

## REPORT ON HIGHER EDUCATION QUALITY IN UKRAINE AND ITS COMPLIANCE WITH THE TASKS OF SUSTAINABLE INNOVATIVE DEVELOPMENT OF SOCIETY IN 2022

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## ISSUES AND PROSPECTS IN THE FIELD OF HIGHER EDUCATION QUALITY ASSURANCE, ITS COMPLIANCE WITH THE GOALS OF SUSTAINABLE DEVELOPMENT

A relevant area for consolidation of efforts of all stakeholders in the higher education quality assurance process is the implementation of the provisions of the Rome Communiqué signed in November 2020 by the Ministers of the European Higher Education Area (EHEA), in particular in terms of the leading role of universities in achieving the UN Sustainable Development Goals. NAQA has initiated a discussion between key stakeholders in higher education on the inclusion of sustainable development principles in the process of internal and external quality assurance<sup>1</sup>.

Problems and challenges overcome by all participants in quality assurance processes (central authorities, employers, NAQA, Ukrainian Higher Education Institutions, and other relevant parties) on the path to enhancing and ensuring quality systems are directly related to our common tasks and prospects in the field of higher education quality assurance.

According to the Law of Ukraine "On Higher Education", "quality of higher education is the compliance of the conditions of educational activity and learning outcomes with the requirements of legislation and standards of higher education, professional and/or international standards (where applicable), as well as the needs of stakeholders and society, ensured through the implementation of procedures for internal and external quality assurance" (Article 1, Part 1, Item 23). Thus, the quality of higher education encompasses a broad range of processes and phenomena in higher education and is closely aligned with the mandate of the National Agency for Higher Education Quality Assurance, as defined in Article 10 of the Law of Ukraine "On Higher Education."

The year 2022, marked by Russia's full-scale invasion of Ukraine, was an unprecedented challenge to Ukraine's higher education system. As a result, university buildings were damaged or completely destroyed, and hundreds of thousands of educators and students relocated abroad or to safer locations within the country. Higher education institutions in occupied areas or war zones were relocated, necessitating the reestablishment of their operations in new environments.

In anticipation of the large-scale invasion of the Russian occupation army into Ukrainian territory, the Cabinet of Ministers of Ukraine approved the Strategy for the Development of Higher Education in Ukraine for 2022-2032 (Decree of the Cabinet of Ministers of Ukraine dated February 23, 2022, No. 286-r). The Strategy identified key issues hindering the development of the higher education system and proposed ways to overcome them, setting the main goals for the next decade. Subsequent events significantly influenced all aspects of life, including the development of higher education.

The strategy identifies the following issues:

- Insufficient funding for the higher education system, ineffective management and utilization of resources, insufficient display of social responsibility, failure to ensure equality and autonomy of higher education institutions;

- Lack of transparency in higher education institutions, inability to produce valuable intellectual output, inadequate response to corruption and academic misconduct, unconditional support for fair admissions and objective assessment of learning outcomes;

- Low accessibility of higher education due to non-compliance with European quality standards, state of infrastructure and educational space, basing the educational process on research, providing conditions for vulnerable groups of learners;

- Eurointegration aspirations not always supported by readiness for structural harmonization, scientific cooperation, and the adoption of best practices, creating conditions for foreign students and preparing Ukrainian students for the global world;

- Widespread imitation student centrism, non-competitive salaries and working conditions for employees, lack of managerial training among higher education institution leaders, lack of awareness of the mission of leadership in human capital formation and societal cohesion, in adult education, leading to decreased attractiveness of higher education institutions<sup>2</sup>.

All the mentioned problems not only did not lose their relevance, but also increased it, taking into account the new, unprecedented challenges our state is facing.

<sup>&</sup>lt;sup>1</sup> Stukalo, N., Lytvyn, M. 2021. *Towards sustainable development through higher education quality assurance*. Education Sciences, 2021, 11(11), 664 https://www.mdpi.com/2227-7102/11/11/664

<sup>&</sup>lt;sup>2</sup> https://zakon.rada.gov.ua/laws/show/286-2022-%D1%80#Text

The results of a joint survey by the State Service of Education Quality of Ukraine and NAQA "System of Quality Assurance of Vocational Pre-Higher and Higher Education under Martial Law"<sup>3</sup> show, in particular, that the Ukrainian market of educational services has undergone significant changes, educational institutions in general managed to overcome a number of problems and cope with complex challenges that have arisen since the beginning of the COVID-19 pandemic. Higher education institutions, having experience of working both online (remotely) and under a blended system (in person-remotely), were able to quickly respond to the challenges of wartime in the context of quality assurance of the educational process, taking into account the security situation in the region and the needs of the participants of the educational process. Evaluating the quality of learning/teaching in educational institutions compared to the pre-war period, respondents generally noted that the quality of education has not changed. It is worth noting that 73.9% of respondents (8870 participants, 63.59% of them are higher education students, 14.78% - are academic staff) indicated the absence of changes in the quality system in educational institutions. Some participants of the questionnaire emphasized the problems of the quality of education. In particular, 13.11% of respondents, including 56.29% of higher education students and 22.3% of academic staff, noted a significant deterioration of the education quality system. At the same time, the results of the survey confirm the general negative impact of the security situation in the regions on the quality of education, in particular in institutions of Mykolaiv, Kharkiv and Zaporizhzhia regions.

The survey within the framework of the project "Universities under siege: challenges for the Ukrainian higher education system after the full-scale Russian invasion of Ukraine", implemented by the School of Political Analysis of the University of Kyiv-Mohyla Academy in partnership with the National Agency for Higher Education Quality Assurance with the support of the Friedric Naumann Foundation for Freedom<sup>4</sup>, provides a different opinion on whether the quality of educational services within the study programme has changed since the beginning of the full-scale war. The majority of respondents, 47.45%, believe that it has not changed; 38.27% rated it as slightly worse, 10.39% – significantly worse, 3% – slightly better, and 0.8% of respondents believe it has improved significantly. This means that 48.5% believe that the quality of education has deteriorated to some extent, which is actually equal to the percentage of respondents who see no changes in the quality of education (47.45%).

In the extremely difficult conditions of the war, the efforts of higher education institutions, NAQA, and all stakeholders not only managed to maintain their achievements, but also to successfully implement their plans. Ensuring the quality of education is impossible without systematic and effective interaction of all participants in this process. Based on this, we state that the activities in the field of higher education quality assurance meet a number of the UN Sustainable Development Goals, the priority of which is Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all<sup>5</sup>.

Despite the state of war, NAQA fully carries out its functions and further enhances its advisory and communication role. Ensuring flexibility and relevance to the demands of the time in external quality assurance procedures is one of the main tasks of NAQA under martial law.

**Internal Quality Assurance Systems in Higher Education** 

The primary level of quality assurance procedures, focused on enhancing and developing the quality assurance system within higher education institutions for educational and higher education quality (internal quality assurance system), has proven to be the most vulnerable.

A pressing issue in the realm of higher education quality assurance today revolves around the fact that education within higher education institutions is predominantly remote (synchronous and asynchronous). This demands alternative approaches to teaching, measurement and assessment of competence development and achievement of learning outcomes, However, in practice, these approaches have remained unchanged.

Specifically, a range of problems complicates the implementation of an internal quality assurance system within higher education institutions:

1. Academic and pedagogical staff and learners tend to favour established educational process requirements and controls, while the current societal and educational context calls for flexibility.

2. The organizational and informational detachment of learners and educators from the institution hinders quality monitoring.

3. The imminent need for fundamentally different preparation of scientific and pedagogical staff demands special attention to the pedagogical component of study programmes and the modernization of

<sup>&</sup>lt;sup>3</sup>https://sqe.gov.ua/wp-content/uploads/2022/10/Pochatok\_2022-2023\_navchalnogo\_roku\_IAD\_VO\_FPO\_SQE.pdf <sup>4</sup>https://ukraine.un.org/uk/sdgs

<sup>&</sup>lt;sup>5</sup>URL: https://ukraine.un.org/uk/sdgs

content preparation within the field of Education/Pedagogy (Goal 4.c: Significantly increase the number of qualified teachers by  $2030^{6}/.../$ ).

4. The health (physical and mental) of teaching staff various factors, both security-related and other external elements, affecting the educational process (Goal 3: Ensure healthy lives and promote well-being for all at all ages<sup>7</sup>).

5. The administration of higher education institutions has shifted its priority towards urgent matters such as safety, institutional existence, aiding those in emergency situations, etc., whereas quality assurance issues have somewhat receded to the periphery of their attention.

6. Varied demand and market weight of specialities, unlike the pre-war period, have led to diminished interest in previously popular professions, exacerbating the shortage of unique professionals, whose training requires time and resources. Thus, the realization of Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all<sup>8</sup>.

7. The insufficient correlation between science and education during the war has become critical, given that equipment was lost in some cases, and access to laboratory and research resources became more complicated.

8. Obsolescence and imperfections in educational and methodological resources.

9. The absence of guaranteed access to electricity, communication, and other necessary components for quality educational implementation (Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all<sup>9</sup>).

The problems of higher education institutions regarding ensuring the quality of education, which mainly have organizational and value aspects, have not lost their relevance.

1. The closedness of the information policy of the vast majority of universities and other higher education institutions as establishments, as a result of which contacts between subjects of educational activity are quite formal. The dissemination of the best educational practices has the character of straightforward transfer without proper analysis.

2. Lack of understanding of the possibilities of using autonomy in the development of the quality system, instead, there are still expectations of normalization of processes by state bodies.

3. Unsystematic work on the formation of a real staff reserve in the field of quality assurance, when it is possible to more actively involve experts of NAQA and members of the Sectoral Expert Councils in these processes.

4. Lack of motivation of scientific and pedagogical staff to improve in the field of quality assurance.

In general, the solution of the above problems is possible thanks to the effective use of the managerial autonomy of the higher education institution and the improvement (if available) or the formation (if not) of the system for ensuring the quality of educational activities and the quality of higher education. Such processes involve the implementation of a number of procedures and measures by higher education institutions, which in turn requires both the systematization of internal processes and the performance of advisory evaluation functions by NAQA. In particular, we are talking about educational webinars and seminars, individual consultations, training of experts who could contribute to improving work in their higher education institutions, etc.

Foremost, it is time for higher education institutions to clearly define the principles and procedures for ensuring the quality of higher education in the local regulatory documentation developed by the vast majority of institutions. Along with that, the mentioned procedures are of a general nature, often cannot be applied in practice, that is, not all internal regulatory documents really become the basis of real activity. Thus, higher education institutions are now actively streamlining the monitoring and periodic review of study programmes, but these procedures still need to be correlated with the experience gained as well as regulated. In particular, there is an automatic transfer of experience from other universities, discrepancies between real practices and the local regulatory framework, formality of approaches.

No less intensively are implemented the practices of annual assessment of higher education students, rating of scientific-pedagogical and pedagogical staff of higher education institutions and regular publication of the results of such assessments, as this is a requirement of the law. However, the question of "surveys just

<sup>9</sup> Ibd

<sup>&</sup>lt;sup>6</sup> URL: https://ukraine.un.org/uk/sdgs

<sup>&</sup>lt;sup>7</sup> Ibd

<sup>&</sup>lt;sup>8</sup> Ibd

to get a survey done?" arises here, when no conclusions have been drawn after the rating and no changes have been implemented regarding the quality of education.

According to the monitoring results of the State Service of Education Quality of Ukraine and NAQA "System of Quality Assurance of Vocational Pre-Higher and Higher Education under Martial Law"<sup>10</sup> regarding the question of conducting surveys in educational institutions in the context of ensuring the quality of learning/teaching, the majority of respondents (65.53% of participants, including 58.19% of higher education students, 20.76% of scientific and pedagogical staff) noted the existence of conducting such surveys. Students and teachers of educational institutions (23.1%) commented on the formal approach to conducting these stakeholder surveys. 11.36% of the respondents noted that no surveys were conducted regarding quality assurance of learning/teaching at all, which indicates the non-compliance of the quality assurance systems of such higher education institutions not only with qualitative, but also with formal requirements.

One of the results of such surveys, in particular regarding teachers, could be the updating of approaches to ensuring the improvement of the qualifications of pedagogical, scientific and scientific-pedagogical staff, in particular in the aspect of updating teaching technologies, attracting teaching-methodical and material resources for the organization of the educational process, specific for each study program.

The use of information systems for effective support of the educational process is not new for Ukrainian higher education institutions, but not all of them are used actively enough. The official resources of some universities look unconvincing from the point of view of ensuring the publicity of information about study programmes, degrees of higher education and qualifications, they often contain outdated information, are functionally inconvenient and not structured.

Regarding the observance of academic integrity by employees of higher education institutions and students of higher education, including the creation and operation of an effective system for the prevention and detection of academic plagiarism (Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels<sup>11</sup>), today, the activation of higher education institutions is mainly demonstrative and does not concern profound worldview changes.

Solving these and other urgent tasks is currently important for all stakeholders, especially higher education institutions, both in building a culture of quality and with the involvement of the National Agency for Higher Education Quality Assurance in the advisory function.

#### Higher military education

The educational activity of higher military educational institutions takes place within the framework of the educational legislation of Ukraine and in accordance with the requirements of the NATO standard Bi-SCD 075-007 "Education and training". The training of specialists in the security and defence sector of Ukraine is changing in accordance with the requirements of the European Educational Area and the standards of professional military education of NATO countries.

The vector of changes defined by the Resolution of the Cabinet of Ministers of Ukraine No. 1410 (December 15, 1997) as amended from December 30, 2022, provides for the achievement of sufficient interoperability of the Armed Forces and other components of the defence forces with the relevant structures of NATO member states in the shortest possible time, and the significant activation of reforms that must be implemented to achieve full compliance with NATO membership criteria.

New system of military education:

1. Introduces joint training of the Armed Forces of Ukraine with other components of the defence forces according to a single plan and plan and under a single leadership.

2. Creates a unified system of military education for training personnel of the defence forces on the basis of professional military education courses L1-L5.

High-quality training in the field of military education is the ability of graduates to act in accordance with the requirements for military practice in peacetime, and in wartime, it is compliance with the requirements of the battlefield and military (defensive, offensive, and other) operations as a whole. Therefore, an assessment of the quality of training of military specialists of the Armed Forces of Ukraine, carried out by external experts, will be quite relevant.

 $<sup>^{10}</sup> https://sqe.gov.ua/wp-content/uploads/2022/10/Pochatok_2022-2023\_navchalnogo\_roku\_IAD\_VO\_FPO\_SQE.pdf$ 

<sup>&</sup>lt;sup>11</sup>https://ukraine.un.org/uk/sdgs

In this context, the assessment of the military expert of the US Center for Civil-Military Relations, Mr. Glen Grant<sup>12</sup>, a retired colonel of the British Army, who was in the war zones between January and October 2015, deserves attention. According to his assessment, the system of military administration at that time ".... at all levels was filled with fear about decision-making and the possibility of punishment. Most officers are afraid to make decisions because of the possibility of mistakes and punishment from superiors. This problem dangerously affects the effectiveness of the military's actions, which became the main factor in the loss of Crimea. Officers are often well aware of the problem but try to ask others to raise the issue. There is a perception of "rather ranks than professional abilities". The one who is simply "older" is considered better than the one who is younger and more "capable".

This assessment largely coincided with the assessments of the heads of military education of the Armed Forces of Ukraine, so this problem was considered by the Collegium of the Ministry of Defence of Ukraine back in August 2015.

The reforms proposed by the Board made it possible to significantly improve the quality of officer training for the Armed Forces of Ukraine. But, according to stakeholders, the system of military education began to undergo fundamental changes in 2019 with the introduction of new approaches to evaluating the quality of study programmes proposed by the National Agency for Higher Education Quality Assurance.

Thus, in recent years, the system of military education has undergone systemic changes due to the following factors:

Introduction of war experience;

> Implementation of NATO standards in training programmes;

 $\succ$  implementation of best practices in education and training of the security and defence sector based on the experience of partner countries;

> change in worldview values in the training of officer personnel;

> improving the quality of practical training of all categories of military education students.

2022 was a difficult, stressful, controversial year for all higher military educational institutions, but at the same time productive in terms of testing and developing capabilities to perform specific combat tasks and train highly qualified officer-leaders to meet the needs of the Armed Forces of Ukraine and other components of the defence forces. This is a year that, in terms of the Russian-Ukrainian war, became a challenge for the system. Many higher military educational institutions were hit by shelling and changed their location. At the same time, the students and employees of higher military educational institutions performing combat missions to repel the armed aggression of the Russian Federation immediately since 24.02.2022.

However, systematic work on training highly qualified graduates continued. Military institutions completed the early graduation of trainees and cadets of the strategic, operational and tactical levels. Students of the 1st year were appointed to positions in the army and transferred to study extramural.

Military units from various deployment locations were involved in the practical component. In certain specialities, practice was carried out in military units.

Despite all the challenges, higher military educational institutions successfully conducted an admissions campaign and enrolled strategic, operational and tactical level students, as well as adjuncts and doctoral students, and started the educational process with them in a timely manner.

Despite the complexity of the situation, the issue of the quality of military education has not receded into the background in the activities of universities, in particular, at the National Defence University of Ukraine named after Ivan Chernyakhovsky, there is a permanent working group of officers-graduates of foreign military educational institutions to accelerate the implementation of NATO standards in the educational process; the teaching of NATO planning standards and procedures is implemented in more than 70 academic disciplines; together with experts from NATO member countries and foreign partners, optional courses have been developed that take into account the specifics of the future professional activities of university graduates and many other innovative measures.

Thus, despite the real involvement in the country's defence at various levels, the military education system of the Armed Forces of Ukraine and the entire security and defence sector of Ukraine continues the development of internal education quality systems aimed at continuous improvement of its activities. The quality of such work is enhanced by the continued systematic introduction of NATO standards and planning procedures into the training content of specialists at all levels\*.

Tasks of the external quality assurance system in higher education

Bringing the system of external quality assurance of educational activities of higher education institutions and the quality of higher education into compliance with the requirements of the European

<sup>&</sup>lt;sup>12</sup> URL: https://www.facebook.com/glen.grant.908

Educational Area is an urgent need<sup>13</sup>. Further measures to implement the National Action Plan on Ukrainian external higher education quality assurance for 2022-2023 period, one of the developers of which is The National Agency for Higher Education Quality Assurance, are aimed at the need to fully comply with the European Educational Area.

Evaluating the importance of quality assurance of education during a full-scale war during a joint survey of the State Service of Education Quality of Ukraine and NAQA "System of Quality Assurance of Vocational Pre-Higher and Higher Education in the Conditions of Martial Law", 39.99% of higher education students confirmed the opinion "even during the war, it is important for me to ensure high quality of education", another 23.76% chose the answer option "rather agree" (total – 62%). Only 4% chose the option "completely disagree" and another 7.98% – "rather disagree"<sup>14</sup>.

Given that the external quality assurance system of educational activities of higher education institutions and the quality of higher education involves the implementation of specific procedures and measures, we offer the following directions for its improvement, taking into account the goals of sustainable development and the tasks outlined in the National Action Plan.

1. Implementation by NAQA of a consultative assessment (evaluation) to promote the effective implementation of processes and procedures of internal quality assurance of educational activities of higher education institutions.

2. Realization of external quality assurance procedures. In particular, it is necessary to improve the processes of accreditation of study programs, to adjust the criteria for evaluating the quality of study programs in accordance with the standards and recommendations of quality assurance in the European Higher Education Area.

3. Development and implementation of the institutional accreditation model. The introduction of institutional accreditation, in particular, is aimed at the assessment by NAQA of the quality assurance system of educational activities by higher education institution in order to clarify its compliance with European practices and requirements of national educational legislation.

3. It is time to normalize activities and develop a network of independent institutions for evaluating and ensuring the quality of higher education.

4. It is necessary to monitor the activities of the quality assurance systems of higher education institutions and find out the effectiveness of their implementation of the recommendations, other procedures and measures and the implementation of the post-accreditation monitoring procedure.

5. In connection with legislative changes, their implementation and activation of further rulemaking.

6. Involvement of all stakeholders in improving the quality of higher education in Ukraine in line with the Sustainable Development Goals and jointly identifying ways to further develop quality assurance in higher education.

<sup>&</sup>lt;sup>13</sup> Бутенко А. Стан відповідності законодавства України про якість вищої освіти стандартам та рекомендаціям, закріпленим в ESG 2015. Юридичний науковий електронний журнал. 2022. № 12. URL: <u>http://lsej.org.ua/12\_2022/1.pdf</u>

<sup>&</sup>lt;sup>14</sup><u>https://spa.ukma.edu.ua/wp-content/uploads/2023/01/Universytety-pid-chas-viyny-vid-zakladu-osvity-do-sotsialnoi-misii-doslidzhennia-SHPA.pdf</u>

<sup>\*</sup> Section prepared based on the materials of Volodymyr Medvediev

## I. HIGHER EDUCATION AND HIGHER EDUCATION QUALITY ASSURANCE IN UKRAINE

In order to prepare the static component of the report, specialists of NAQA analysed the Unified State Electronic Database on Education, the official website of the Ministry of Education and Science of Ukraine, Vstup.OSVITA.UA information system, and other open sources containing information about the higher education system.

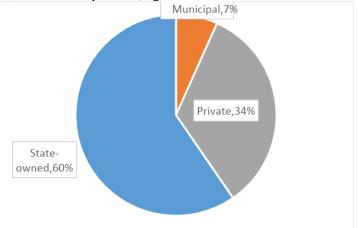
So, the quantitative indicators of the higher education system are as follows.

### 1.1 Information on national system of higher education in Ukraine.

#### **1.1.1. Higher education institutions**

As of January 1, 2023, 736 higher education institutions were represented in the Register of Educational Entities "Higher Education Institutions" of the Unified State Electronic Database on Education (USEDE).

According to the forms of ownership, higher education institutions are distributed as follows: 439 are state-owned, 49 are municipal, and 248 are private (Fig. 1.1.1).



*Figure 1.1.1. Distribution of higher education institutions by the forms of ownership* The regional distribution shows the concentration of the majority of higher education institutions in the city of Kyiv, as well as in the Dnipro, Lviv, Odesa, and Kharkiv regions (Fig. 1.1.2).

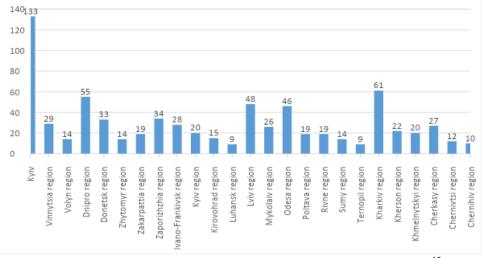


Figure 1.1.2. Regional distribution of higher education institutions<sup>15</sup>

A more detailed analysis shows that there are five cities which can be considered university centres: Kyiv, Kharkiv, Lviv, Dnipro and Odesa (Fig. 1.1.3).

<sup>&</sup>lt;sup>15</sup> Hereinafter: the regional distribution was determined by the legal location of the institution; data for Kyiv region are given excluding the city of Kyiv.

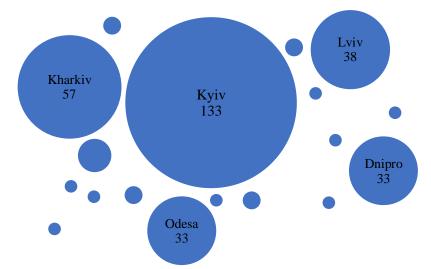


Fig. 1.1.3. Largest cities – university centres, by number of higher education institutions

#### **1.1.2. Scientific institutions**

As of 1 January 2023, the Register of Educational Entities "Higher Education Institutions" of the USEDE base included 191 institutions in the category "Scientific Institutes (Institutions)".

Among them, only 1 institution is privately owned<sup>16</sup>, the rest are state-owned.

Two thirds of this category of institutions (126) are located in the city of Kyiv. Several institutions are located in Kharkiv (27), Lviv (11), Dnipro, Kyiv and Odesa regions (6 each). The rest of the regions have 1-2 scientific institutions or none at all (11 regions). (Fig. 1.1.4).

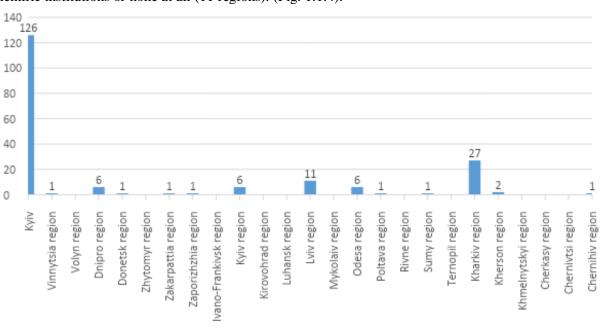
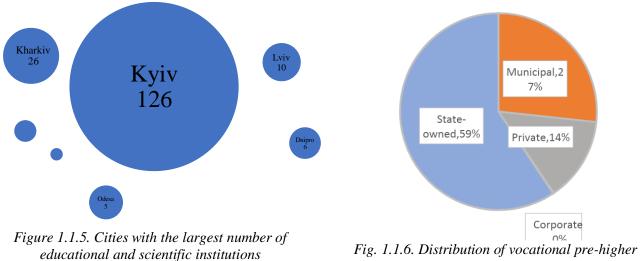


Fig. 1.1.4. Regional distribution of scientific institutions

The largest number of institutions are concentrated in Kyiv (126), Kharkiv (26), Lviv (10), Dnipro (6) and Odesa (5). (See Figure 1.1.5).

<sup>16</sup> Private institution "The Scientific Institute of Public Law".



education institutions by forms of ownership

Thus, regional distribution and distribution by city correlates with the situation in higher education institutions.

The majority of educational institutions — scientific institutions (172) are subordinate to national academies: the National Academy of Sciences of Ukraine (102), the National Academy of Agrarian Sciences of Ukraine (32), the National Academy of Medical Sciences of Ukraine (21), the National Academy of Pedagogical Sciences of Ukraine (10), the National Academy of Legal Sciences of Ukraine (6), the National Academy of Arts of Ukraine (1).

1.1.3. Vocational pre-higher education institutions

As of January 1, 2023, 588 institutions of professional pre-higher education were represented in the Register of Educational Entities "Higher Education Institutions" of the USEDE base.

According to the forms of ownership, institutions are distributed as follows: 349 institutions are stateowned, 157 are municipal, 81 are private, and 1 is corporate (see Fig. 1.1.6).

The largest number of vocational pre-higher education institutions are located in Dnipro region (52), city of Kyiv (42), Odesa region (38), Lviv region (37), Kharkiv region (34), which generally correlates with the regional distribution of higher education institutions (Fig. 1.1.7).

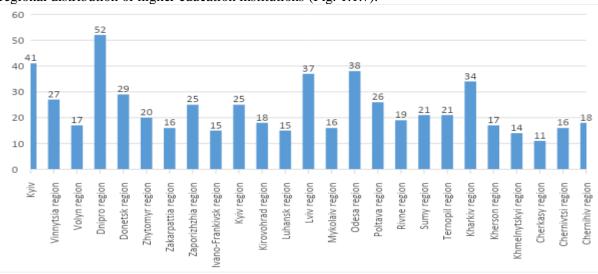


Figure 1.1.7. Regional distribution of vocational pre-higher education institutions

Cities that are also leaders in terms of the number of higher education institutions are also the leading cities in terms of the number of vocational pre-higher education institutions: these are Kyiv (41 VPHEI), Odesa (27), Lviv and Kharkiv (21 each) and Dnipro (18) (see Fig. 1.1.8).

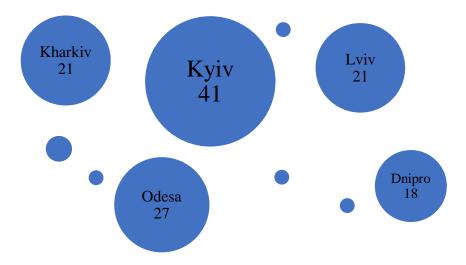


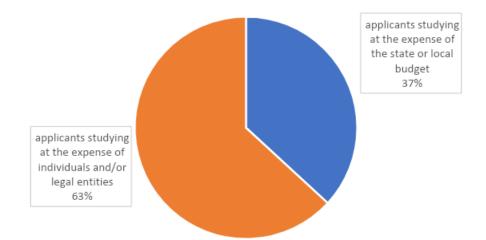
Fig. 1.1.8. Cities with the largest number of vocational pre-higher education institutions

## **1.2. Higher Education Students**

## **1.2.1. General indicators**

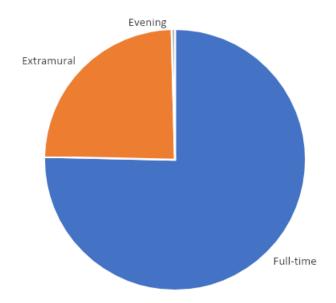
According to the USEDE base, as of January 1, 2023, there were 1,077,685 higher education students in Ukraine with the degrees of Junior Bachelor, Bachelor, Specialist, Master, Doctor of Philosophy and Doctor of Arts.

Slightly more than a third of students (36.9%) obtain higher education at the expense of state or local budgets (Fig. 1.2.1). In quantitative terms, there are 397,134 students studying at the expense of the state or

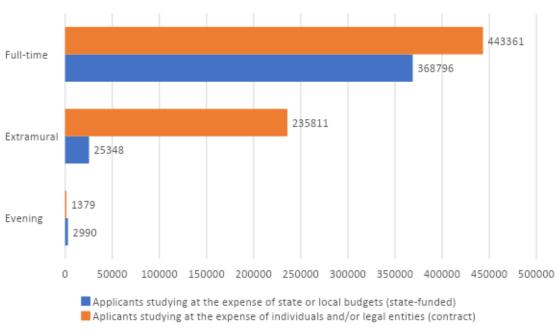


local budget, and 680,551 students studying at the expense of individuals and legal entities. *Fig. 1.2.1. Ratio of students by sources of education funding* 

The distribution by form of study is as follows: more than three-quarters of students study full-time (75.4%). Almost a quarter of students study extramural (24.2%) and the smallest number of students study in the evening courses (0.4%) (Fig. 1.2.2). In quantitative terms, there are 812,157 full-time students and 261,159 extramural students, and 4369 evening students.



1.2.2. Distribution of students by forms of study



Quantitative indicators are presented in fig. 1.2.3.

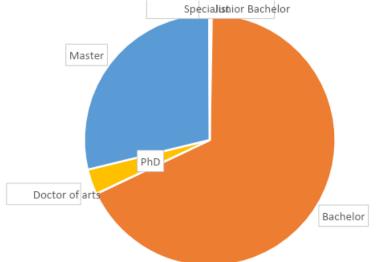
Fig. 1.2.3. Number of students by different forms of education

1.2.2. Higher education students by level of higher education

According to the USEDE base, as of 1 January 2023, the distribution of students by level of higher education is as follows: for Junior Bachelor's degree are obtained by 2,891 individuals, Bachelor's degree – 729,506, Specialist's degree – 845, Master's degree – 309,297, Doctor of Philosophy – 35,026 and Doctor of Arts – 120. It is worth noting that since higher education institutions are not responsible for providing information on students for Doctor of Philosophy and Doctor of Arts degrees to the USEDE, the report possibly contains incomplete data on them.

The current distribution of students by level of higher education is presented in fig. 1.2.4 and fig. 1.2.5. *Fig. 1.2.4. Distribution of students by level of higher education* 

The students are distributed by form of study as follows: 89.3% of students for the degree of Junior



Bachelor study full-time and 10.7% study extramural. The distribution of Bachelor's degree holders is as follows: 77.3% of students are studying full-time, 22.6% are studying extramural, and 1% are studying in the evening courses. As for students for the degree of Specialist, there is a greater shift towards extramural study -60.5% and 39.5% – full-time. For Master's degree students, there is an even greater shift towards extramural study: 71.3% are studying full-time, 28.6% – extramural and 1% – evening. Students for the degree of Doctor of Philosophy are distributed as follows: 71.7% are full-time, 18.9% are extramural, and 9.4% are evening courses students. Students for the degree of Doctor of Arts are distributed as follows: 99.2% are full-time, 0.8% are extramural.

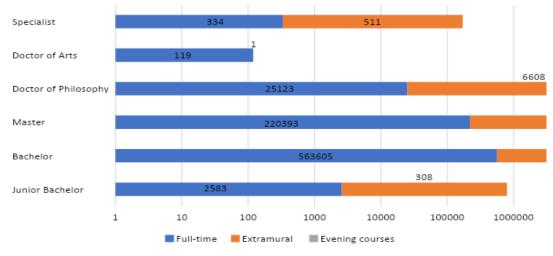


Fig. 1.2.5. Number of degree students by levels of higher education and forms of study

The distribution of students by sources of funding for higher education is as follows:

- 72.5% of students studying with the funds of the state or local budget at the level of Bachelor education, 23.1% at the Master's level of education, 4.1% at the Doctor of Philosophy level of education, and less than 1% by other levels of education.

- the number of students studying at the expense of individuals and/or legal entities according to the level of education Bachelor is 64.9%, according to the level of education Master — 32.0%, according to the level of education Doctor of Philosophy — 2.8%, according to other levels of education — less than 1%.

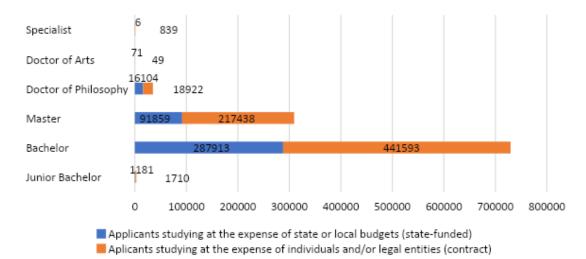


Fig. 1.2.6. Number of students for Junior Bachelor's, Bachelor's and Master's degrees by sources of funding

Generalized information on students by form of study, source of funding and level of education is presented in Table 1.2.1.

Distribution of students by level of higher education									
Educational level	<b>Full-</b> time (state- funded)	<b>Full-</b> time (contract)	<b>Extramural</b> (state-funded)	Extram ural (contrac t)	Evenin g courses (state- funded)	<b>Evening</b> <b>courses</b> (contract)	Total		
Junior	1170	1413	11	297	0	0	2891		
Bachelor									
Bachelor	268844	294761	19033	146119	36	713	729506		
Master	85653	134740	6206	82373	0	325	309297		
Doctor of	13053	12070	97	6511	2954	341	35026		
Philosophy									
Doctor of Arts	71	48	0	1	0	0	120		
Specialist	5	329	1	510	0	0	845		
Total	368796	443361	25348	235811	2990	1379	107768		

Distribution of students by level of higher education

Source: USEDE base.

**1.2.3. Students by speciality** 

Generalized information on the distribution of students by speciality is shown in Table 1.2.2.

Distribution of students by speciality<sup>17</sup> shows that the most popular specialities are the following: 081 Law (80,329 students, 7.46% of the total), 222 Medicine (58,820/5.47%), 014 Secondary Education (57,144/5.31%), 073 Management (56,388/5.24%), 053 Psychology (38,630/3.59%), 035 Philology (38,144/3, 54%), 122 Computer Science (36,913/3.43%), 051 Economics (27,599/2.56%), 072 Finance, Banking and Insurance (25,551/2.37%), 121 Software Engineering (23,721/2.2%).

*Table 1.2.1.* 

<sup>&</sup>lt;sup>17</sup> Here and further, the analysis of the distribution of applicants did not take into account, due to their small number, applicants studying on study programmes with codes in accordance with the now defunct List of specialities in which training is provided in higher education institutions at the Specialist and Master's levels, approved by the Resolution of the Cabinet of Ministers of Ukraine of 27 August 2010 No. 787. According to the USEDE base, as of 1 January 2023, the number of such applicants (Junior Bachelor, Bachelor, Specialist and Master degrees) was 1554.

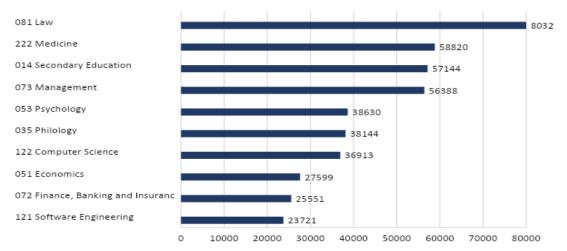


Fig. 1.2.7. TOP-10 most popular specialities



Distribution of students by speciality									
Speciality	Full-time (state- funded)	Full-time (contract)	Extramural (state- funded)	Extramural (contract)	Evening courses (state- funded)	Evening courses (contract)	Total		
011 Educational, pedagogical sciences	597	1677	4	1671	116	17	4082		
012 Preschool education	4928	1623	1509	4648	0	0	12708		
013 Primary education	5759	1743	1475	5448	1	0	1442		
014 Secondary education (by subject specialities)	29840	12242	3765	11250	37	10	57144		
015 Vocational education (by subject specialities)	2754	2402	315	1112	52	7	6642		
016 Special education	2462	1942	395	4363	6	1	9169		
017 Physical culture and sports	6075	8126	595	4625	23	2	19446		
021 Audiovisual Arts and Production	1145	2291	80	640	0	0	4156		
022 Design	4093	7631	7	1970	7	1	1370		
023 Fine art, decorative art, restoration	2853	1746	39	344	6	0	4988		
024 Choreography	1194	1376	46	835	7	0	3458		
025 Musical art	4004	2983	142	1085	21	0	8235		
026 Stage art	1399	1634	115	486	0	0	3634		
027 Museum studies, monument studies	222	142	0	6	0	0	370		
028 Management of socio-cultural activities	436	1637	5	876	0	0	2954		

## Distribution of students by speciality<sup>18</sup>

<sup>&</sup>lt;sup>18</sup> Specialities 252, 253, 254 and 255 are not presented, as the data on them are classified.

029 Information,							
library and archival	1608	2335	23	1092	0	0	5058
work	1000	2555	23	1072	U	0	5050
031 Religious			_			_	
studies	64	65	0	17	10	3	159
032 History and	2724		100	<i>(</i> ) <b>-</b>		2	
archaeology	2724	2397	132	687	88	8	6036
033 Philosophy	793	906	3	189	33	2	1926
034 Culturology	889	1324	8	396	5	0	2622
035 Philology	13087	19027	380	5522	85	43	3814
041 Theology	4	682	0	588	4	0	1278
051 Economy	7034	13393	305	6675	171	21	2759
052 Political science	1034	2473	58	650	52	4	4271
053 Psychology	4330	15040	280	18740	73	167	3863
054 Sociology	942	1016	14	250	21	0	2243
061 Journalism	2706	7721	37	265	18	4	1313
071 Accounting and	4118	6441	633	6114	29	8	1734
taxation	4110	0441	033	0114	29	0	1734
072 Finance,							
banking and	5847	11643	497	7511	43	10	2555
insurance							
073 Management	8302	28944	796	18263	62	21	5638
074 Public							
management and	0	2	0	0	0	0	2
administration							
075 Marketing	3659	10656	28	381	22	11	1845
076							
Entrepreneurship,	3288	9610	317	4113	39	16	1738
trade and exchange				_		-	
activity	11005	25525	17	22120	1.61	50	0022
081 Law	11285	35525	17	33130	161	58	8032
091 Biology	3415 4046	987	43	1207	65	26	5719
101 Ecology 102 Chemistry	2015	3562 202	524	1698 102	39 11	0	9875 2331
v			1			-	
103 Earth Sciences	1720	560	54	12	12	1	2475
104 Physics and	1444	212	0	7	21	0	1684
astronomy			Ŭ			Ű	100.
105 Applied physics	1573	218	0	16	14	0	1821
and nanomaterial	1575	210			14		1621
106 Geography	972	551	6	53	1	2	1585
111 Mathematics	1710	247	0	76	4	0	2037
112 Statistics	439	19	0	0	0	0	458
113 Applied	3122	876	0	28	9	1	4036
mathematics	5122	070	0	20	,	1	+050
121 Software	10474	11129	439	1660	16	3	23721
engineering	10474	11127	-57	1000	10	5	23721
122 Computer	17831	16087	592	2329	53	21	3691
Science	17031	10007	572	2527		21	5071
123 Computer	9328	5764	310	1074	9	23	16508
engineering							
124 System analysis	2376	1281	4	176	1	0	3838
125 Cybersecurity	6036	6648	53	844	12	9	1360
126 Information	22.55	2072				0	<b>18</b> 00
systems and	3266	3073	102	351	6	0	6798
technologies							
131 Applied	5141	1696	292	567	14	2	7712
mechanics							

132 Materials science	1523	592	104	118	16	1	2354
133 Industrial engineering	6313	2638	460	873	28	2	10314
134 Aviation and rocket and space	1381	607	15	141	7	18	2169
technology							
135 Shipbuilding	370	540 679	31 345	402 195	0	0	1343 2380
136 Metallurgy 141 Power	1134	0/9	545	193	0	1	2380
engineering, electrical engineering and electromechanics	10586	4537	823	2934	12	5	1889
142 Energy engineering	1066	567	74	181	10	1	1899
143 Nuclear power	290	34	6	172	6	0	508
144 Thermal power	1255	487	35	372	1	0	2150
engineering							
145 Hydropower 151 Automation and	70	18	8	10	0	0	106
computer-integrated technologies	6971	2961	314	942	22	2	11212
152 Metrology and information and measurement technology	1689	657	77	219	17	0	2659
153 Micro- and nanosystem technology	1281	202	2	3	0	0	1488
161 Chemical technologies and engineering	2948	1056	75	421	38	1	4539
162 Biotechnology and bioengineering	1864	1171	17	429	0	1	3482
163 Biomedical engineering	673	526	20	91	3	0	1313
171 Electronics	1720	381	16	70	12	0	2199
172 Telecommunications and radio engineering	5618	1697	86	646	22	4	8073
173 Avionics	438	156	0	51	1	0	646
181 Food technologies	5283	3199	483	2551	10	0	1152
182 Technologies of light industry	735	215	106	310	0	0	1366
183 Environmental protection technologies	794	560	82	141	15	1	1593
184 Mining	1504	678	177	485	4	0	2848
185 Oil and gas engineering and technologies	1242	829	45	682	1	0	2799
186 Publishing and printing	1383	691	43	122	3	0	2242

107 11 11							
187 Woodworking	270	242	11	47	0	0	670
and furniture	370	242	11	47	0	0	670
technologies							
191 Architecture and	3022	3974	0	253	8	323	7580
urban planning							
192 Construction	9528	5140	813	3718	39	9	19247
and civil engineering						-	
193 Geodesy and	3279	2467	165	1170	6	0	7087
land management	0-17	2.07	100				
194 Hydrotechnical							
construction, water	334	153	55	34	0	0	576
engineering and	554	155	55	5-	Ŭ	0	570
water technologies							
201 Agronomy	6741	4427	1048	1980	77	7	1428
202 Protection and	803	544	45	100	3	0	1495
quarantine of plants	803	544	45	100	3	0	1495
203 Horticulture and	501	077	117	0.4	2	0	1012
viticulture	521	277	117	94	3	0	1012
204 Technology of							
production and	2624	000	226	741	17	4	4600
processing of animal	2624	906	336	741	17	4	4628
husbandry products							
205 Forestry	1627	1056	447	1473	13	1	4617
206 Horticulture	915	463	141	233	4	0	1756
207 Aquatic	210		1.1				1100
biological resources	562	328	286	176	16	0	1368
and aquaculture	502	520	200	170	10	0	1500
208 Agricultural							
engineering	4934	2645	754	1247	0	0	9580
211 Veterinary							
medicine	4435	3017	0	7	20	3	7482
212 Veterinary							
hygiene, sanitation	409	292	0	1	7	0	709
and expertise	407		U	1	,	0	107
221 Dentistry	912	10064	3	46	78	0	1110
221 Dentistry 222 Medicine	22479	35362	27	448	49	5	5882
223 Nursing	602	628	0	715	37	279	2261
224 Technologies of	002	028	0	/15	57	219	2201
medical diagnosis	216	495	0	11	4	2	728
and treatment	210	493	0	11	4	2	120
225 Medical	88	568	0	2	7	0	665
psychology							
226 Pharmacy,	1212	6588	58	10894	46	91	18889
industrial pharmacy							
227 Physical	0071	(001	50	770	20	21	0465
therapy,	2371	6221	52	770	20	31	9465
occupational therapy	10.40	20.4		0	2.6		1504
228 Pediatrics	1342	394	4	8	36	0	1784
229 Public health	57	115	0	267	9	0	448
231 Social work	2817	3064	723	2555	12	0	9171
232 Social security	703	1188	30	319	1	0	2241
241 Hotel and	1798	7049	67	3664	0	0	1257
restaurant business							
242 Tourism	2223	6566	110	2778	1	6	1168
251 State security	1	34	0	13	0	0	48
253 Military	1	0	0	0	0	0	1
administration (by	1	0	0	0	U	0	1

forces)Image: constraint of the second	types of armed							
military equipment1110012024256 National security (by separate areas of provision activities)3 $1053$ $00$ $726$ $11$ $00$ $1783$ 261 Fire safety50611071422031993804262 Law enforcement activity1766042850000011649263 Civil security69110239410901022910271 Sea and inland water transport24033764266488610011089272 Aviation transport11497255426112307273 Railway transport893249185758402089274 Road transport technologies (by types)51293809319221123311494281 Public management and administration1350491058370362026514146291 International regional studies1838585938126118519292 International regional studies15176001161531111149090	/							
security (by separate areas of provision and types of activities)3105307261101783261 Fire safety50611071422031993804262 Law enforcement activity1766042850000011649263 Civil security691102394109010222910271 Sea and inland water transport2403376426488610011089272 Aviation transport1149725542611112307273 Railway transport893249185758402089274 Road transport2826322034611362117550275 Transport technologies (by types)51293809319221123311494281 Public management and administration1350491058370362026514166291 International regional studies183858593812618519292 International regional studies1517600116153111149090		11	1	0	0	12	0	24
262 Law enforcement activity $17$ $6604$ $28$ $5000$ $0$ $11649$ $263 Civil security69110239410901022910271 Sea and inlandwater transport2403376426488610011089272 Aviationtransport11497255426112307273 Railwaytransport893249185758402089274 Road transport2826322034611362117550275 Transporttechnologies (bytypes)51293809319221123311494291 Internationalrelations, publiccommunications andregional studies183858593812618519292 Internationalregional studies1517600116153111149090$	security (by separate areas of provision and types of	3	1053	0	726	1	0	1783
enforcement activity17 $6604$ 28 $5000$ 00011649263 Civil security69110239410901022910271 Sea and inland water transport2403 $3764$ 26488610011089272 Aviation transport11497255426112307273 Railway transport893249185758402089274 Road transport2826322034611362117550275 Transport technologies (by types)51293809319221123311494281 Public management and 	261 Fire safety	506	1107	142	2031	9	9	3804
271 Sea and inland water transport24033764264886100011089272 Aviation transport11497255426112307273 Railway transport89324918575844002089274 Road transport2826322034611362117550275 Transport technologies (by types)51293809319221123311494281 Public management and administration1350491058370362026514146291 International relations, public communications and regional studies1517600116153111149090		17	6604	28	5000	0	0	11649
water transport     2403     3764     26     4886     10     0     11089       272 Aviation transport     1149     725     5     426     1     1     2307       273 Railway transport     893     249     185     758     4     0     2089       274 Road transport     2826     3220     346     1136     21     1     7550       275 Transport technologies (by types)     5129     3809     319     2211     23     3     11494       281 Public management and administration     1350     4910     583     7036     202     65     14146       291 International relations, public communications and regional studies     1838     5859     3     812     6     1     8519       292 International economic relations     1517     6001     16     1531     11     14     9090	263 Civil security	691	1023	94	1090	10	2	2910
transport11497255426112307273 Railway transport893249185758402089274 Road transport2826322034611362117550275 Transport technologies (by types)51293809319221123311494281 Public management and administration1350491058370362026514146291 International regional studies183858593812618519292 International economic relations1517600116153111149090		2403	3764	26	4886	10	0	11089
transport $893$ $249$ $185$ $738$ $4$ $0$ $2089$ $274$ Road transport $2826$ $3220$ $346$ $1136$ $21$ $1$ $7550$ $275$ Transport $5129$ $3809$ $319$ $2211$ $23$ $3$ $11494$ types) $281$ Public $1350$ $4910$ $583$ $7036$ $202$ $65$ $14146$ administration $1350$ $4910$ $583$ $7036$ $202$ $65$ $14146$ 291 International relations, public communications and regional studies $1838$ $5859$ $3$ $812$ $6$ $1$ $8519$ 292 International economic relations $1517$ $6001$ $16$ $1531$ $11$ $14$ $9090$		1149	725	5	426	1	1	2307
275 Transport technologies (by types)51293809319221123311494281 Public management and administration1350491058370362026514146291 International relations, public communications and regional studies183858593812618519292 International regional studies1517600116153111149090	•	893	249	185	758	4	0	2089
technologies (by types)51293809319221123311494281 Public management and administration1350491058370362026514146291 International relations, public communications and regional studies183858593812618519292 International regional studies1517600116153111149090	274 Road transport	2826	3220	346	1136	21	1	7550
management and administration1350491058370362026514146291 International relations, public communications and regional studies183858593812618519292 International economic relations1517600116153111149090	technologies (by	5129	3809	319	2211	23	3	11494
relations, public communications and regional studies183858593812618519292 International economic relations1517600116153111149090	management and	1350	4910	583	7036	202	65	14146
292 International economic relations1517600116153111149090	relations, public communications and	1838	5859	3	812	6	1	8519
293 International law     868     3113     1     830     4     1     4817	292 International	1517	6001	16	1531	11	14	9090
	293 International law	868	3113	1	830	4	1	4817

Source: USEDE base.

The analysis of the distribution of students by speciality in private higher education institutions shows certain features inherent in this category of higher education institutions. For example, the share of students studying in the speciality 081 Law in private higher education institutions is 14.25% of all students studying in private higher education institutions, while in state-owned institutions – 8.46% of all students studying in state-owned institutions; in speciality 073 Management — 11.3% (in state-owned — 5.94%); in speciality 053 Psychology — 8.33% (in state-owned — 4.7%). Private higher education institutions do not have or have an extremely low number of students specializing in fields of 09 Biology, 10 Natural sciences, 11 Mathematics and statistics, 13 Mechanical engineering, 14 Electrical engineering, 15 Automation and instrumentation, 16 Chemical and bioengineering, 17 Electronics and Telecommunications, 18 Production and technologies, 19 Architecture and construction, 20 Agricultural sciences and food, 21 Veterinary medicine, 25 Military sciences, national security, state border security, 27 Transport.

The distribution of students by speciality in municipal higher education institutions has its own specificity. The largest share of students studying in specialities 014 Secondary education is 6.02%, while in state-owned this indicator is 6.02%; in speciality 013 Primary education — 8.41% (in state-owned — 1.52%); in speciality 012 Preschool education — 7.54% (in state-owned — 1.34%); in speciality 081 Law — 7.46% (in state-owned — 8.46%); in speciality 035 Philology — 6.74% (in state-owned — 4.02%); in speciality 025 Musical art — 6.65% (in state-owned — 0.87%); in speciality 053 Psychology — 5.46% (in state-owned — 4.07%), in speciality 223 Nursing — 4.57% (in state-owned — 0.24%); in the speciality 061 Journalism — 4.4% (in state-owned — 1.38%). However, there are no or very few students in the following specialities: 09 Biology, 10 Natural sciences, 11 Mathematics and statistics, 13 Mechanical engineering, 14 Electrical engineering, 15 Automation and instrument engineering, 16 Chemical and bioengineering, 17 Electronics and telecommunications, 18 Production and technologies, 19 Architecture and construction, 20 Agricultural

sciences and food, 21 Veterinary medicine, 24 Service sector, 25 Military science, national security, state border security, 26 Civil security, 27 Transport.

**1.2.4. Students by higher education institutions** 

According to the USEDE base, as of January 1, 2023 the training of students for the degree of Junior Bachelor is carried out by 46 institutions, Bachelor -442 institutions, Specialist -42 institutions, Master -322 institutions, Doctor of Philosophy -389 institutions and Doctor of Arts -8 institutions.

The distribution of students by the higher education institution's form of ownership is: the vast majority - 88.13% — study in state-owned higher education institutions<sup>19</sup> (948,341 people), in higher education institutions with a private ownership are studying <sup>20</sup> 9.75% (104,949) students and in higher education institutions with a municipal form of ownership <sup>21</sup> — 2.12% (22 841).

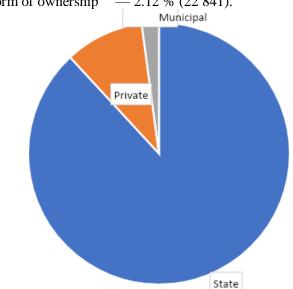


Fig. 1.2.8. Distribution of students by the higher education institution's forms of ownership

The situation with the distribution of students who study at the expense of the state or local budget and students who study at the expense of individuals and/or legal entities by institutions of different forms of ownership (Fig. 1.2.9) is typical for a national higher school: students who study at the expense of the state or local budget study mainly in state and municipal higher education institutions, and only 310 students chose to study in private institutions.

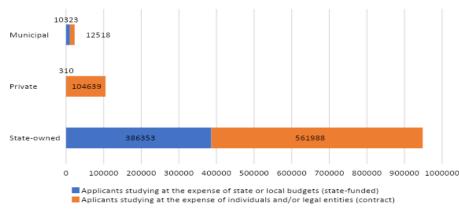


Fig. 1.2.9. Number of students with different sources of financing education in higher education institutions of different forms of ownership

Generalized information on the ratio of *students* according to the form of ownership of the higher education institution, sources of funding and form of study is shown in Table 1.2.3.

<sup>&</sup>lt;sup>19</sup> Then there are state higher education institutions.

<sup>&</sup>lt;sup>20</sup> Then there are private higher education institutions.

<sup>&</sup>lt;sup>21</sup> Then there are municipal higher education institutions.

#### Table 1.2.3

Distribution of students by institutions of higher education of different forms of ownership and
forms of education

Torms of cutcuton									
Form of ownership	Full-time (state- funded)	Full-time (contract)	Extramural (state- funded)	Extramural (contract)	Evening (state- funded)	Evening (contract)	Total		
State	358465	374470	24952	186711	2936	807	948341		
Private	275	60974	35	43297	0	368	104949		
Municipal	9921	7446	348	4868	54	204	22841		
Total	368661	442890	25335	234876	2990	1379	1076131		
~									

Source: USEDE base.

As shown in Fig. 1.2.10 and Table 1.2.4, the majority (94.5%) of Junior Bachelor's degree students study at state higher education institutions, while the participation of other forms of ownership is currently minimal. Instead, the distribution of Bachelor's degree students by state, private and municipal ownership is 87.6%, 9.9% and 2.5%, respectively, Specialist's degree students – 15.3%, 75.1% and 9.6%, Master's degree students – 89.1%, 9.5% and 1.4%, Doctor of Philosophy degree students – 90.1%, 8.4% and 1.5%, Doctor of Arts degree students – 92.5%, 0% and 7.5%.

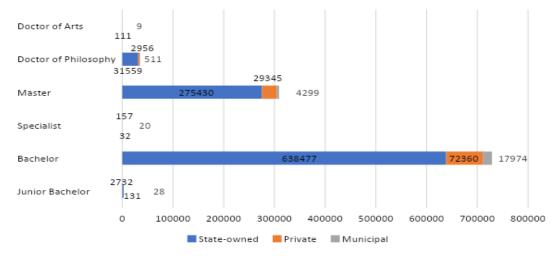


Fig. 1.2.10. Number of students for different degrees of higher education in higher education institutions of different forms of ownership

Table 1.2.4

Distribution of students of higher education by institutions of different forms of ownership and
levels of higher education

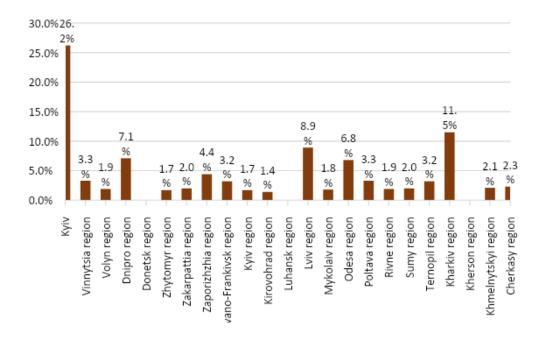
k veis of inglier cudeation										
Educational level	State	Private	Municipal	Total						
Junior Bachelor	2732	131	28	2891						
Bachelor	638477	72360	17974	728811						
Specialist	32	157	20	209						
Master's degree	275430	29345	4299	309074						
Doctor of Philosophy	31559	2956	511	35026						
Doctor of Arts	111	0	9	120						
In total	949183	105657	22845	1076131						

Source: USEDE base.

1.2.5. Regional distribution of students

According to the USEDE, as of 1 January 2023, the regional distribution of students is as follows: more than a quarter of students study in Kyiv (26%) (Fig. 1.2.11). Also, Kharkiv, Lviv, Dnipro, and Odesa regions are traditional "leaders". Due to the area of active combat operations, there are no students in Donetsk, Luhansk and Kherson regions.

Fig. 1.2.11. Regional distribution of students by place of study



## 1.2.6. Admission campaign — 2022

The admissions campaign during the full-scale invasion not only took place, but also took place in full, which is evidenced by both the number of students and the number of submitted applications - a significant number of Ukrainian graduates chose Ukrainian higher education institutions.

According to the portal "Vstup.OSVITA.UA"<sup>22</sup> during the 2022 admissions campaign, more than 1.3 million applications were submitted, including:

for Bachelor's and medical Master's degrees (admission on the basis of complete general secondary education) – almost 662 thousand applications (the number decreased compared to 2021, then – 1.1 million applications, i.e., by about 40%);

for Master's degree programmes (excluding students on the basis of complete general secondary education) – almost 338 thousand applications (the number increased compared to 2021, then – 216 thousand applications, i.e., by 36%);

for Junior Bachelor's speciality — 1.8 thousand applications.

*Table 1.2.5* 

Distribution of applications for 2022 by region									
Region	Bachelor and medical Master	Master	Junior Bachelor	Total					
Kyiv	207048	78315	110	333376					
Vinnytsia region	23844	10707	111	48725					
Volyn region	15727	8045	0	34254					
Dnipro region	44421	19536	70	96846					
Donetsk region	3130	3218	0	10803					
Zhytomyr region	12306	7055	20	29325					
Zakarpattia region	13504	6383	75	26262					
Zaporizhzhia region	15047	14498	11	42663					
Ivano-Frankivsk region	22598	10577	0	48467					
Kyiv region	6246	7056	0	21512					
Kirovohrad region	4796	3000	0	12562					
Luhansk region	3433	4108	0	9545					
Lviv region	90578	38125	11	152927					
Mykolaiv region	4859	4733	49	16243					
Odesa region	37215	16955	103	77016					
Poltava region	14929	8733	37	35036					
Rivne region	12424	720	56	29679					

<sup>&</sup>lt;sup>22</sup> URL: https://vstup.osvita.ua/

Sumy region	9314	8494	153	28292
Ternopil region	20272	1284	16	46436
Kharkiv region	50444	37272	455	106737
Kherson region	2857	2808	10	9618
Khmelnytskyi region	12110	6831	0	27677
Cherkasy region	12048	9886	397	32161
Chernivtsi region	15589	7197	119	31031
Chernihiv region	7237	4304	0	17803
TOTAL	661976	337884	1803	1325040

Source: portal "Vstup.OSVITA.UA"

As last year, the largest number (31.6%) of school graduates submitted applied to the higher education institutions in Kyiv. It can be argued that the security situation in the region influences the level of applications; in regions where there were hostilities and ongoing missile and drone attacks, the number of applications decreased three times, and in some cases by half. The same trend is demonstrated by Kharkiv (from 140 to 50 thousand applications), Dnipro (from 66 to 44 thousand applications), Odesa (from 64.6 to 37.2 thousand applications), and Mykolaiv (from 10.8 to 4.9 thousand applications) regions.

## **1.3.** Academic staff of higher education institutions

As of the beginning of 2023, 145,114 records of scientific and pedagogical staff were presented in the USEDE. However, in cases where a certain person holds several positions as a scientific and pedagogical staff (part-time), each such position is represented by a separate entry in the database. As a result, such persons are represented in the database several times. To count the number of "unique" scientific and pedagogical staff and conduct further analysis, duplicate records with the same full name were removed<sup>23</sup>. As a result, an array with information on 119,533 scientific and pedagogical staff was obtained.

The gender balance is expectedly shifted: women predominate among scientific and pedagogical staff (60%) (Figure 1.3.1).

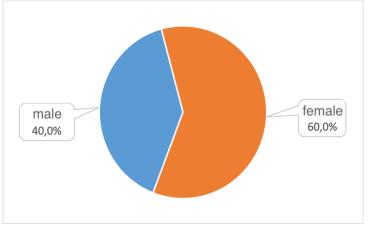


Fig. 1.3.1. Gender balance of academic staff

Almost 60% of scientific and pedagogical staff have scientific degrees, including 13.5% have a Doctor of Science degree, and 46% have a Candidate of science or a Doctor of Philosophy. However, in terms of gender, the situation differs significantly (Fig. 1.3.2). Thus, among men, the share of persons with degrees is 77.2%, while among women it is only 62.3%. Also, among men, the specific weight of Doctors of Science is much higher — 20% compared to 9.2% among women.

<sup>&</sup>lt;sup>23</sup> The statistical data excludes people with the same surname, name and patronymic, but the chance of such cases is obviously extremely low and can be ignored for the purposes of this analysis.

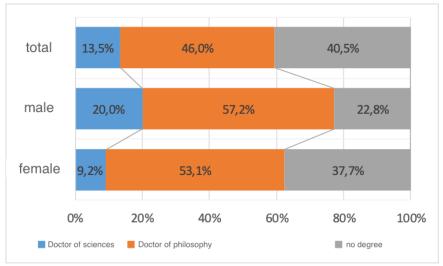


Fig. 1.3.2. Share of academic staff with scientific degrees

This situation is well illustrated by the diagram of the gender balance of scientific degrees among scientific and pedagogical staff (Fig. 1.3.3): among Doctors of Science, the proportion of men is 59.1%, while among candidates of science / Doctors of Philosophy, the situation is the opposite. The imbalance is even more noticeable among scientific and pedagogical staff who do not have a scientific degree: women dominate in this category (71.3%).

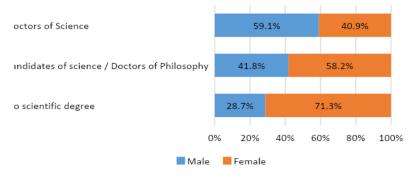


Fig. 1.3.3. Gender balance of academic degrees among scientific and pedagogical staff

As for academic titles, 42% of scientific and pedagogical staff have them, including 9.9% have the academic title of professor, 30.3% — associate professor, and 1.8% — senior researcher<sup>24</sup>.

As in the case of scientific degrees, there is a difference in the shares of scientific and pedagogical staff with academic titles by gender. Thus, the share of men with the title of professor is 15.4%, women have 6.2%. At the same time, the share of scientific and pedagogical staff with the rank of associate professor is approximately the same for both men and women. Instead, among women, of those without academic rank is much higher (62.1% compared to 51.6% among men) (Figure 1.3.4).

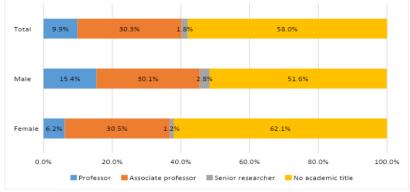


Fig. 1.3.4. Share of scientific and pedagogical staff with academic titles

<sup>&</sup>lt;sup>24</sup> In the event that a certain person simultaneously holds the title of senior research associate (senior researcher) with the academic title of professor or associate professor, then during the analysis, he was included in the category of professors or associate professors, respectively.

Analysing the gender balance by each category, it can be seen that men "dominate" in the categories of those with the academic titles of professor and senior research researcher (senior researcher), while women dominate in the categories of those with the academic titles of associate professor and those who do not have an academic title (Fig. 1.3.5).

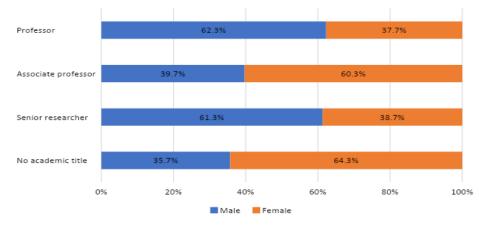


Fig. 1.3.5. Gender balance of academic titles among scientific and pedagogical staff

## **1.4. Study programmes**

As of the beginning of February 2023, the USEDE base contained the following data (by level of higher education) (Fig. 1.4.1):

- Bachelor's degree 17184 study programmes;
- Master's degree 15123 study programmes;
- Doctor of Philosophy 2833 study programmes;
- Doctor of Arts 11 study programmes;
- Junior Bachelor 485 study programmes.

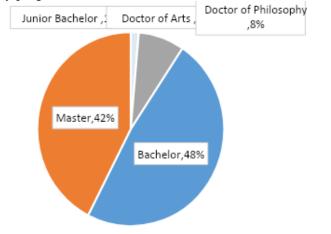


Fig. 1.4.1. Distribution of study programmes by levels of higher education

Statistical data on the distribution of study programmes by level of education and field of study are presented in Table 1.4.1.

At the Bachelor's level of higher education, the clear "leaders" are such fields of knowledge as 01 Education/Pedagogy (21.3% of the total number of study programmes) and 07 Management and Administration (13.6%). The second cluster is formed with the following fields: 03 Humanities (8.7%), 02 Culture and Arts (8.0%), 05 Social and Behavioural Sciences (7.6%) and 12 Information Technologies (6.5%). The situation at the Master's level is approximately the same: The "leaders" are 01 Education/Pedagogy (17.5% of the total number of study programmes) and 07 Management and Administration (16.0%); the second conditional cluster is formed by such fields as 03 Humanities (8.4%), 05 Social and Behavioural Sciences (7.5%) and 12 Information Technologies (6.2%). However, a slightly different picture is observed at the doctoral level of higher education: the leading positions are held by industries: 05 Social and Behavioural Sciences (10.4%), 07 Management and Administration (10.3%), 01 Education/Pedagogy (8.3%), 03

Humanities (8.3%), 22 Healthcare (7.3%), 12 Information Technology (6.7%), 10 Natural Sciences (6.4%) and 13 Mechanical Engineering (5.8%) (Figure 1.4.2).

Distribution of study programs by branches and levels of higher education								
The field of study	Bachelor	Master	Doctor of Philosophy/Arts	Junior Bachelor	Total			
01 Education/Pedagogy	3652	2652	237	47	6588			
02 Culture and art	1383	663	55	4	2105			
03 Humanities	1497	1277	236	9	3019			
04 Theology	38	27	6	0	71			
05 Social and behavioural sciences	1311	1130	297	40	2778			
06 Journalism	169	163	19	1	352			
07 Management and administration	2331	2416	292	145	5184			
08 Right	366	306	113	22	807			
09 Biology	73	112	95	2	282			
10 Natural sciences	471	534	181	10	1196			
11 Mathematics and statistics	146	157	70	0	373			
12 Information technologies	1124	933	191	12	2260			
13 Mechanical engineering	609	688	166	18	1481			
14 Electrical engineering	397	439	77	9	922			
15 Automation and instrumentation	365	386	72	11	834			
16 Chemical and bioengineering	196	199	42	5	442			
17 Electronics and telecommunications	240	265	46	1	552			
18 Production and technologies	325	327	52	33	737			
19 Architecture and construction	335	401	40	12	788			
20 Agricultural sciences and food	246	237	87	31	601			
21 Veterinary medicine	19	45	29	1	94			
22 Health care	309	386	208	9	912			
23 Social work	222	166	23	5	416			
24 Scope of service	339	223	9	22	593			
25 Military sciences, national security, security of the state border	92	104	25	4	225			
26 Civil security	112	91	19	0	222			
27 Transport	379	270	50	23	722			
28 Public management and administration	143	271	66	2	482			
29 International relations	295	255	41	7	598			
TOTAL	17184	15123	2844	485	35636			

Distribution of study programs by branches and levels of higher education

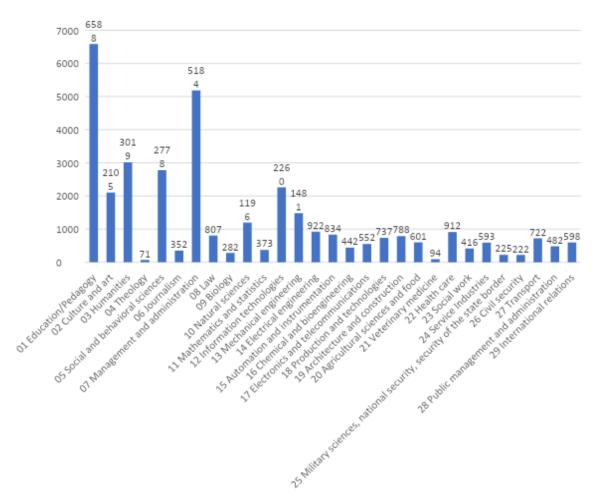


Fig. 1.4.2. Distribution of study programmes by field of study

#### **1.5. Displaced institutions**

According to the Ministry of Education and Science of Ukraine, as of 1 August 2022, according to the operational information of the Ministry of Education and Science, 29 higher education institutions and 64 separate structural units of state-owned, municipal and private higher education institutions were displaced (including the first wave of displacement<sup>25</sup>.

From the available information on the displacement of 19 higher education institutions to safer regions of the country, a number of conclusions can be made, namely: almost half of the displaced higher education institutions (9) moved from Donetsk region, 4 – from Luhansk region and 3 universities each from Kherson and Zaporizhzhya regions; all universities in Zaporizhzhia region moved to the regional centre; among the regions where displaced higher education institutions found a new location, the leaders are Dnipro, Zaporizhzhya and Khmelnytskyi regions (three universities each); there is a high regional differentiation in the location of displaced higher education institutions. In total, 11 regions of the country have accepted the displaced higher education institutions. In addition to the regions already mentioned, universities were relocated to Mykolaiv, Ivano-Frankivsk, Lutsk, Kropyvnytskyi, Ternopil, Kyiv, Rivne, and cities of Poltava region; mostly the relocated universities are located on the territory of industry-related higher education institutions<sup>26</sup>.

Due to the armed aggression of the Russian Federation against Ukraine, the following higher education institutions under the management of the Ministry of Education and Science of Ukraine were displaced<sup>27</sup>:

#### Donetsk region:

 <sup>&</sup>lt;sup>25</sup>URL:https://mon.gov.ua/ua/ministerstvo/pro-ministerstvo/najposhirenishi-zapitannya-vidpovidi-ta-aktualni-kontakti-mon-pid-chas-voyennogo-stanu/najposhirenishi-zapitannya-vidpovidi/fahova-peredvisha-visha-osvita
<sup>26</sup> Ibd p.172

<sup>&</sup>lt;sup>27</sup> URL: https://mon.gov.ua/ua/ministerstvo/pro-ministerstvo/najposhirenishi-zapitannya-vidpovidi-ta-aktualni-kontaktimon-pidchas-voyennogo-stanu/najposhirenishi-zapitannya-vidpovidi/fahova-peredvisha-visha-osvita

• Donbas State Pedagogical University and Horlivka Institute for Foreign Languages (Dnipro<sup>28);</sup>

• Donetsk National Technical University with separate structural units: Bakhmut Industrial College School, Kostiantynivka Industrial Professional College (Lutsk);

• Pryazovskyi State Technical University with separate structural units: Mariupol Professional College, Mariupol Polytechnic Professional College, Mariupol Machine-building Professional College (Dnipro).

• Donbas State Engineering Academy (Ternopil) with a separate structural unit Druzhkivka professional college (Dnipro);

• Donbas National Academy of Civil Engineering and Architecture with the separate structural units Drushkivka housing and communal professional college (Ivano-Frankivsk);

• Mariupol State University with a separate structural unit Vugledar Applied College (Kyiv);

#### Zaporizhzhya region:

• Berdyansk State Pedagogical University with the separate structural units Berdyansk Economics and Humanities College (Zaporizhzhya);

• Bohdan Khmelnitsky Melitopol State Pedagogical University (Zaporizhzhya);

• Dmytro Motornyi Tavria State Agrotechnology University with separate structural units: Vasylivka Professional College, Nogaisk Professional College, Melitopol Professional College, erdyansk Professional College (Zaporizhzhya), Nova Kakhovka Professional College (Kropyvnytskyi).

#### Luhansk region:

• Luhansk Taras Shevchenko National University with separate structural units: Vocational Professional College of the State Institution "Luhansk Taras Sevchenko National University", Starobilsk Professional College, Kadiivka Pedagogical Professional College, Lysychansk Pedagogical Professional College, Rubizhne Professional College, Brianka Professional College, as a separate unit "Regional center of a professional education State Institution "Luhansk Taras Shevchenko National University" (Poltava);

• Luhansk National Agrarian University<sup>29</sup> with separate structural units: Donbass Agrarian Professional College, Donetsk Applied College, Starobilsk Applied College, a separate unit "Luhansk State Regional Center for Training, Retraining and Professional Development of the agro-industry personnel of Luhansk National Agrarian University" (Dnipro);

• Volodymyr Dahl East Ukrainian National University with the separate structural unit Severodonetsk Applied College (Dnipro, Kamianets-Podilskyi, Khmelnytskyi).

Kherson region:

• Kherson State Maritime Academy with the separate structural unit Maritime Applied College (Odesa);

• Kherson State Agrarian and Economic University with the separate structural unit Skadovsk Agrarian Professional College (Kropyvnytskyi);

• Kherson State University with the separate structural unit: V. F. Benkovskyi Beryslav Applied Pedagogical College, Henichesk Professional College (Ivano-Frankivsk).

• Kherson National Technical University with the separate structural unit Professional college of economics and technology (City of Khmelnytskyi, Khmelnytskyi region).

Table 1.5.1.

## Number of students at displaced universities

Name of the higher education institution	Number of students
Donbas State Pedagogical University	1933
Donetsk National Technical University	1380
Pryazovskyi State Technical University	2157
Donbas State Engineering Academy	1306
Donbas National Academy of Civil Engineering and Architecture	423
Mariupol State University	3244
Berdyansk State Pedagogical University	3399
Bohdan Khmelnitsky Melitopol State Pedagogical University	2599
Dmytro Motornyi Tavria State Agrotechnology University	3847
Luhansk Taras Shevchenko National University	5687
Luhansk National Agrarian University	0

<sup>&</sup>lt;sup>28</sup> Hereinafter, in brackets, the location to which the institution was displaced is indicated.

<sup>&</sup>lt;sup>29</sup> Merged with Volodymyr Dahl East Ukrainian National University.

Volodymyr Dahl East Ukrainian National University	4409
Kherson State Maritime Academy	2715
Kherson State Agrarian and Economic University	2573
Kherson State University	3659
Kherson National Technical University	1684
Total	41015

Therefore, many Ukrainian higher education institutions were forced to change their location, establish the educational process, and communicate with academic staff and students for higher education. Today, a significant number of these higher education institutions have resumed their full-fledged activities and are involved in the processes of external higher education quality assurance.

As for higher education students, 3.9% of the total number of students in Ukraine are studying at displaced universities.

# II. LEGISLATIVE CHANGES IN THE HIGHER EDUCATION QUALITY ASSURANCE SYSTEM FOR 2022

After the introduction of martial law in Ukraine, there was a need to significantly change approaches to the accreditation of study programs. Therefore, on March 16, 2022, the Cabinet of Ministers of Ukraine adopted Resolution No. 295 "On the Peculiarities of Accreditation of Study Programmes for Higher Education Under Martial Law", which established that the validity period of accreditation certificates of higher education institutions (scientific institutions) specialities and fields of training and certificates of accreditation of study programmes, according to which higher education students are trained, which were valid on February 24, 2022, are extended until July 1 of the year following the year of termination or abolition of martial law in Ukraine.

In accordance with the specified Resolution, The National Agency for Higher Education Quality Assurance is temporarily allowed to carry out accreditation of study programmes that train higher education students in a remote (distance) mode, as well as to adopt a decision on conditional (delayed) accreditation of study programmes without conducting or with a partial conducting an accreditation examination without payment of the cost of accreditation by a higher education institution.

Pursuant to the above-mentioned Resolution of the Cabinet of Ministers of Ukraine, NAQA has developed the Temporary Order of Accreditation of Study Programmes in Higher Education Under Martial Law, approved by the decision of NAQA dated April 14, 2022 (Protocol No. 6 (11)), in accordance with in which all study programmes, whose intention to be accredited by higher education institutions have been previously notified to NAQA and whose information is included in the schedule of accreditations for the academic year 2021/2022, starting from March 17, 2022, undergo accreditation according to one of two procedures:

- in a remote (distance) mode, in accordance with the Regulation on the accreditation of study programmes, according to which higher education students are trained, approved by the Order of the Ministry of Education and Science of Ukraine No. 977 dated 11.07.2019 and the Temporary procedure for conducting accreditation examinations using technical means of video communication, approved by the decision of NAQA dated March 17, 2020 (protocol No. 6(23));
- under a simplified procedure with the adoption of a decision on conditional (delayed) accreditation without conducting or with partial conducting of an accreditation without payment of the cost of accreditation by the higher education institution.

Continuation of the accreditation of study programmes under martial law and the adoption of relevant normative documents is an important decision necessary for the continuation of the effective provision of the organisation of the study process in these conditions and as a separate component of the general system of external quality assurance of higher education.

In order to improve the process of accreditation of study programmes and taking into account the difficulties faced by higher education institutions (scientific institutions) due to the military aggression of the Russian Federation against Ukraine and the introduction of martial law, NAQA, guided by the first clause of the first part of Art. 18 of the Law of Ukraine "On Higher Education", a project of the Temporary Regulation on the accreditation of study programmes for the training of higher education students was developed under martial law (2022), which is currently under approval. The specified temporary provision defines the main principles and procedure for accreditation of study programmes, according to which higher education students are trained, as a tool for external assurance of the quality of higher education in Ukraine under martial law and during the liquidation of the consequences of war. The temporary provision also provides for a significant reduction in the cost of accreditation of study programmes, which is significant in today's conditions.

In addition, on January 12, 2022, Resolution No. 44 of the Cabinet of Ministers of Ukraine was adopted "On Amendments of the Procedure for awarding the degree of Doctor of Philosophy and cancellation of the decision of the one-time specialized academic councils of the higher education institution, scientific institution on awarding the degree of Doctor of Philosophy". In compliance with this Resolution and other acts of legislation, NAQA developed and approved the Procedure for considering complaints/statements regarding facts of academic plagiarism, fabrication, falsification (protocol No. 10(15) dated 21.06.2022), which defines the procedure for obtaining the degree of Doctor of Philosophy (scientific degree of Doctor of Sciences, Candidate of Sciences) and/or scientific publications, which highlight the scientific results of dissertations, facts of academic plagiarism, fabrication, falsification, as well as the Procedure for considering notices regarding violations of the dissertation defence procedure by the Appeals Committee of the National Agency for Higher Education Quality Assurance (protocol No. 11 (16) dated 19.07.2022), which regulates the issue of consideration by the Appeals Committee of notices of violation of the procedure for defending theses for the degree of Doctor of Philosophy and the National cancellation of the decision of the one-time specialized

academic council of the higher education institution (scientific institution) on awarding the degree of Doctor of Philosophy.

The specified regulations are designed to provide a solution to the current problems of higher education in Ukraine in terms of establishing a clear mechanism for bringing to academic responsibility violators of the rules of academic integrity in order to avoid legal nihilism, and to determine the role of NAQA in these processes.

On December 6, 2022, the Cabinet of Ministers of Ukraine adopted Resolution No. 1392 "On Amendments to the List of Fields of Knowledge and Specialties for which Higher Education Candidates are Trained", which is due to the need to ensure the harmonization of higher and vocational pre-higher education systems with the requirements and practices of the European Union.

There have been changes in the name of certain specialties: "Finance, banking, insurance and stock market", "Entrepreneurship and trade", "Biology and biochemistry", "Cyber security and information protection", "Renewable energy sources and hydropower", "Electronic communications and radio engineering", "Gardening, fruit growing and viticulture", "Therapy and rehabilitation", "Tourism and recreation"; the "Automation and Instrumentation" field speciality was transferred to the "Electronics, Automation and Electronic Communications" field; the "Veterinary Medicine" and "Veterinary Hygiene, Sanitation and Expertise" specialties were combined; in the 25th branch of Military Science, the speciality "Information Security Management" was introduced.

In its commentary, the Ministry of Education and Science of Ukraine drew attention to the fact that "the core of higher education, which determines its content, the essence of the acquired education, assigned qualifications, etc., is study programmes, not specialities. Fields of knowledge and specialities establish a general framework. Accordingly, changes in the list of branches and specialities do not prevent the implementation of study programmes belonging to the changed positions of the list" (https://mon.gov.ua/ua/news/rishennya-uryadu-prodovzheno-garmonizaciyu-pereliku-galuzej-znan-ta-specialnostej-iz-mizhnarodnoyu-standartnoyu-klasifaciyeyu-osviti-msko).

However, the specified changes pose new tasks to NAQA, in particular, the timely activation of cooperation with the Scientific and Methodological Council of the Ministry of Education and Science of Ukraine for further coordination of higher education standards and with higher education institutions for the purpose of developing adjusted study programmes.

At the same time, Russia's armed aggression against Ukraine, hostilities on a large territory of Ukraine, destruction or damage by the enemy of critical energy infrastructure made it impossible to meet the certification deadlines of PhD candidates in all cases. Therefore, in order to protect the rights of the recipients, NAQA initiated amendments to the Resolution of the Cabinet of Ministers of Ukraine No. 44 "On Amendments of the Procedure for awarding the degree of Doctor of Philosophy and cancellation of the decision of the ad hoc specialized academic council of the higher education institution, scientific institution on awarding the degree of Doctor of Philosophy", which were approved by the Resolution of the Cabinet of Ministers of Ukraine No. 341 dated 03.21.2022. These changes provide that the period of martial law, as well as the following three months after its termination or cancellation, are not taken into account when calculating the terms specified by this Order.

In accordance with the planned measures defined by the National Action Plan on external higher education quality assurance in Ukraine for 2022-2023 period, NAQA initiates changes to normative legal acts in the specified period in order to improve them, namely, participates in the development of legislative changes in the field higher education, scientific activity, implementation of all types of accreditations, formation of the space of academic integrity, etc.

At the same time, the formation of proposals for legislative of higher education quality assurance will contribute to the integration of the higher education system of Ukraine into the pan-European educational and scientific space.

Therefore, another step towards the implementation of effective mechanisms for ensuring academic integrity in the fields of education and science in 2022 was the development and provision by NAQA (in accordance with Part 2 of Article 18 of the Law of Ukraine "On Higher Education") of proposals for legislative for higher education quality assurance, in particular, amendments to the draft Law of Ukraine "On Academic Integrity" and the draft Law of Ukraine "On Amendments to Certain Laws of Ukraine on Higher Education Quality Assurance", because the experience of NAQA in defending the principles of academic integrity in the public space and in courts indicates the need to adopt of a special law, which will include, among other things, the main requirements and ways of procedurally ensuring academic integrity.

The draft Law of Ukraine "On Academic Integrity" provides for basic requirements for ensuring academic integrity, ways to ensure academic integrity, types of violations of academic integrity and measures to respond to such violations, etc.

The draft law "On Amendments to Certain Laws of Ukraine on Higher Education Quality Assurance" provides, in particular, the possibility of conducting post-accreditation monitoring. The duration of validity of the accreditation certificate is set at five years, conditional accreditation at one year. The proposed change should create prerequisites for the further development of the higher education quality assurance system and its compliance with European standards, as the proposed innovations are fully in line with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015).

The proposed draft law contains a mechanism for improving the procedure for appealing the decisions of NAQA, which will become an effective tool in protecting the interests of all subjects of accreditation relations.

In addition to the above, the draft law improves the legal regulation of the existing mechanisms of study programmes accreditation, the implementation of institutional accreditation, creates appropriate conditions for the implementation of accreditation by non-governmental higher education quality assurance organizations, while NAQA receives the opportunity to conduct post-accreditation monitoring, which is fully in line with global higher education quality assurance practice.

#### **III. ACTIVITIES OF NAQA FOR HIGHER EDUCATION QUALITY ASSURANCE**

#### 3.1. Historical overview of NAQA's activities

The National Agency for Higher Education Quality Assurance is an independent permanent collegial body established by the Resolution of the Cabinet of Ministers of Ukraine "On the Establishment of The National Agency for Higher Education Quality Assurance" dated April 15, 2015, in accordance with Article 17 of the Law of Ukraine "On Higher Education" dated July 1, 2014.

The first Board of NAQA was elected in 2015, however, for a variety of reasons it never started its official work. In 2018, according to the amended Law of Ukraine "On Education", the new Board for NAQA was selected by an international competition commission and approved by the Cabinet of Ministers of Ukraine in December 2018, in January-February 2019 was elected and the Board of NAQA approved by the Cabinet of Ministers of Ukraine.

In October 2021, the decision of the Supreme Court cancelled by Cabinet of Ministers of Ukraine Order No. 1063-r on approving the composition of NAQA. Already on November 2, 2021, the Law of Ukraine "On Amendments to Certain Laws of Ukraine Regarding the Functioning of The National Agency for Higher Education Quality Assurance" was adopted, developed with the aim of eliminating the legal conflict in the Law of Ukraine "On Higher Education" in terms of the principles of selection of members of NAQA. namely, the application of the principles of branch representation in the selection of representatives of labour market and students of higher education to NAQA. The same Law gave the right to the Cabinet of Ministers of Ukraine to approve the temporary composition of NAQA without holding a competition. On December 2, 2021, the Cabinet of Ministers of Ukraine approved the temporary composition of NAQA as it was before the decision of the Supreme Court. On December 3, 2021, the first meeting of the temporary staff of NAQA was held. During the meeting, elections were held for the Head of NAQA temporary staff and four Vice Heads of NAQA in accordance with the Statute.

In March 2022, in connection with his election to the post of president of the Kyiv-Mohyla Academy, Sergiy Kvit appealed to the Cabinet of Ministers of Ukraine with a request to resign him from the position of Head of NAQA, the government granted this request. On April 1, 2022, Andrii Butenko was appointed as the Head of NAQA until the end of the term of office of the temporary Board, and three new members of the temporary Board of NAQA were introduced. The authority of the temporary Board of NAQA lasts until the approval of the new staff of NAQA, formed as a result of the competition, but no longer than six months from the date of termination or abolition of martial law.

The year 2022 has become a test for Ukraine, Russia is constantly striking, destroying cities, killing and maiming people, shelling educational institutions and critical infrastructure, leaving Ukraine without power. In such difficult times, the work of NAQA requires constant adaptation and flexibility. In the conditions of war, NAQA not only did not stop its work, but also continues to support higher education institutions, adapting to the existing circumstances. The accreditation process in online mode, as well as the possibility to make a decision on conditional (delayed) accreditation of study programs without or with partial accreditation examinations in accordance with the Resolution of the Cabinet of Ministers of Ukraine No. 295 of 03/16/2022, significantly helped displaced and damaged higher education institutions.

Also, NAQA continues to adhere to the Recommendations and Guidelines of the European Higher Education Area ESG-2015, maintain communication with stakeholders, inform society about the higher education quality assurance, accumulate best practices from international partners and carry out accreditation in conditions of permanent power outages.

### **Mission and strategy**

NAQA's mission is to catalyse positive changes in higher education and to shape its quality culture.

The general goals of NAQA are defined in the Strategy of NAQA, which was approved in 2019. In connection with the beginning of the full-scale invasion of the Russian Federation into Ukraine, the Strategy was prolonged on October 25, 2022, at the meeting of NAQA for the period of martial law. At the same time, the Strategy of NAQA does not lose its relevance and is the basis for the agency's activities to this day: the quality of educational services, recognition of the quality of scientific results, ensuring the systemic impact of NAQA's activities. They correspond to the interests of key stakeholders — higher education institutions, higher education students and employers.

## 3.2. Cooperation with foreign quality assurance agencies and consultations with international experts

The continuation of quarantine restrictions, and later the introduction of martial law in Ukraine, did not stop international cooperation. At the beginning of 2022, within the framework of the memorandum on

cooperation with the Kazakh agency IAAR, joint (parallel) accreditation of the medical education program of Sumy State University, which began in 2021, was carried out. It was a pilot project of NAOA, which was implemented together with IAAR (Independent Agency for Accreditation and Rating, Kazakhstan) and provided for the simultaneous accreditation of medical study programmes in Ukrainian higher education institutions with the aim of their recognition not only in Ukraine, but also in other countries of the world, respectively to the standards of the World Federation for Medical Education - WFME. Within the framework of this pilot project, a simultaneous on-site accreditation examination of the study and professional programme "Medicine" speciality 222 "Medicine" at the second (Master's) level of higher education at Sumy State University took place. Experts of NAQA evaluated the study programme for compliance with the criteria stipulated in the Accreditation Regulation, and the IAAR expert group worked according to the requirements of the WFME. It should be noted that the quality criteria of study programmes of NAQA and IAAR are fully comparable and practically do not differ. Therefore, both expert groups worked harmoniously, professionally and in compliance with all requirements of national legislation and international standards. Communication between experts and focus groups took place in English — international experts and observers noted the high level of English proficiency of both Ukrainian experts and representatives of Sumy State University and higher education students. After the on-site accreditation, reports of expert groups and decisions of both agencies were formed, which were made independently of each other in accordance with the national legislation of each country.

In 2022, memorandums of cooperation were signed with the Quality Assurance Agency (QAA, Great Britain), the Central Agency for Assessment and Accreditation (ZeVA, Germany), the Romanian Agency for Quality Assurance in Higher Education (ARACIS), the Agency for Recognition and Quality Assurance of Education (ARQA, Kazakhstan), Hungarian Accreditation Commission (MAB). Coordination of the text of the memorandum by the main committee responsible for the assessment and accreditation of higher education institutions for the training of professional engineers in France (Commission des Titres d'Ingénieur, CTI) is in progress.

QAA is an independent body for higher education quality assurance in the UK. QAA was founded in 1997 and works with stakeholders and higher education students from all four parts of the UK. The cooperation of NAQA with the British agency began in 2019. QAA provided expert support in the training of trainers for NAQA. The next training of trainers by QAA experts took place in autumn 2020. Until now, NAQA has 45 trainers who have successfully trained more than 4,000 accreditation experts in Ukraine. Also, during 2020-2021, other events, webinars, and forums were held in which Ukrainian and British agencies jointly participated. Among the directions of further cooperation, the work on popularization and ensuring the principles of academic integrity, as well as the development of an optimal model of institutional accreditation for Ukraine, was singled out. These initiatives formed the basis of a memorandum of understanding that will be signed in the future.

ZeVA is the first accreditation agency that appeared in Germany in 1995. ZeVA actively works in the field of higher education quality assurance in Germany, Europe and beyond. The German agency is actively involved in the accreditation of study programmes in higher education institutions of Ukraine.

ARACIS is an autonomous state institution of national interest, which has the status of a legal entity and its own income and expenditure budget. The agency is not subject to political or any other interference. The mission of ARACIS is to conduct external quality evaluation of education provided by higher education institutions and other organizations offering study programmes in Romania.

ARQA is a non-profit public organization created in 2015 with the aim of promoting and assistance the development of the quality assurance system through institutional and programme accreditation procedures, ratings of educational organizations and independent assessment of the level of qualifications of specialists; included in the register of recognized accreditation bodies in Kazakhstan.

MAB is an independent expert body at the national level, which is tasked with carrying out an external assessment of the quality of educational and related research activities and internal quality assurance systems of higher education institutions in Hungary.

NAQA started cooperation with Quality Matters, a global organization dedicated to quality assurance in online and innovative digital teaching and learning environments, which has been operating for more than 15 years and has more than 60,000 members. A series of meetings were held during which a cooperation plan between Quality Matters and foreign experts with Ukrainian higher education institutions and scientific and pedagogical staff was developed.

In the second half of 2022, cooperation with the Accreditation Organization of the Netherlands and Flanders (NVAO) began, and in December the agencies held a joint webinar, during which NAQA shared the experience of digitizing quality assurance processes and NVAO shared the specifics of ENQA review.

# **3.3.** Accreditation of study programs as the main procedure for external quality assurance of higher education.

# Accreditation methodology

In its activities, NAQA is based on the principles of trust and mutual demands, aiming to spread them in the Ukrainian academic environment. These principles should lay the foundation of the reputational capital of Ukrainian higher education institutions along with a new culture of quality and integrity and in accordance with the best European practices and ESG-2015 standards. In the process of accreditation, NAQA primarily performs a service function, not a punitive one, implements the consultative assessment paradigm, helping higher education institutions in their pursuit of excellence. For this purpose, a constant dialogue and fruitful cooperation has been established.

For the experts of NAQA, Methodical recommendations on the application of criteria for evaluating the quality of study programme (2019), Recommendations on the application of criteria for evaluating the quality of study programme (approved by NAQA on November 17, 2020) were developed.

It should be noted that based on the results of the first year of accreditation under the new system, expert surveys, feedback from representatives of higher education institutions, as well as due to the challenges of the pandemic, proposals for changes to the Regulation on Accreditation of Study Programmes were developed with the aim of legalizing distance and mixed forms of accreditation, reduction of the cost of accreditation, further improvement of the accreditation procedure and criteria for evaluating the quality of study programmes in the field of higher education, as well as bringing the Regulations on Accreditation into compliance with changes in the legislation of Ukraine that have taken place in recent years.

Accreditation pursues two inseparable goals:

- objectively assess the extent to which the study programme and its implementation activities meet the Quality Criteria of the Study Programme;
- provide the institution and the programme with advice on further improvement.

In general, the accreditation methodology used by NAQA meets European standards. However, there are certain problems, including the following:

- lack of awareness of part of the study-programme leaders and other representatives of higher education institutions involved in the process of internal quality assurance in the field of educational legislation causes an incomplete understanding of the requirements of modern quality approaches to the organization of the study process, based on the requirements of ESG 2015;
- difficulties in planning visits due to air raids, shelling, power outages, lack of telecommunication;
- inconsistency of recommendations for higher education institutions to improve the educational process with SMART criteria;
- lack of systematic professional development of experts;
- inconsistency of the level of compliance established by the expert group with the evaluation criteria of the study programme to the shortcomings identified by it;
- non-unification of requirements and approaches of different SECs.
- unreasonableness from the SEC of changing the assessments previously provided by the expert group, which causes the accreditation case to be returned for reconsideration by the SEC.

## PROCESS OF ACCREDITATION OF STUDY PROGRAMMES

The diagrams below demonstrate the place and role of a participant in the process of study programmes accreditation as the main form of external quality assurance.

#### **Higher education Institution**



- initiates a study programme and provides educational activities in accordance with it;
- improves the study programme;
- plans accreditation as a procedure for external assurance of education quality.

Performs the necessary measures within the accreditation procedure:



informs of the intention to accredit the study programme;



prepares and submits an application for accreditation and self-assessment information:



cooperates with the expert group.

#### **Expert group**





studies self-assessment information and other documents of the accreditation case;



forms the visit programme and coordinates it with the higher education institution;



visits a higher education institution;



prepares and signs the report of the expert group.

#### Sectoral expert council





analyzes the self-assessment information, the report of the expert group and other documents of the accreditation case;

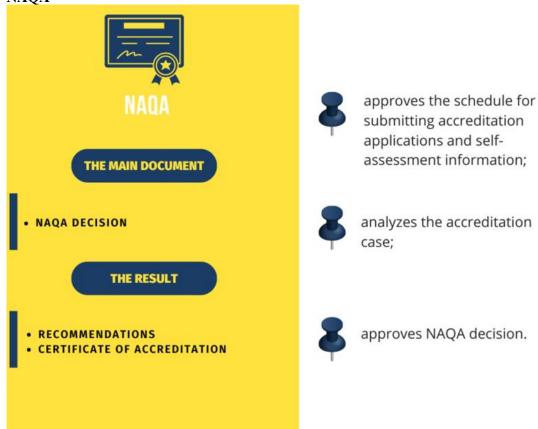


developes an expert opinion of the sectoral expert council;



approves the expert opinion of the sectoral expert council at the meeting.

#### NAQA



#### **Informational system (IS)**

With the support of partners, for the first time in the world history of external higher education quality assurance, NAQA created the automatic informational system on Accreditation Service of study programmes of higher education institutions. All processes and procedures, document flow for them take place through this system.

The system is structured according to the stages of accreditation, created to simplify administrative processes and reduce the time for processing documents during the process of accreditation.

### **Functional capabilities of IS**

The accreditation process involves information interaction between various subjects — NAQA (its employees and members), higher education institutions (scientific institutions), experts and members of SECs. In the process of this interaction, information and documents are exchanged according to certain forms and in a certain sequence. The system ensures the exchange of this information in electronic form, as well as further storage of the relevant information.

Within the System, the work with accreditation cases is taking place. The accreditation concerns one study programme (which is identified by its ID in USEDE) and contains a set of documents and information that was created and accumulated during its accreditation.

No more than one accreditation can be created for one study programme within one academic year. An accreditation can be created only for that study programme, which is included in the Schedule for the corresponding academic year.

The accreditation goes through a number of stages corresponding to the accreditation procedure.

Access to accreditations and the documents contained in them is provided depending on the role of the user and the stage of the accreditation.

#### **IS** structure

The system consists of client and server parts.

### **IS components**

Client part

The client part is implemented as a web application compatible with the latest versions of the main web browsers (Chrome, Firefox, Safari, Opera).

The main user interaction interfaces implemented within the client part include:

- user authentication interface;
- interface for viewing the list of accreditation cases available to the user (for authenticated and unauthenticated users);
- interface for viewing a separate accreditation, which allows to view documents belonging to the case and general information about the case (for authenticated and unauthenticated users);
- interfaces for viewing and/or editing individual documents included in the accreditation (for authenticated and unauthenticated users);
- Schedule viewing interface;
- interfaces for submitting messages to the Schedule;
- interface for viewing messages from higher education institutions that are submitted to Schedule.

Work with a qualified electronic signature (QES) implemented within the client part takes place on the user's side.

#### Server part

The server part provides data exchange with the client part, in particular, receiving and processing data entered by users and transferring data for users to work with them.

The server part involves working with a relational database, the structure of which ensures optimal storage of information, which is processed within the System.

Data exchange with the client part takes place using the appropriate API.

Ensuring the transparency of all its stages became a particularly important principle of the new accreditation procedure. This became possible because the new paradigm of accreditation of study programmes is based on a unique information system introduced by NAQA - the Service of Accreditation of Study Programmes of Higher Education Institutions, which is used not only by participants of the accreditation process. Through the public interface, anyone can inquire about the accreditation stage of any study programme: https://public.naqa.gov.ua/ All processes have been online for more than four years.

The information system, in addition to organizational and anti-corruption tasks, performs a very important mission - it provides an opportunity to exchange the best experience in the implementation of study programmes between higher education institutions and scientific institutions, allows applicants, students,

employers and all other interested parties to learn more about study programmes that have undergone accreditation.

Thus, the use of IS ensures transparency, openness and the possibility of access to all materials of the accreditation for all stakeholders.

## 3.4. Decision of NAQA on accreditation of study programmes

Accreditation in 2022 was carried out in extraordinary conditions, air alarms and massive missile attacks, drone attacks and air defence operations, interruptions in power supply and telecommunication. Higher education institutions prepared information on self-evaluation and uploaded them to the information system of NAQA, their representatives went to an online meeting, presenting their study programs. Expert groups ensured the submission of reports, sectoral expert councils organized and conducted meetings with the subsequent provision of conclusions. Meetings of NAQA were held in a mixed mode for considering cases under the full procedure and making decisions about the partial procedure. All this could not but affect the overall picture and evaluation statistics. However, it can be stated that the characterological changes are not of a critical nature, and the work was not suspended even in the most difficult situations.

3.4.1. Decisions of NAQA adopted in accordance with the Resolution of the CMU No. 295 of March 16, 2022.

In accordance with the Decree of the Cabinet of Ministers of Ukraine No. 295 of March 16, 2022, NAQA is temporarily allowed to make a decision on conditional (delayed) accreditation of study programmes without conducting or with partial conducting of an accreditation without payment of the cost of accreditation by the higher education institution. Therefore, a higher education institution that has difficulties with material support, in particular premises, has lost equipment, lack of staff and at the same time, overcoming problems, continues to exist as an institution, can receive conditional accreditation for its study programs, if it provides information on self-assessment for established form and qualitatively prepared. The table below shows the data on the conditional ones received under the Decree, a total of 852 of them in 2022. By educational level, Bachelors prevail (40.8%), by fields - 01 Education, pedagogy (15.9%). It can be stated that the number of study programmes according to the indicators correlates with the total number of study programmes according to the basis of the USEDE.

*Table 3.4.1*.

# The number of cases that received conditional (delayed) accreditation in accordance with the Resolution of the CMU of March 16, 2022 No. 295 "On the peculiarities of accreditation of study programmes under martial law"

Field	Master	Bachelor	Doctor of Philosophy	Doctor of Arts	Junior Bachelor	Total
1. Education, pedagogy	26	71	30		9	136
2. Culture and art	9	15	3	3		30
3. Humanities	6	12	20			38
4. Theology						0
5. Social and behavioral sciences	16	14	29		4	63
6. Journalism	2	4				6
7. Management and administration	32	31	14		13	90
8. Law	8	12	8		6	34
9. Biology	1	3	9		1	14
10. Natural sciences	7	22	24		3	56
11. Mathematics and statistics	1	1	6			8
12. Information technologies	10	28	15		3	56
13. Mechanical engineering	4	10	18		1	33

14. Electrical engineering	5	5	10			20
15. Automation and	2	7	5		2	16
instrumentation						
16. Chemical and	1	4	2		1	8
bioengineering						
17. Electronics and		2	5			7
telecommunications						
18. Production and	1	6	7		4	18
technologies		1.4				
19. Architecture and	5	14			3	22
construction		10			0	22
20. Agricultural sciences	3	10	11		9	33
and food			4			4
21. Veterinary medicine			4			4
22. Health care	14	10	13		3	40
23. Social work	2	9	2			13
24. Service industries	8	18	1		1	28
25. Military sciences	1	3				4
26. Civil security	4	5	1			10
27. Transport	5	10	4		3	22
28. Public management	9	5	7			21
and administration						
29. International relations	2	17	2		1	22
Total	184	348	250	3	67	852

3.4.2. Decisions of NAQA made according to the full procedure

In 2022, NAQA reviewed 904 study programmes according to the full procedure (for 2021 - 2040 study programmes), of which 422 - 4 at the Master's level of education, 306 - 4 at the Bachelor's level of education, 148 - 4 at the educational level of Doctor of Philosophy and Doctor of Arts, 28 - 4 Junior Bachelor. A significant advantage of Master's programmes is due to the term of study and graduation dates in the first half of the year 2022-2023.

The largest number of cases were considered in the field 01 "Education, pedagogy" 130 (14.4%), the least - in the field 04 "Theology" - 1 (0.11%). In general, the number of considered study programmes correlates with the number of study programs by branch (see Fig. 1.4.2).

*Table3.4.2.* 

The number of study programmes, presented by NAQA in 2022

Field	Master	Bachelor	Doctor of Philosophy	Doctor of Arts	Junior Bachelor	Total
1. Education, pedagogy	56	57	17	0	0	130
2. Culture and art	5	21	1	1	0	28
3. Humanities	24	24	9	0	1	58
4. Theology	0	0	1	0	0	1
5. Social and behavioral	40	28	14	0	2	84
sciences						
6. Journalism	1	7	2	0	0	10
7. Management and	70	21	15	0	9	115
administration						
8. Law	10	9	9	0	0	28
9. Biology	3	6	3	0	1	13
10. Natural sciences	18	13	14	0	0	45
11. Mathematics and statistics	7	8	2	0	0	17
12. Information technologies	40	29	12	0	0	81

Total	422	306	147	1	28	904
29. International relations	17	13	2	0	0	32
administration	0		5	0	0	14
28. Public management and	8	3	3	0	0	12
27. Transport	5	6	1	0	0	17
26. Civil security	10	3	1	0	0	14
25. Military sciences	2	1	1	0	0	4
24. Service industries	4	13	0	0	4	21
23. Social work	5	4	0	0	0	9
22. Health care	16	5	7	0	0	28
21. Veterinary medicine	0	0	2	0	0	2
20. Agricultural sciences and food	3	9	5	0	4	21
construction						
19. Architecture and	11	5	3	0	1	20
18. Production and technologies	15	7	5	0	3	30
telecommunications				-	-	
17. Electronics and	6	3	1	0	0	10
bioengineering		0	5	Ŭ	Ū	15
16. Chemical and	4	6	3	0	0	13
15. Automation and instrumentation	13	1	5	0	2	21
14. Electrical engineering	13	2	3	0	0	18
13. Mechanical engineering	16	2	6	0	1	25

A total of 20 (2.2%) study programmes received accreditation with the definition of "exemplary", 778 (86.5%) study programmes were accredited, 103 (11.3%) received conditional accreditation, and one study programme accreditation was denied. More detailed information is disclosed in the tables (3.4.3-3.4.6).

*Table 3.4.3*.

## Number of study programmes for which NAQA made a decision on accreditation

Number of study programmes for which NAQA made a decision on accreditation							
Field	Master	Bachelor	Doctor of Philosophy	Doctor of Arts	Junior Bachelor	Total	
1. Education, pedagogy	46	45	15	0	0	106	
2. Culture and art	1	17	1	1	0	20	
3. Humanities	23	23	8	0	0	54	
4. Theology	0	0	1	0	0	1	
5. Social and behavioral	36	26	14	0	2	78	
sciences							
6. Journalism	1	7	2	0	0	10	
7. Management and	63	18	14	0	7	102	
administration							
8. Law	10	9	9	0	0	28	
9. Biology	3	4	3	0	0	10	
10. Natural sciences	16	12	14	0	0	42	
11. Mathematics and statistics	5	7	2	0	0	14	
12. Information technologies	36	22	11	0	0	69	
13. Mechanical engineering	15	0	6	0	1	22	
14. Electrical engineering	13	1	3	0	0	17	
15. Automation and instrumentation	12	0	4	0	2	18	
16. Chemical and bioengineering	2	3	0	0	0	5	

17. Electronics and	5	3	1	0	0	9
telecommunications						
18. Production and	12	3	5	0	2	22
technologies						
19. Architecture and	8	5	1	0	1	15
construction						
20. Agricultural sciences and	2	8	5	0	2	17
food						
21. Veterinary medicine	0	0	1	0	0	1
22. Health care	14	4	6	0	0	24
23. Social work	3	4	0	0	0	7
24. Service industries	3	10	0	0	4	17
25. Military sciences	2	1	1	0	0	4
26. Civil security	10	3	1	0	0	14
27. Transport	5	5	1	0	0	11
28. Public management and	7	2	3	0	0	12
administration						
29. International relations	16	11	2	0	0	29
Total	369	253	134	1	21	778

Compared to the previous year, the number of accredited study programmes has increased from 80.6% (1645 programs) to 86.5% in 2022.

A significant majority of accredited study programmes (91.4%) are at the level of Doctor of Philosophy and Doctor of Arts, in conjunction with the overall number of accredited study programmes (87.4% and 82.5% respectively) at the Master's and Bachelor's levels. A somewhat smaller percentage (75%) are Junior Bachelor's level study programmes.

Regarding the distribution by field, 100% of study programmes are accredited in fields 04 Theology, 06 Journalism, 08 Law, 21 Veterinary Medicine, 25 Military Sciences, 26 Civil Security. Slightly below the average (75%) of study programmes are accredited in the field of 19 Architecture and Construction.

*Table 3.4.4*.

## The number of study programmes on which NAQA made a decision on conditional (delayed) accreditation

Field	Master	Bachelor	Doctor of Philosophy	Doctor of Arts	Junior Bachelor	Total
1. Education, pedagogy	9	11	2	0	0	22
2. Culture and art	4	4	0	0	0	8
3. Humanities	1	1	0	0	1	3
5. Social and behavioral sciences	2	0	0	0	0	2
7. Management and administration	6	2	0	0	2	10
9. Biology	0	2	0	0	1	3
10. Natural sciences	1	0	0	0	0	1
11. Mathematics and statistics	0	1	0	0	0	1
12. Information technologies	4	7	1	0	0	12
13. Mechanical engineering	1	2	0	0	0	3
14. Electrical engineering	0	1	0	0	0	1
15. Automation and instrumentation	1	1	1	0	0	3
16. Chemical and bioengineering	2	3	1	0	0	6

17. Electronics and	1	0	0	0	0	1
telecommunications						
18. Production and	2	3	0	0	1	6
technologies						
19. Architecture and	3	0	2	0	0	5
construction						
20. Agricultural sciences and	1	1	0	0	2	4
food						
22. Health care	1	1	0	0	0	2
23. Social work	1	0	0	0	0	1
24. Service industries	0	3	0	0	0	3
27. Transport	0	1	0	0	0	1
28. Public management and	1	1	0	0	0	2
administration						
29. International relations	1	2	0	0	0	3
Total	42	47	7	0	7	103

In comparison with the previous year, the number of study programmes that received conditional accreditation has slightly decreased from 15.3% (314 programmes) to 11.4% in 2022. It is evident that those study programmes for which the institution's management foresaw the possibility of obtaining conditional (deferred) accreditations were submitted according to the letter of NAQA No. 499 dated August 16, 2022, for the procedure with or without partial accreditation, as stipulated by the Cabinet of Ministers' Resolution No. 295 dated March 16, 2022.

Among the conditionally accredited study programmes, 6.8% are at the Doctor of Philosophy level, and 0% are at the Doctor of Arts level. For the Master's and Bachelor's levels, the percentages are higher, comprising 40.8% and 45.6% respectively, compared to the overall percentage of 6.8% for Junior Bachelor's study programmes.

In terms of the sectoral principle, the highest proportion (21.4%) of conditionally accredited study programmes falls within the field of 01 Education/Pedagogy. As mentioned above, no study programmes conditionally (deferred) accredited are present across the five mentioned sectors.

Table 3.4.5.

made a decision on exemplary accreditation								
Field	Master	Bachelor	Doctor of Philosophy	Doctor of Arts	Junior Bachelor	Total		
1. Education, pedagogy	1	1	0	0	0	2		
3. Humanities	0	0	1	0	0	1		
5. Social and behavioral sciences	2	1	0	0	0	3		
7. Management and administration	1	1	1	0	0	2		
10. Natural sciences	1	1	0	0	0	2		
11. Mathematics and statistics	2	0	0	0	0	2		
16. Chemical and bioengineering	0	0	2	0	0	2		
18. Production and technologies	1	1	0	0	0	2		
21. Veterinary medicine	0	0	1	0	0	1		
23. Social work	1	0	0	0	0	1		
24. Service industries	1	0	0	0	0	1		
Total	10	5	5	0	0	20		

# The number of study programmes for which NAQA made a decision on exemplary accreditation

Only in eleven out of twenty-nine fields are there study programmes accredited with the designation of "exemplary". This represents a relatively small number, ranging from 1 to 3 study programmes per field, aligning with NAQA's perspective on the uniqueness of such study programmes within the respective sectors.

*Table 3.4.6.* 

### The number of study programmes for which NAQA made a decision to refuse accreditation

Field	Master	Bachelor	Doctor of Philosophy	Doctor of Arts	Junior Bachelor	Total
22. Health care	1	0	0	0	0	1
Total	1	0	0	0	0	1

In 2022, NAQA declined accreditation for only one study programme (as opposed to the previous year when 25 study programmes were denied accreditation). This particular study programme had not been fully implemented and had significant deficiencies according to the Assessment Criteria for study programmes.

Analysing common issues related to ensuring the quality implementation of study programmes, it can be noted that the most significant problems arise under Criterion 2: Structure of the study programme.

In order to identify typical problems in study programmes under Criterion 2, which had the highest percentage of conditional accreditations through the full procedure receiving a level of compliance "E", an analysis of substantial observations from expert groups and sectoral SECs for the study programmes programs was conducted.

The proportion of conditional accreditation of study programmes with significant observations under the specified criterion is 14.3% (19 out of 133 programmes submitted according to the Accreditation Schedule). This includes the identification of compliance level "E" under Criterion 2 by both expert groups and SECs in only four study programmes.

In the other fifteen study programmes, expert groups assigned a compliance level of "B". However, SECs disagreed with the assigned level of compliance by the expert groups and justified a compliance level of "E".

Thus, it is within this criterion that the majority of study programmes experience a reduction in the assessment level of compliance by the SECs.

This statistics provides grounds, in particular, to emphasize the necessity for conducting training with the expert groups to ensure objective and well-founded determination of compliance levels according to the criteria.

To summarize deficiencies under Criterion 2, the field 01 Education/Pedagogy was selected, as it encompassed the proportionally highest number of accreditation cases (130 out of 904 with the full procedure) and the largest number of study programmes received conditional accreditation (as indicated above - 21.4%).

Among the key issues in the study programmes within the sector 01 Education/Pedagogy are:

- The content of educational disciplines and practical tasks not fully aligning with the subject area of the specialization (specializations), observed in 15 study programmes, accounting for 78.9% of study programmes with significant observations under Criterion 2.
- The formation of general and professional competencies being incomplete due to the absence of corresponding educational components that provide study programme or based on the content of educational disciplines and practical tasks, noted in 14 study programmes, or 73.7%.
- Discrepancy between program learning outcomes and the content of educational components that these components are meant to support, based on the information presented in the assurance matrix, identified in 14 study programmes, or 73.7%.
- Disruption of connections in the structural-logical scheme of the study programme (or its absence) and the sequence of studying educational components, which could negatively impact the quality of the study process, found in 12 study programmes, or 63.1%.
- Limitation of higher education students' choices of disciplines, particularly violations of students' right to select disciplines, and the absence of information about elective educational components (in the form of a course outline or syllabus), identified in 9 study programmes, or 47.3%.

According to the analysis of study programmes which got the conditional accreditation in 2022, additional issues in study programmes were founded in the sector 01 Education/Pedagogy:

- The study programme does not fully comply or only partially complies with the requirements of the higher education standard for the specialization, professional standard observed in 8 study programmes, accounting for 42.1% of study programmes with significant observations under Criterion 2.
- Discrepancies exist between the study programme, curriculum, and syllabus noted in 8 study programmes, or 42.1%.

- Partial or complete inconsistency of the educational and/or professional qualification within the study programme with the subject area of the specialization (specializations) found in 6 programmes, or 31.5%.
- The goals and objectives of practical activities cannot be fulfilled based on the designated practice bases, and there is an insufficient number of practice bases noted in 6 programmes, or 31.5%.
- Disproportional distribution of credits among subject specializations within the specialization 014 Secondary Education (in case of multiple subject specializations within the study programme), by speciality and specialization found in 5 programmes, or 26.3%.
- Unreasonable allocation of hours within individual educational disciplines between classroom and self-study found in 5 study programmes, or 26.3%.
- Uniformity of content in course outlines for educational components and practical activities across different study programmes within the same specialization, without considering the specificity of the study programmes found in 4 programmes, or 21%.
- Inconsistencies between the tasks of pedagogical practices and the content of pedagogical and methodological disciplines found in 2 programmes, or 10.5%.
- Mismatch between the topics and tasks of qualification works and the subject area of the specialization (specializations) found in 2 programmes, or 10.5%.
- The study programme does not encompass all four components that ensure the acquisition of competencies by post-graduate student in accordance with the National Qualifications Framework found in 2 programmes, or 10.5%.
- The content of certain educational disciplines only partially aligns with the content of practical activities identified in 1 programme, or 5.2%.
- Incompatibility of the assessment format within the study programme and the curriculum identified in 1 programme, or 5.2%.
- Interdisciplinary study programmes are aligned with only one field of knowledge found in 1 programme, or 5.2%.
- Humanitarian cycle disciplines of study programmes that contribute to general competencies are only offered as electives found in 1 programme, or 5.2%.

The main reasons for these issues include the absence of higher education standards for specific specializations (for the first (Bachelor's) level - 011 Education/Pedagogical Sciences, 014 Secondary Education; for the second (Master's) level - 013 Primary Education, 014 Secondary Education; for the educational-scientific level - 011 Education/Pedagogical Sciences, 014 Secondary Education; for the education (specializations), 016 Special Education, 017 Physical Education and Sport); delayed updates to study programmes, curricula, content of educational components, and practical tasks; the existence of multiple programs for a single specialization (subject specialization); designation of multiple specializations within a study programme; a formal approach by developers of study programmes regarding the structure of the study programme, content of educational components, goals, and objectives of practical activities, leading to inconsistencies with the subject area of the specialization.

Of note is the identification of significant problems related to specializations that require education for access to regulated professions. These professions involve particularly responsible work, including legal practice, nuclear energy, medicine, military service, and more. The state places enhanced requirements on educational activities for training specialists in such fields.

In general, these specializations fall within 9 sectors of knowledge. Among these, four sectors have no conditional accreditation of study programmes, while three sectors have only one such study programme in each. An analysis of significant observations under Criterion 2 by expert groups and SECs for specializations to additional regulation revealed that the proportion of conditional accreditations of study programmes with significant observations under this criterion is 1.98% (2 out of 101 study programmes submitted according to the Accreditation Schedule), and the denial of accreditation is 0.99% (1 out of 101 study programmes submitted according to the Accreditation Schedule).

In the specialization 191 Architecture and Urban Planning within the field of knowledge 19 Architecture and Construction, there are several key problems:

- The content of educational disciplines of study-research programmes duplicates that of the educational components at the first (Bachelor's) level.
- There is a significant volume of construction-technical disciplines that are not related to the specialization 191 Architecture and Urban Planning.

- The content of the study-research programmes substantially overlaps with similar courses in the specialization 192 Construction and Civil Engineering at the first (bachelor's) level, which does not correspond to the subject area of the specialization.
- Inconsistency between programme learning outcomes and the content of educational components.
- Complicated procedure for students' selection of disciplines.
- Disproportionate distribution of credits among educational components according to their content.
- Inefficient allocation of credits between educational components and hours within individual educational disciplines between classroom and self-study.
- During stakeholder discussions, the content of the study-research programmes did not undergo significant changes, and updates to the structure of the educational-scientific programme only involved rearranging disciplines within blocks.
- Syllabus do not provide a comprehensive understanding of the content, organization, and assessment methods of the educational process.
- Course contents and practical tasks require significant updates.
- Limited scope of course design projects.
- Educational and methodological support and the organization of the educational process do not fully support the achievement of goals and programme learning outcomes.
- Foreign higher education students face difficulties in fluently speaking the Ukrainian language.

One of the main reasons of appearance of these problems is the formal approach of developers towards the structure of the study program, the content of the Study programme, and the objectives of practical training. This formal approach leads to a mismatch with the subject area of the specialization.

Within the context of Criterion 2, two study programmes (one conditionally accredited and one denied accreditation) have significant observations, accounting for 6.7% of study programmes in the field of knowledge 22 Health Care. The main problems of study programmes in the sector 22 Health Care are as follows:

- Practical training in the study programme does not meet the requirements of the higher education standard for the specialization.
- Disruption of connections in the structural-logical scheme of the study programme or its absence, affecting the sequence of learning outcomes, which can negatively impact the quality of the educational process.
- The study programme's content does not fully correspond to the subject area of the specialization.
- Lack of a list for elective disciplines.
- Absence of syllabus for elective disciplines or working study programmes, limiting students' choices of disciplines.
- Inefficient distribution of credits between educational components and hours within individual disciplines between classroom and self-study.
- Inconsistencies between the study programme, the curriculum, and specific working programmes for educational component.
- Humanities-oriented disciplines in the study programme are only elective.

The prerequisites for significant deficiencies in higher education institutions in study programmes within the field of knowledge 22 Health Care include: partial inconsistency with the higher education standard for the specialization; delayed updates to the study programme, curriculum, syllabus (working programmes), and the content of the study programme; and a formal approach by developers towards the structure of the study programme, the content of the study programme, and the objectives of practical training, leading to a mismatch with the subject area of the specialization.

Comparing the number and ratio of study programmes that received conditional (delayed) accreditation in 2022 with those that went through the full procedure, the following can be stated.

1. HEIs actively used the opportunity provided by Resolution No. 295 - 49% of study programmes received conditional (delayed) accreditation under a shortened procedure.

2. By the field of knowledge, in general, the number of such programmes ranges from 32% to 67% (the average value, therefore, is close to the indicator indicated above — 48.5%) of the total

the number of study programmes regarding which the decision of NAQA was made this year. Their number is relatively greater in those industries that are not indicative for analysis because of the smaller number of cases, for example, 67% (a total of 6 cases) by branch 21 Veterinary medicine.

On the other hand, in the fields where the number of considered study programmes is significant, the ratio tends to parity: 01 Education/Pedagogy (266 cases, 51% conditional under the Decree — 49% according to the full procedure), 07 Management and administration (205 cases, 44% conditional according to the Decree

- 56% under the full procedure), 05 Social and behavioral sciences (147 cases, 43% conditional under the Decree - 57% under the full procedure).

3. The ratio of conditional accreditations according to the Resolution to those considered according to the full procedure, according to the level of education, looks somewhat different. The number of conditional accreditations according to the decree prevails quite noticeably, in general, at the level of junior bachelor (71%) and doctor of philosophy (63%), the least — at the Master's level (30%).

Thus, even in conditions of a state of war, the activities of NAQA were effectively focused on the development of internal quality assurance systems within higher education institutions and the functioning of external quality assurance, particularly through the accreditation of study programmes.

## IV. NAQA INTERNAL QUALITY ASSURANCE PROCEDURES

NAQA ensures internal quality assurance of its activities through the implementation of appropriate policy and a series of procedures, in accordance with Standard 3.6 of the ESG-2015. It continuously reviews and enhances its work, adhering to principles of serving society, accountability to stakeholders, and integrity in its operations.

In 2020, the Quality Assurance Policy of NAQA<sup>30</sup> was formulated, grounded in its mission, values, internal organizational principles as outlined in NAQA's Strategy<sup>31</sup>, the principles and provisions of the Academic Integrity Code of NAQA<sup>32</sup>, current Ukrainian legislation, as well as international agreements and standards.

Among the main principles of NAQA's quality assurance system are: sufficient and balanced resources for external quality assurance processes in higher education; independence of NAQA's activities; assessment of acquired experience and improvement of its activities; high professional standards and integrity; prevention of intolerance or discrimination; interaction with authorities; alignment of NAQA activities with ESG principles; information security and accessibility; conflict of interest avoidance; accountability; provision of feedback mechanisms and reflection.

In pursuit of strategic objectives and the implementation of the Quality Assurance Policy, NAQA approved The Regulation on the Quality Assurance System of the National Agency for Higher Education Quality Assurance<sup>33</sup> (hereinafter Regulations on NAQA QA System), in October 2022. This document defines the purpose, structure, processes, functions, and measures of this system. The NAQA QA System encompasses the conditions, processes, procedures, and measures that ensure the effectiveness, efficiency, and continuous improvement of NAQA's operations through defined mechanisms. Continuous improvement involves the "plan-implement-check-improve" cycle for each process specified by the Regulations and for the NAQA QA System as a whole. The Regulations applies to members of NAQA, members of the Advisory Board of NAQA, members of the SEC of NAQA, NAQA experts and trainers, Secretariat staff, and other individuals engaged in National Agency activities.

The structure of NAQA QA System consists of three levels (strategic, tactical and operational) with correspondingly defined processes. NAQA QA System performs a number of functions, each of which provides specific procedures.

The information and analytical function is aimed at ensuring the functioning of the exchange information through information systems and resources, national and international platforms both of online and offline; as well as carrying out various types of analysis (normative documents, resources, needs, effectiveness of policies and procedures, etc.) and development of analytical materials.

The planning and forecasting function involves strategic, long-term and operational planning of activities; formation of stakeholders' awareness of quality assurance processes and developing proposals for improving quality assurance processes.

The regulatory-consultative function is realized through the development and periodic review of processes; the formation and dissemination of a culture of quality in higher education; training and provision of advisory support to stakeholders regarding internal and external quality assurance procedures in higher education; and the facilitation of accreditation expertise.

The control-diagnostic function includes, among other aspects, procedures to ensure the independence of NAQA's activities; conducting monitoring and internal audits of the effectiveness of NAQA processes, identifying and rectifying deficiencies in the operation of the NAQA QA System; monitoring and controlling stakeholders' adherence to quality assurance standards in higher education and academic integrity; monitoring the impact of NAQA's activities on higher education institutions (research institutions).

The review of processes, procedures, and measures of the NAQA QA System is carried out systematically by NAQA, at a minimum annually, ensuring continuous improvement within NAQA.

The previously mentioned processes, procedures, and measures of the NAQA QA System contribute to ensuring that all members of NAQA, Secretariat staff, SECs, and experts are competent professionals who uphold ethical principles.

## Adherence to Ethical Standards in the Activities of NAQA

In 2022, NAQA took several important steps to enhance the internal quality assurance of its activities, particularly in terms of adhering to ethical standards.

<sup>&</sup>lt;sup>30</sup> URL: <u>https://cutt.ly/z88EFiT</u>

<sup>&</sup>lt;sup>31</sup> URL: <u>https://bit.ly/3v2xXsv</u>

<sup>&</sup>lt;sup>32</sup> URL: <u>https://cutt.ly/i88Ricv</u>

<sup>&</sup>lt;sup>33</sup> URL: https://bit.ly/3x4sO3q

The foundation for operations is both the aforementioned NAQA Strategy, which encompasses the mission, vision, values, and tasks, as well as the relevant provisions of the "Policy for Quality Assurance of NAQA's Activities". This policy outlines the requirements for high professional standards and integrity for all individuals involved in higher education quality assurance processes.

The "Policy for Quality Assurance of NAQA's Activities" focuses primarily on the commitment to act professionally, ethically, and with integrity regarding the competence and moral character of NAQA members.

The implementation of these policies in NAQA's activities in 2022 has specific results, including:

1. The development and refinement of the Expert Selection Procedure within a working group. This procedure includes stages and criteria that allow for a more comprehensive consideration of candidates' professional, competency, and reputational qualities during the selection of experts.

2. Initiating and planning changes to the Procedure for Nominating and Electing Members of Sectoral Expert Councils for the National Agency for Higher Education Quality Assurance in 2023. These changes will promote the incorporation of expert experience and reputational aspects in evaluating candidates.

3. Updating the content of the training for expert candidates, making ethical cases more concrete and realistic.

4. Emphasizing the goal of cooperation during targeted events for higher education institutions - the establishment of internal quality systems that integrate productive changes for enhancing study programmes.

5. Conducting quality monitoring of the services provided by expert groups and SECs following each Board meeting of NAQA, particularly focusing on the ethics of evaluation and communication.

6. Ensuring compliance with the Declaration of Academic Integrity by NAQA members, Secretariat staff, and individuals engaged in NAQA's work is an ongoing process.

NAQA's mandate, as stipulated in the Law of Ukraine "On Higher Education", are also implementation with consideration of ethical challenges. For instance:

1. During the formation of quality assurance system requirements for higher education, NAQA strives for objective evaluation of educational activities parameters through assessment criteria for study programmes and advisory evaluations of internal quality systems to ensure conscientiousness and responsibility.

2. Temporary provisions for accreditation of study programmes under conditions of martial law were developed considering past experiences of preventing misconduct in the study process, such as the submission of study programmes for accreditation in the first year of their existence.

3. The analysis of the quality of educational activities allows NAQA to highlight stakeholder's attention to high-quality or distinctly bad-quality study programmes.

4. During the direct accreditation of study programmes, which prepare higher education students, NAQA observers are engaged to prevent conflict situations and provide corresponding reporting.

5. Special attention has been paid to the issue of integrity in the Procedures for Awarding the Degree of Doctor of Philosophy and Revoking the Decision of the Ad hoc Specialized Academic Council of a Higher Education Institution or Research Institution on Awarding the Degree of Doctor of Philosophy in its academic aspect.

6. In terms of standardizing criteria for assessing the quality of educational activities, including research achievements, of Ukrainian higher education institutions that might determine rankings, the image-related components of higher education institutions' activities might be significant.

In 2022, the Communication Strategy of NAQA was approved (Protocol No. 16 of September 27, 2022), outlining a systematic and informational interaction (communication) between NAQA and Ukrainian society as well as the international community. The Communication Strategy specifically declares that "the stabilization of the education sphere, adaptation to modern conditions, and overcoming the consequences of war are possible only through complete unity in society, its trust in the National Agency for Higher Education Quality Assurance". This trust, in turn, can only be achieved through adhering to the principles of productive and ethical communication, such as the absence of discriminatory communication practices towards higher education institutions, whether national or privately owned. Advisory assessment of higher education quality assurance entails upholding the important principle of respecting the individuality of every participant in the education process. It involves striving for consensus and active engagement with all stakeholders, both during the planning and execution of activities related to the evaluation of study programmes, as well as within the scope of information and promotional events.

# V. ALIGNMENT OF ACTIVITY OF NAQA TO STANDARDS AND GUIDELINES FOR QUALITY ASSURANCE IN THE EUROPEAN HIGHER EDUCATION AREA (ESG-2015)

Modern quality assurance practices in higher education involve aligning the activities of NAQA with specific standards outlined in the European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015).

## Standard ESG 2.1: Consideration of internal quality assurance

# External quality assurance should address the effectiveness of the internal quality assurance processes described in Part 1 of the ESG.

According to Article 32, Part 3, Section 2 of the Law "On Higher Education" dated July 1, 2014, No. 1556-VII, "higher education institutions are required to have an internal quality assurance system for higher education, including an approved policy to ensure academic integrity by participants in the educational process (academic integrity code)". These institutions are responsible for the quality of their study programmes, educational services, and ensuring this quality. NAQA assesses the effectiveness of internal quality assurance systems during the accreditation procedure of study programmes, particularly through the evaluation under Criterion 8. Criterion 8 of the Regulations on the Accreditation of Study programmes directly pertains to internal quality assurance processes within higher education institutions and reflects the requirements of Standard 1.1 "Policy for Quality Assurance", Standard 1.9 "On-going Monitoring and Periodic Review of Programmes", and Standard 1.10 "Cyclical External Quality Assurance" (initially, the accreditation certificate for a study programme is issued for a period of 5 years).

Furthermore, other criteria of external quality assurance by which study programmes are evaluated during the accreditation process directly mirror the Standards of Part 1 of ESG-2015. Specifically, Criterion 1 demands that study programmes have clearly formulated objectives aligned with the mission and strategy of the higher education institution, and these objectives and learning outcomes should be defined based on the perspectives and needs of stakeholders. This criterion (including its sub-criteria) reflects Standard 1.2 of ESG-2015. Standard 1.4 of ESG-2015 pertains to admission, teaching, recognition, and certification of students. As for NAQA, this standard is reflected in Criterion 3 "Access to the Study programme and Recognition of Learning Outcomes" and Criterion 5 "Control Measures for Student Assessment and Academic Integrity". Similarly, Criterion 6 addresses teaching staff involved in a specific study programme, reflecting Standard 1.5 "Teaching Staff", Institutions should assure themselves of the competence of their teachers. They should apply fair and transparent processes for the recruitment and development of the staff. Standard 1.6 Institutions should have appropriate funding for learning and teaching activities and ensure that adequate and readily accessible learning resources and student support are provided. Criterion 7, which outlines quality assessment procedures of NAQA, specifically defines sub-criteria for assessing the educational environment and material resources. Standard 1.8 regarding public information directly corresponds to Criterion 9 "Transparency and Publicity".

NAQA places great emphasis on the functioning of internal quality assurance systems within higher education institutions and their effectiveness. The results of the internal quality assurance systems are continuously discussed during NAQA Board meetings. Upon request and as needed by higher education institutions, NAQA conducts consultations, organizes seminars, webinars, and other events to provide informational and advisory support and recommendations for enhancing the quality of study programs.

#### Standard ESG 2.2: Designing methodologies fit for purpose

External quality assurance should be defined and designed specifically to ensure its fitness to achieve the aims and objectives set for it, while taking into account relevant regulations. Stakeholders should be involved in its design and continuous improvement.

The overarching goals of NAQA are outlined in NAQA Strategy, which was approved in 2019. Due to the full-scale invasion by Russia into Ukraine, the Strategy's duration was extended **until October 25, 2022**, during a meeting of NAQA to cover the period of martial law. The strategic goals and their implementation directions remain clear and relevant even in times of war. They align with the interests of key stakeholders, including higher education institutions, higher education students and employers. Keeping these goals in mind, NAQA develops regulations that govern various external quality assurance procedures.

Currently, the primary document is the Regulations on Accreditation of Study Programmes, which govern the preparation of higher education students. This document defines the purpose of accreditation, which includes: 1) ensuring the quality of the study program and educational activities based on the criteria specified in these Regulations; 2) assisting higher education institutions in identifying strengths and weaknesses of the study programme and its related activities; 3) providing all stakeholders with information about the quality of

the study programme and its related activities; 4) enhancing trust in higher education in Ukraine; 5) facilitating the integration of Ukrainian higher education institutions into the European Higher Education Area. These objectives are achieved through strict adherence to the procedure outlined in the Regulations on Accreditation of Study Programmes and alignment with the ESG-2015 itself.

In response to external changes and stakeholder needs, NAQA has made changes to its external quality assurance processes. For instance, in response to the COVID-19 pandemic, NAQA swiftly developed and implemented a Temporary Procedure for Conducting Accreditation Expertise Using Video Communication Tools within the first two weeks of the national quarantine. NAQA's activities during the quarantine period were in full compliance with legal requirements and government recommendations. With the onset of Russia's invasion, a Temporary Accreditation Procedure for Study Programmes was approved, allowing the adaptation of processes to the extraordinary conditions while maintaining stability and quality.

NAQA designs external evaluation processes that aim to meet the needs and expectations of both internal and external stakeholders. It engages major stakeholders in the development of regulatory documents. For example, the development of the draft law "On Academic Integrity" was accompanied by consultations with higher education institutions, international experts, the advisory board of NAQA, parliamentarians, and government officials. All provisions of NAQA are based on current legislation, feature clear goals and formulations, and are published on NAQA's website.

#### **Standard ESG 2.3: Implementing processes**

*External quality assurance processes should be reliable, useful, pre-defined, implemented consistently and published. They include:* 

- *a self-assessment or equivalent;*
- an external assessment normally including a site visit;
- *a report resulting from the external assessment;*
- *a consistent follow-up.*

NAQA's commitment to the sequence and transparency of all processes and procedures has contributed to building trust within the modern higher education system in Ukraine. The accreditation process of study programmes by NAQA generally aligns with Standard 2.3, is reliable, and is beneficial, as confirmed by stakeholder surveys conducted during events and meetings. This process is predetermined in the Regulations on the Accreditation of Study Programmes, and the course and outcomes of which are publicly accessible through the electronic system public.naqa.gov.ua and the official web-resources of NAQA. All accreditation results of study programmes are recognized and have corresponding consequences for study programmes and higher education institutions in Ukraine.

The accreditation process includes self-assessment by higher education institutions, external assessment by an expert group, a report on the results of the external assessment by the expert group, review of the accreditation case and the expert conclusion of the SEC, review of the case, and the decision of NAQA. However, the requirement for "a consistent follow-up actions based on assessment results" is not fully executed at present. Partially, such actions could be related to the provisions of sub-criterion 6 of criterion 8, which requires study programmes to take into account "the results of external quality assurance in higher education (including comments and suggestions made during previous accreditations)". The absence of legislative regulation on post-accreditation monitoring for external quality assurance of study programmes threatens the prospect of NAQA obtaining membership in ENQA and accreditation from the World Federation for Medical Education (WFME).

To address this legal gap, NAQA has proposed changes to the legislation in this regard. The proposed definition of post-accreditation monitoring is the evaluation by the accrediting body of the implementation of recommendations provided as a result of accreditation and/or further compliance with accreditation criteria. NAQA has introduced the concept of post-accreditation monitoring, which is free for higher education institutions, simple, and yet effective in ensuring sequential follow-up actions based on the results of external quality assessment of study programs. The adoption of legislative changes and their implementation in the accreditation process will ensure full compliance of NAQA's activities with ESG Standard 2.3.

### **Standard ESG 2.4: Peer-review experts**

*External quality assurance should be carried out by groups of external experts that include (a) student member(s).* 

Within the framework of accreditation expertise, all procedures are conducted by independent experts who are included in NAQA's expert registry and do not have conflicts of interest with respect to each other, the specified study programme, and the higher education institution where it is implemented. To ensure reliable and consistent work of experts, they undergo thorough selection and training by NAQA, after which they receive the status of NAQA experts and are included in the registry. They possess the necessary skills and competencies to perform their functions and undergo periodic training for qualification enhancement. Prior to each accreditation expertise, they also receive instructions.

Expert groups appointed to visit higher education institutions as part of the accreditation expertise and the SEC include one member who is a higher education student, except for those participating in the evaluation of study programmes related to the military or police sector (SEC 25 and 26). Each SEC also includes a representative of employers.

Starting from 2022, international experts from higher education institutions in Poland, the USA, Spain, Austria, the UK, and the Netherlands have been introduced into the majority of SECs. The policy of involving international experts in expert groups is also gradually being implemented. Already, 42 international experts from Germany, Poland, Lithuania, Kazakhstan, the Czech Republic, Belgium, the USA, Norway, France, Austria, Switzerland, and other European countries have been included in the expert registry.

It is worth noting that involving international experts in the accreditation of study programmes faces certain obstacles, including issues related to financing the work of such experts, conducting expertise in the language that the international expert speaks, and certain legal nuances. In 2022, NAQA's team actively worked on developing mechanisms for involving international experts in the accreditation of study programmes. One partial solution to this issue was the selection of experts with significant international experience in higher education and quality assurance, who are proficient in the Ukrainian language, and granting them international expert status. This approach has resulted in the inclusion of 42 experts and 22 members of SECs. However, this direction requires further development and refinement from NAQA and the legislature.

#### **Standard ESG 2.5: Criteria for outcomes**

Any outcomes or judgements made as the result of external quality assurance should be based on explicit and published criteria that are applied consistently, irrespective of whether the process leads to a formal decision.

The Regulation on Accreditation of Study Programmes contains specific criteria for their external quality assurance. These criteria (along with corresponding sub-criteria) serve as the foundation for the self-assessment report, the expert report, and the report of the SEC. Each criterion is assessed on a 4-level scale:

A – Innovative/exemplary implementation of this criterion

B – Satisfactory implementation

E - Unsatisfactory implementation, but improvement is possible within one year

F – Unsatisfactory implementation

This assessment scale is applied consistently.

Conclusions and recommendations provided during the process of external quality assurance have an impact on the quality of study programs and higher education institutions as a whole.

## **Standard ESG 2.6: Reporting**

Full reports by the experts should be published, clear and accessible to the academic community, external partners and other interested individuals. If the agency takes any formal decision based on the reports, the decision should be published together with the report.

All documents related to each accreditation case, including expert reports, are available online in the information system of NAQA at https://public.naqa.gov.ua/, which was significantly enhanced after 2020. Users have the ability to filter data by parameters (ID of study programme, level of higher education, sector of knowledge, stage of case processing). The decisions of NAQA are also published in the system and placed on a single page alongside all materials of the accreditation case.

NAQA pays special attention to the quality of expert group reports, ensuring that they serve as a basis for further actions and decision-making. For this purpose, specialists from the Accreditation Department of NAQA's Secretariat review expert group reports for compliance with requirements, completeness, and reasoned judgments. Training and professional development of experts are also conducted to enhance skills in preparing high-quality reports. In 2022, an approach was developed that involves experts and SEC members

providing recommendations for higher education institutions using the SMART technology (specific, measurable, assignable, realistic, time-related).

An additional perspective direction for reporting improvement is ensuring the translation of brief information about each accreditation case into English for interested parties from other countries.

#### **Standard ESG 2.7: Complaints and Appeals**

Complaints and appeals processes should be clearly defined as part of the design of external quality assurance processes and communicated to the institutions.

Higher education institutions have the right to appeal decisions made by NAQA. In this regard, NAQA operates professionally and consistently. On May 21, 2019, it developed and approved the Procedure for appealing decisions of the National Agency for Higher Education Quality Assurance, which is posted on the official website and communicated to all stakeholders in educational processes. The decisions of NAQA can be contested by submitting the corresponding appeal to the Appeals Committee of NAQA. The Appeals Committee consists of members of NAQA (currently five individuals) and is approved at a meeting of NAQA. In 2022, the Appeals Committee reviewed five appeals.

At the same time, NAQA acknowledges the need to improve these processes to achieve full compliance with Standard 2.7. and is working systematically on changes to the Procedure for appealing its own decisions and substantial adjustments to the composition of the Appeals Committee. Thus, a draft of legislative changes was developed and submitted to the Verkhovna Rada of Ukraine, proposing to reform the Appeals Committee into an Appeals Chamber with significant modifications to its composition, work organization, and scope of authority. The proposal suggests that the Appeals Chamber be composed of five members who hold higher education, academic degrees and/or academic titles, and have at least five years of professional experience in the field of quality assurance in higher education. Members of the Appeals Chamber will be selected through a competitive process for a two-year term and will perform their functions based on civil contracts. Members of NAQA and SECs will not be eligible to be part of the Appeals Chamber. The same individual cannot serve in the Appeals Chamber for more than two terms. The procedure for forming the Appeals Chamber, its authority, and the manner of its operation will be defined in the Appeals Chamber regulations developed by NAQA and approved by the Ministry of Education and Science of Ukraine. If an appeal is granted by the Appeals Chamber, it may overturn the contested decision of NAQA. In the event of overturning such a decision, the relevant matter will be re-examined at the subsequent meeting of NAQA. During this reexamination, the decision on the matter will be considered adopted if it receives the support of at least twothirds of the members of NAQA.

Upon the implementation of the proposed legislative changes by the Verkhovna Rada of Ukraine, NAQA will have the opportunity to organize the formation of the Appeals Chamber within six months. Until the Appeals Chamber is formed, the existing Appeals Committee will continue to review appeals and appeals of decisions made by NAQA.

## **CLOSING REMARKS**

The analysis of the state of higher education quality in Ukraine in 2022, presented in this report, demonstrates that despite challenges, quality assurance processes continue. The higher education system in Ukraine continues to operate, with notable efforts directed towards aligning with the requirements of the European Higher Education Area. In particular, they led to effective rule-making activities, which should become the basis of this compliance.

The aggregated data in the report regarding the statistical components of higher education reveal that the quantity and proportional distribution among higher education institutions, study programmes, academic staff, and higher education students in 2022 have remained relatively stable. However, these data made it possible to single out the existing problems of the quality of education, and also to analyse the indicators of the accreditation process as its component.

Clearly, the education quality assurance, the underlying processes, and procedures cannot be achieved without continuous collaboration and communication among all stakeholders in this process: higher education institutions, the central executive authority - the Ministry of Education and Science of Ukraine, NAQA, the Committee of the Verkhovna Rada of Ukraine on Education, Science, and Innovation. Notably, key external and internal stakeholders are becoming more active, and participants in quality assurance processes increasingly include higher education students, student self-governance bodies, employers and their associations, as well as the educational and scientific community. This is demonstrated by numerous joint initiatives, for example, the preparation of the National Action Plan, work on which was already completed during the full-scale invasion.

Given that the main powers of NAQA, as defined by the Law of Ukraine "On Higher Education" (2014), are aimed at higher education quality assurance, it is important to state that NAQA is fully performing its functions, significantly enhancing its advisory and communicative role over the past year.

Comprehensive accreditation expertise is fully underway, informational and consultative events for various participants in the quality assurance process are held, international cooperation and the promotion of Ukrainian higher education activities are growing more prominent in these extraordinary conditions. The challenges of the state of war are generally being overcome, although their critical nature pushes the limits: mass migrations of higher education students and staff, destruction of higher education institutions, rocket attacks, and drone strikes destabilize the security situation. Nevertheless, higher education institutions have effectively leveraged their experience in remote and blended learning, educational process management, and as a result, quality assurance procedures were reinstated in the early weeks of the conflict.

Implementing external quality assurance remains one of the main tasks of NAQA during these wartime conditions, requiring the achievement of specific goals, including:

1. NAQA conducting advisory monitoring to facilitate the effective implementation of processes and procedures for internal quality assurance in higher education institutions.

2. Implementation of procedures for external quality assurance, including the need for refining the processes of accrediting study programmes and adjusting the quality assessment criteria of study programmes in accordance with the standards and quality assurance recommendations of the European Higher Education Area.

3. Development and implementation of an institutional accreditation model, with the introduction of institutional accreditation aimed at evaluating the quality assurance system of the higher education institution by NAQA to ascertain its compliance with European practices and requirements of national education legislation.

4. Standardization of the activities and development of the network of independent evaluation and quality assurance institutions in higher education.

5. Necessity of conducting monitoring of quality assurance system activities of higher education institutions and determining the effectiveness of their compliance with received recommendations, other procedures, and measures, including the introduction of post-accreditation monitoring.

6. Given legislative changes, their implementation and the activation of further norm-setting activities.

7. Engagement of all stakeholders in enhancing the quality of higher education in Ukraine, aligning with sustainable development goals, and jointly identifying ways to further develop higher education quality assurance.

Addressing these and other pressing tasks is crucial for all interested parties, especially higher education institutions themselves, in building a culture of quality and involving them in executing the advisory function of NAQA.

# **REPORT ON HIGHER EDUCATION QUALITY IN UKRAINE AND ITS COMPLIANCE** WITH THE TASKS OF SUSTAINABLE INNOVATIVE DEVELOPMENT OF SOCIETY IN 2022

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