestation Commission (HAC) and the State Accreditation Commission (SAC).

Functions of the National Agency of Higher Education Quality Assurance (NAHEQA):

- 1. forms requirements for the system of quality assurance in higher education, develops the provision for accreditation of educational programs and submits it for approval by the Ministry of Education and Science
- 2. analyzes the quality of educational activities of higher education institutions;
- 3. conducts licensing expertise, prepares an expert opinion on the possibility of issuing a license for the conducting of educational activity;
- 4. formulates proposals on the list of specialties to conduct the training of higher education applicants at the relevant levels of higher education;
- 5. forms a single database of higher education institutions of specialization at each level of higher education;
- 6. carries out accreditation of educational programs;
- 7. establishes criteria for assessing the quality of educational activities, including scientific achievements, higher education institutions of Ukraine, which can determine the ratings of higher education institutions of Ukraine;
- 8. develops the requirements for the level of scientific qualification of persons who acquire scientific degrees, develops the procedure for their award by specialized academic councils of HEIs (scientific institutions) and submits it for approval by the Ministry of Education and Science;
- 9. develops a regulation on the accreditation of specialized academic councils and submits it for approval by the Ministry of Education and Science, accredited specialized scientific councils and controls their activities;
- 10. accredites independent evaluation institutions and quality assurance of higher education.

On April 15, 2015, the Cabinet of Ministers of Ukraine adopted a decision to establish the National Agency of Higher Education Quality Assurance.

In June 2015, the first members were elected to the Agency, and on July 27, 2016, the Cabinet of Ministers approved a new version of the Charter, the personal composition of the NAHEQA, determined the limit number of staff.

The process of creating and launching the NAHEQA was widely disseminated in the media.

The results of the election of the members of the Agency, which took place in June 2015, outraged the public, Ministry issued a statement with condemned reaction on the results of election.

The Law of Ukraine "On Education" (September 5, 2017) changed the principles of the formation of the NAHEQA (on a competitive basis) and determined the reload of NAHEQA.

By the Resolution of the Cabinet of Ministers of Ukraine on November 22, 2017, No. 926, was adopted the Regulation on the competitive commission for the selection of members of NAHEQA, and also stipulated that it will consist of nine persons, including representatives of European organizations:

- Representative of the Ministry of Education and Science
- Representative from the European Association for the Quality Assurance of Higher Education (ENQA)
- Representative from the Association of European Universities (EUA)
- Representative from the European Association of Higher Education Institutions (EURASHE)
- Representative from the European Union of Students (ESU)
- Representative of the joint representative body of all-Ukrainian associations of employers' organizations
- Representative of the National Academy of Sciences of Ukraine
- Representative of the National Academy of Pedagogical Sciences of Ukraine

• Representative of the NGO "Ukrainian Student Association", a member of the European Union of Students (ESU).

On January 31, 2018, the Government approved the personal composition of the commission.

In September 2018, the Cabinet of Ministers of Ukraine approved the Regulation on the selection of members of the National Agency of Higher Education Quality Assurance.

The Regulation determines the stages of the competition, the list of documents required for participation in the competition, qualification requirements for candidates for membership of the National Agency, criteria for assessing candidates.

Candidates to the National Agency will be evaluated according to the following criteria:

- professional achievements;
- adherence in the professional activity the academic integrity;
- the practice of applying standards and recommendations on quality assurance in the European Higher Education Area and the Law of Ukraine "On Higher Education" in the professional activity;
- experience of work with international and national organizations working in the field of education and educational projects;
- experience of work or study at a foreign HEI and / or a scientific institution;
- English proficiency.

From 1 to 31 October 2018 it is continued the process of receiving the documents from persons who wish to become members of the National Agency of Higher Education Quality Assurance.

The National Agency of Higher Education Quality Assurance should include 23 members: two persons from the applicants of higher education at first and second level, three representatives from all-Ukrainian associations of employers' organizations, at least one representative of the employees

of the National Academy of Sciences, HEIs of state, communal and private ownership, one representative from the national branch academies of sciences.

The Ministry of Education and Science of Ukraine expects that the National Agency will start its work at the beginning of 2019.

**Special academic boards** are the main link in the system of certification of academic personnel of the highest qualification, which operate at scientific & research and scientific & technical institutions, higher educational institutions and other organizations and conduct fundamental and applied scientific research and have sufficient level of staffing, financial and logistical support for the training of highly qualified academic personnel.

As of the beginning of 2017, there are 994 special academic boards (727 doctoral boards and 267 candidate boards) involving 572 academic specialties in Ukraine. 763 special academic boards operate at higher education institutions and, accordingly, 231 operate at research institutions.

#### - Description of the general architecture of training programs provision and of Degrees awarded

Training of higher education Ph.D. candidates is carried out as follows:

- Postgraduate education program at a higher education institution (an academic institution) involving intramural (day, evening) and extramural forms of study
- Outside the postgraduate education program (for individuals who professionally conduct academic, scientific & technical and scientific & pedagogical activities at the main place of work in the respective higher educational institution (academic institution)
- Self-guided preparation of academic achievements to be presented.

Postgraduate and doctoral educational programs are implemented as follows:

- At the expense of **the state budget** (government contract)
- At the expense of **legal or natural persons** (under the terms of a contract, in particular, **by means of grants** received by a higher educational institution (academic institution) to conduct scientific researches, which provide for the training of higher education Doctor of Philosophy or Doctor of Science candidates).

The Ph.D. training curriculum should contain information on the list and scope of the academic disciplines (30-60 ECTS credits), the sequence of their study, the forms of training sessions and their scope, the schedule of the educational process, the forms of current and final control.

### - Articulation between Master and Doctorate level, statistics per level of study and field of study, students /graduates statistics

**The Master's degree** is an educational degree obtained at the second level of higher education and awarded by a higher educational institution as a result of successful completion of a corresponding educational program by the higher education candidate. Master's degree is obtained on the basis of educational & professional or educational & scientific program. The volume of the educational & professional master's program is 90-120 ECTS credits, and the volume of the educational & scientific program is 120 ECTS credits. The educational & scientific master's program must include a research (scientific) component amounting to at least 30 percent of the whole volume.

**The Doctor of Philosophy** is an educational degree and, at the same time, the first academic degree obtained at the third level of higher education on the basis of a master's degree. The degree of the Doctor of Philosophy is awarded by a special academic board functioning at the higher educational institution or academic institution as a result of successful completion of the relevant educational & academic program by a higher education candidate and the public defence of the thesis work (doctoral dissertation) against a special academic board.

## The graduation of master's and postgraduate students from higher educational institutions of the Ministry of Education and Science of Ukraine for the period of 2012 to 2016

Year	2012	2013	2014	2015	2016
Master's students	61,689	67,260	58,006	59,319	37,725
Postgraduate students	4,937	4,819	4,584	4,908	4,289

## The number of persons entered the postgraduate education program in 2016 by fields of study (at the costs of state budget)

TOTAL, persons	3,000
Education	305
Culture and Art	49
Humanities Courses	299
Theology	0
Social and Behavioural Sciences	445
Journalism	29
Management and Administration	153
Law	170
Biology	81
Natural Sciences	182
Mathematics and Statistics	99
Information Technology	150
Mechanical Engineering	125
Electrical Engineering	71
Automation and Instrument Making	99
Chemical and Bioengineering	66
Electronics and Telecommunications	65
Production and Technology	117
Architecture and Construction	117
Agrarian Sciences and Foodstuffs	155
Veterinary Medicine	68
Health Care	50
Social Work	9
Service Sector	0
Military Sciences, National Security, State Border Security	9
Civil Security	10
Transport	77

#### References to the national qualifications frameworks

In accordance with the Law of Ukraine on Higher Education the National Qualifications Framework is interpreted as a description of qualification levels that are systemized and structured on the basis of competences.

The third (scientific and research) cycle of higher education corresponds to the ninth level of the National qualification framework.

Scientific and research cycle of higher education allows students to acquire theoretical knowledge, skills, experience and other competences that are sufficient for development of new ideas, solution

of complex problems in profession, research and innovation, to acquire scientific and pedagogic methodology, and also to conduct independent academic research which results include scientific novelty, academic value and practical impact.

### National statistics on research and role of the HEIs within the research system (if some), research priorities (at national level or at HEI level)? Role of other actors (if some)

The scientific researches in Ukraine are carried out in accordance with the following principles:

- Priority areas for development of science and technology for the period until 2020 (Law of Ukraine on Priority Directions for Development of Science and Technology № 2623-III dated 11.07.2001 (as amended on 16.01.2016)
- Priority thematic areas of scientific research and scientific & technological developments for the period until 2020 (resolution of the Cabinet of Ministers of Ukraine No. 942 dated 07.09.2011)
- Medium-term priority directions of innovative activity at the national level for the period 2017-2021 (resolution of the Cabinet of Ministers of Ukraine No. 1056 dated 28.12.2016).

Doctors of philosophy are involved in work related to scientific & research topics of higher educational institutions (academic institutions); the research results are further used in their thesis research.

#### EMPLOYMENT Full-time graduates in 2012-2016 studied under the government contract

	Graduates						
Years	2012	2013	2014	2015	2016		
Number of graduates – total	3462	3400	3275	3474	2967		
Employment in their own universities and higher educational establishments of the system of the Ministry of Education and Science	2449	2446	2433	2656	2049		
Employment in other institutions and enterprises	879	826	776	678	713		
No data on employment	134	128	66	140	205		

#### **Brief presentation of the doctorate level**

#### How is doctorate level organized in the country?

The new Regulation on study of doctors of philosophy and doctors of science which determines the procedures of study at the third educational and scientific cycle of higher education in higher education institutions and research institutes in Ukraine (the Regulation), was approved by the resolution of the Cabinet of Ministers of Ukraine No.261 dated 23.03.2016.

The study of postgraduate students in higher education institutions (research institutes) that commenced before the Regulation on study of philosophy and doctors of science will continue in accordance with the resolution of the Cabinet of Ministers of Ukraine No. 300 dated 01 March 1999.

Accordingly, postgraduate students who applied for degrees of candidate of science and doctor of science will finish their study under respective programs in 2019.

# Number of HEIs providing Cycle 3, Fields of interest at national level, Role of HEI in research and delivery of doctoral programs, award of qualifications

Information about number of HEIs and research institutes (RIs) providing Cycle 3 by fields of study is listed below:

Field of study	Number of HEIs	Number of RIs		
Education	142	9		
Culture and Art	32	0		
Humanities Courses	154	15		
Theology	3	0		
Social and Behavioural Sciences	226	23		
Journalism	14	0		
Management and Administration	231	11		
Law	60	8		
Biology	36	24		
Natural Sciences	112	35		
Mathematics and Statistics	46	11		
Information Technology	118	9		
Mechanical Engineering	126	10		
Electrical Engineering	46	8		
Automation and Instrument Making	49	3		
Chemical and Bioengineering	29	1		
Electronics and Telecommunications	30	2		
Production and Technology	46	2		
Architecture and Construction	35	1		
Agrarian Sciences and Foodstuffs	48	31		
Veterinary Medicine	17	4		
Health Care	83	29		
Social Work	18	1		
Service Sector	7	0		
Military Sciences, National Security, State Border Security	16	3		
Civil Security	11	1		
Transport	31	0		
Public management and administration	39	2		
International relations	28	2		

#### National statistics on Doctorate studies

Statistics on doctorate students in Ukraine:

			Years	2010	2011	2012	2013	2014	2015	2016	2017
PhD st	udents	in full-ti	me study	19560	19522	19444	18366	16263	17350	15757	15486
Including PhD students at the											
cost	of	state	budget	18488	18399	18272	17287	15032	13799	12513	12263
(gover	nment	contract)									