Ukraine

Improving Higher Education for Results Project

Environment and Social Management Framework (ESMF)

January 2021

Draft – Subject to Change

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ACRONYMS & ABBREVIATIONS

CMU	Cabinet of Ministers of Ukraine		
EIA	Environmental Impact Assessment		
ESCP	Environmental and Social Commitment Plan		
ESF	Environmental and Social Framework		
ESHS	Environmental, Social, Health and Safety		
ESIRT	Environmental and Social Incident Reporting Toolkit		
ESIA	Environmental and Social Impact Assessment		
ESMF	Environmental and Social Management Framework		
ESMP	Environmental and Social Management Plan		
ESS	Environmental and Social Standard		
GBV	Gender-based violence		
GIIP	Good International Industry Practice		
GRM	Grievance Redress Mechanism		
HEI	Higher Education Institution implementing HEI project implemented activities		
HEMIS	Higher Education Management Information System		
HVAC	Heating, ventilation and airconditioning		
ICT	Information and Communication Technologies		
LMP	Labor Management Procedure		
MEEP	Ministry of Energy and Environmental Protection		
MOES	Ministry of Education and Science		
NAHEQA	National Agency for Higher Education Quality Assurance		

OHS	Occupational Health and Safety		
PBCs	Performance-based conditions		
PIU	Project Implementation Unit		
RAP	Resettlement Action Plan		
RCA	Root Cause Analysis		
RPF	Resettlement Policy Framework		
SCAP	Standards Corrective Action Plan		
WB	World Bank		

1 INTRODUCTION

1.1 Project Overview

1.2 Purpose of the ESMF

The Environmental and Social Management Framework (ESMF) guides project activities that will only be identified during implementation of the Project to ensure that environmental and social issues are considered and managed. This involves identifying the risks associated with the various project interventions and defining the mitigation and management procedures and measures that will have to be implemented during the project's implementation. The ESMF will serve as a tool for MoES/PIU and activities implementing partners (HEIs) to identify, mitigate and manage potential environmental and social impacts that may arise as a result of (i) HEI buildings retrofitting/renovation; (2) financing the retrofit/renovation of HEI buildings; and (3) operating those HEI buildings.

The ESMF clarifies, assesses and establishes (i) environmental and social impacts and benefits commonly associated with HEI project implemented activities, (ii) mitigation measures to be undertaken, (iii) monitoring and reporting framework and the institutional arrangements to be made during the implementation of the Project.

The ESMF should become an integral part of the Ukraine Improving Higher Education for Results Project, that MoES/PIU and Ministry of Finance (MoF) should develop.

The WB Group's new Environmental and Social Framework with its 10 (ten) environmental and social standards (ESSs) sets the acceptable level (objectives) to be achieved by the Project in terms of environment and social issues management.

As part of the project activities under components 1, 2, and 3, the World Bank's environmental and social standards that apply are: ESS 1 "Risk assessment and management and environmental and social impacts", ESS 2 "Labor and working conditions", ESS 3 "Resource efficiency and pollution prevention and management", ESS 4 "Community health and safety", ESS 5 "Land acquisition", ESS 8 "Cultural Heritage", ESS 10 "Stakeholder engagement and Information Disclosure".

1.3 Approach and Methodology for the preparation of ESMF

The methodological approach adopted for the development of the ESMF is structured around the phases of research and consultation and presented in Table 1 below.

Table 1: Summary of the main steps of the ESMF methodology

Phase	Content		
Meeting and consulting with the MoES team, WB team	Meeting with the WB team and MoES team to discuss the project activities and the context. The project documents were made available. The MoES submitted the response to the questionnaire, provided additional information upon request, and reviewed the draft ESMF.		
The collection of primary data and review of the documents (project documents, law, regulations and other requirements)	The desk review of documents and other relevant information, legal framework, WB ESF and ESSes. Data request. The preliminary analysis of this information made it possible to identify the relevant issues to be studied further and to proceed with a categorization of the impacts.		
Baseline data	The collection of baseline data provided a description of the environmental and socio-economic country background (the background of the sites and its immediate surroundings need to be specified when the participating HEIs are known).		
	The collection of these data facilitated the identification and analysis of potential impacts and the definition of major environmental issues to be considered and further developed during this study.		
Processing, analysis and synthesis of information	Identification and assessment of the environmental and social impacts of the project and the required ESSes to be met.		

1.4 Project Description

The proposed Ukraine Improving Higher Education for Results Project Development Objective (PDO) is to improve efficiency, conditions for quality, and transparency in higher education system of Ukraine.

The achievement of the Project's PDO is expected via implementation of four components, as described in more detail below:

Component 1: Sector-Wide Improvements to Governance, Financing, Quality and Transparency. The objective of this component is to support the Government with implementation and monitoring of sector-wide reforms affecting higher education governance and financing, quality, and transparency. This component contains two mutually reinforcing sub-components: 1.1, which supports strategic sector-wide investments to strengthen system management, planning and monitoring, and 1.2, which reimburses against specific results in those areas through performance-based conditions (PBCs).

<u>Sub-component 1.1 – Strategic sector-wide investments to support autonomy, transparency,</u> and monitoring

This sub-component would support strategic investments in information systems including Higher Education Management Information System (HEMIS), surveys/studies, evaluations, standardized tools for learning assessments, and comprehensive communications campaigns and outreach efforts for the ongoing higher education reform. These strategic investments are needed to support the introduction of autonomy reforms and performance-based incentives for HEIs, and to improve transparency of funding and information flows within the sector. This sub-component will also finance the design, establishment and implementation of a National Student Survey (NSS) and support introduction of digitally enhanced standardized learning assessements for higher education.

<u>Sub-component 1.2: Strategic results to strengthen performance-based incentives in higher education.</u>

To incentivize policy changes and implementation of key activities, this sub-component will finance critical performance-based conditions (PBCs) related to the introduction and implementation of performance-based incentives at the system-level and the institutional level in the higher education sub-sector. Under the PBCs mentioned below, the project will co-finance results that will lay the foundations for performance-based incentives to improve efficiency, conditions for quality and transparency in higher education, while building on the strategic activities financed under sub-component 1.1. This sub-component will reimburse the Government for results achieved in support of the following specified disbursement-linked indicators (PBCs):

- PBC 1: Performance-based funding formula for HEIs. The proposed Project will support the implementation of the Government's financing and governance reforms in the higher education sector, specifically implementation of a performance-based funding formula for public HEIs that incorporates a stability funding component and a performance-based component.
- PBC 2: Financial autonomy for HEIs. The proposed Project will support the Government's vision for financial autonomy for HEIs by financing actions that enable such autonomy. Two PBCs would be supported under this PBC:

- PBC 2.1: Financial autonomy for HEIs: legislation. This will include necessary revisions to the Law on Higher Education and/or related laws to address issues of budgetary institutions and other aspects of financial autonomy for HEIs.
- PBC 2.2: Financial autonomy: adopting bylaws. This will include development and adoption of bylaws for financial autonomy in HEIs in accordance with existing legislation.
- O PBC 3: Performance-based rector contracts with KPIs signed (scalable). Within the frame of financial autonomy of higher education, the system of performance-based relationships between the MOES and HEIs shall be introduced. These are to be established in the form of performance agreements (contracts), whose KPIs are negotiated jointly between the MOES and the rector of the HEI.

Component 2: Alliances and Partnerships for Improved Efficiency and Quality

The objective of this component is to support the Government to improve fiscal efficiency in the higher education sector and to support merged HEIs in improving the conditions for quality teaching and learning as part of institutional merger processes. This component is also divided into two sub-components:

Sub-component 2.1: Strategic investments to ensure successful university mergers

Under this sub-component, the Project would finance packages of investments including goods and minor civil works. These would be specified in detail in the POM, but they would be selected by MOES to promote successful implementation of governance and financial autonomy reforms, as well as quality of higher education. In particular, "merger support packages" could include the following: laboratories for teaching, research, and/or learning, equipment for laboratories, learning support facilities, and other learning spaces, modern digital infrastructure and IT to support distance learning, and minor refurbishment/rehabilitation. New construction will not be supported.

Sub-component 2.2 - Strategic results to support consolidation in higher education

To incentivize policy changes and implementation of key activities, this sub-component will finance a critical disbursement-linked result related to institutional mergers and consolidation of the network of higher education institutions in Ukraine. This component will follow a result-based approach and will co-finance a result under the PBC mentioned below:

¹ HEIs benefiting from the ongoing Higher Education Project financed by the European Investment Bank (EIB) and the Nordic Environment Finance Corporation (NEFCO) would not be subject to mergers.

PBC 4: Number of mergers of public HEIs under MOES (scalable). This PBC recognizes the significant challenges associated with incentivizing institutional mergers and consolidating the number of public HEIs, despite the widespread recognition that the status quo in Ukraine in terms of the number of HEIs relative to the declining studentage population is unsustainable. This PBC is scalable, rewarding the number of mergers of public HEIs under MOES.

Component 3 – Capacity Building and Education Environment Enhancement

The objective of this component is to build capacity of academic managers and improve the educational environments and research capacity in HEIs, including with a focus on supporting HEIs to maintain learning continuity and operational resilience via remote and distance modalities. In the short-term, this will support HEIs to adapt to the new operating reality imposed by COVID-19. In the medium-term, this will ultimately improve the overall relevance, quality and external economic efficiency of the HEIs and their graduates in support of innovation and economic development.

To build capacity of academic managers in HEIs, this component would also support targeted training for managerial staff in several key areas, including, inter alia, development of change management plans, academic innovation, labor market linkages, strategic planning and change management, entrepreneurship and business engagement, human resource management, and financial management/taxation. This component would also support the establishment of an Operational Sustainability Team within the MOES, staffed by a small number of specialized consultants to facilitate the process of introducing financial, staffing, human resources, and other types of autonomy at the institutional level. This would help to enhance sustainability for long-term implementation of fhe project.

Additionally under this component, the project would finance pre-defined categories of goods and services, including: modern digital infrastructure for distance learning, digital devices, multimedia equipment and software, electronic learning management systems, and similar types of IT investments to improve quality of distance learning modalities. Investments would also include modern basic teaching laboratories and advanced scientific research laboratories, equipment, and minor refurbishment and rehabilitiation.

Component 4: Project Management, Monitoring & Evaluation

The objective of this component is to support the effective management and implementation of the proposed project. The component would finance the day-to-day management and monitoring and evaluation of the proposed project through the establishment and maintenance of a Project Implementation Unit (PIU) at the Ministry of Education and Science (MOES). It would finance salaries for PIU staff, including fiduciary, environmental and social risk management staff and incremental consultants to related agencies, training activities, targeted technical assistance, and operating costs, including outreach related to the project and the project-specific Grievance Redress Mechanism (GRM).

1.4.1 Country and sector context/ Project Concept

Ukraine has been facing with economic, demographic and political challenges since its independence in 1991 that shape the policy space for education reform. The failure to introduce structural economic and institutional reforms, curb corruption and reduce dependency on external energy resources has made the country vulnerable to external shocks and hampered economic growth.

Its population of 45.4 million (2014) has declined significantly in recent decades and, owing to falling fertility rates, it is projected to decline further to 35.1 million in 2050 (UN, 2015). Also emigration has increased substantially in recent years and it is estimated that 3 million of Ukrainians are permanently abroad and 7-9 million people leave for seasonal work.

More than two decades after independence, Ukraine engaged in wide-scale reforms spurred by the Euromaidan Revolution of 2014. Its reform initiatives now cover a broad range of policy areas including: anti-corruption, public procurement, decentralization, law enforcement, deregulation and private sector development, healthcare, taxation, state administration, the financial sector, education, the energy sector, state-owned enterprises, agriculture, the justice system and national security. Anti-corruption and education sector reforms have focused on the adoption of new legislation, and the implementation of these and other reforms has proceeded slowly.

Education is a critical part of the public sector in Ukraine, whether measured in expenditure, public employment or citizens served. Public education expenditures comprised 5.9% of Ukraine's GDP in 2014, and public and private spending on education together equal to 6.9% of GDP or USD 9.211 million (SSSU, 2014). Millions of Ukrainians participate in education as students, teachers or parents. The programmes, the schools students go to, and the HEIs they attend have an important impact on the lives of Ukrainians, opening opportunities for social inclusion and entry to the labor market.²

The COVID-19 pandemic has forced a sudden slowdown in activity and has significantly affected teaching and learning in Ukrainian universities, with many ill-equipped to make the transition to effective distance education. After all schools and universities were closed in March 2020, the switch to online modes of teaching and learning has revealed significant challenges. HEIs have used various e-learning platforms, videoconferencing platforms, and social media networks to maintain learning continuity, but HEIs have largely operated independently in determining how to organize study processes. Access to technical and digital infrastructure, competences and pedagogies for distance learning remains a major constraint.

In this context, the Government of Ukraine recognizes human capital development as a key priority. Since the Euromaidan revolution in 2014, the Government of Ukraine has been engaged in an ambitious and transformative reform of the education sector to promote human

² OECD Reviews of Integrity in Education: Ukraine 2017

capital development as a strategic priority of the Government. In 2020, President Zelenskyy issued Decree No. 210/2020 ("On the improvement of higher education in Ukraine") which elevates strategic planning for higher education and supports state programs for higher education and research in Ukraine. The Government Action Program from June 2020 identifies higher education reform as one of the priorities.

Ukraine's education sector is undergoing ambitious and challenging reforms in several subsectors that can unleash and maximize the human potential of the Ukrainian society and translate it into higher economic growth and welfare. Important new laws have been passed in recent years that set the framework for modernization in several education sub-sectors: The Law on for Higher Education in 2014, the Law on Research and Scientific Activity in 2015, and the 'Law on Education' in 2017.

1.5 Project Institutional and Implementation Arrangements

1.5.1 Implementation Arrangements

The Ministry of Education and Science (MoES) will create the Project Implementation Unit (PIU) and maintain adequate capacity of its staff. Also, the MoES will continuously build the capacity of the staff of participating HEIs and other entities at the MoES' discretion.

Since the PIU would provide operational and management support for the proposed Project for its full duration, it needs to make sure that the Environmental and Social Specialist position is properly reflected on the budget of the Project. The budget should also include a line to support targeted technical assistance to the PIU on Bank-specific processes related to procurement, financial management, and environmental and social risk management, in addition to the project-specific Grievance Redress Mechanism (GRM). The PIU will monitor and coordinate Project implementation. The MoES/PIU is responsible for revisiting and approving ESMF and monitoring its implementation as well as advising the contractor on environmental and social issues.

The Environmental and Social Specialist at the PIU will monitor compliance with ESSes provisions and report to the WB Safeguard Specialist. The tasks of the Environmental and Social Specialist may include the following:

- screening the HEI project implemented activities, identifying potential risks and impacts
 on natural and social environment, necessary mechanisms/documents on environmental
 and social provisions as well as assisting HEI project implemented activities in drafting of
 the ESMPs;
- providing support in ensuring compliance with ESSes objectives and addressing issues related project activities implemented by HEIs (renovation/rehabilitation and construction activities);
- providing support to HEI project implemented activities on baseline data collection;

- ensuring, prior to the commencement of works, the availability of all necessary permits to perform such works in accordance with the design documentation;
- ensuring the availability of the necessary documentation (checklist for screening (Annex D), ESMP (Annex E), incident Register form (Annex B) and ESIRT (Annex F)) for each HEI project implemented activities (project activities);
- conducting a check of the ESMP for compliance with the requirements of ESSes and Ukrainian legislation for protection of natural and social environment and the identification of aspects not covered by impact mitigation measures / actions;
- ensuring that all necessary measures for monitoring and impact mitigation are properly considered in the civil works budgets (procurement plans) of HEI project implemented activities;
- monitoring the proper organization of public discussions on each HEI project implemented activities (if applicable) and the availability of the results of such discussions to the public;
- providing contractors with a complete list of mandatory requirements to mitigate the impact on natural and social environment, which should be met before the start of works under the relevant HEI project implemented activities;
- monitoring the implementation of measures to mitigate the impact identified in the ESMP for each HEI project implemented activities, and informing the head of the PIU / WB / the Ministry of Education of any identified incompliances;
- ensuring implementation of the monitoring plan within each HEI project implemented activities, including determination of baseline indicators and the effectiveness of impact mitigation measures;
- ensuring establishment and operation of a grievance redress mechanism (GRM) at the project level and submission of quarterly reports on consideration of complaints received in connection with implementation of the Project;
- ensuring the relevant updating of the ESMF and HEI project implemented activities ESMPs to reflect the needs of the Project and changes in the World Bank's environmental and social policy (if applicable);
- in case of an incident, ensuring timely notification to the Bank, investigation (using RCA approach), developing a corrective action plan (SCAP), monitoring of SCAP and reporting to the Bank on its implementation (as per ESIRT in Annex F).
- performing other tasks within the Project as necessary.

The Environmental and Social Specialist will report to the head of the PIU. Visits to the HEI project sites will be authorized by the head of the PIU.

The PIU is in charge of overseeing the organization and conduct of public discussions on individual HEI project implemented activities of individual education institutions. The PIU will closely cooperate with HEIs to ensure access to HEI project activities' information for general public and stakeholders in accordance with the national legislation and the Bank ESF. The coordination between the PIU and HEIs will be required for individual HEI project activities' ESMPs drafting and disclosure.

In accordance with the analysis of the potential impact of the HEI project activities on the environment and human health (discussed further in Chapter 5), the MoES/PIU will be required to organize training workshops for the following:

- construction contractors about required procedures to mitigate negative environmental impacts during construction and dismantling works;
- HEIs implementing project activities about compliance with environmental requirements and safety in the period of construction and in the future operation of buildings and structures in accordance with the developed ESMP.

Representatives of the World Bank will visit HEIs to monitor implementation of project activities.

2 BASELINE DATA

The specific location of the HEI project activities is not known yet. Most probably, HEIs implementing project activities that will involve civil works, are situated in urban areas. The baseline data are provided for the whole territory of Ukraine and is therefore not very specific. When the HEI project activities are identified and their location is known, the PIU is expected to support them in developing ESMP with HEI specific baseline data that would include the following:

- Location of the HEI (geographical location specifying names of towns/villages, community, etc.);
- Description of physical environment (climate), topography (geology, soils and hydrology);
- Biological environment (ecosystems);
- Socio-economic background.

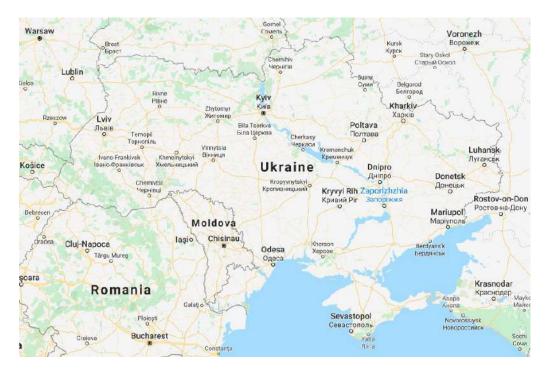
2.1 Location and Size

Ukraine, located in Eastern Europe, has a total area of 603,550 sq. km. It is bordered in the southwest by Romania and the Republic of Moldova, in the west by Hungary, Slovakia and Poland, in the northwest by Belarus, in the northeast and east by the Russian Federation, and in the south by the Black Sea, where the Crimea peninsula is located. Administratively, Ukraine is divided into 24 provinces (oblasts), 1 Autonomous Republic (Crimea) and 2 municipalities with oblast status (Kiev and Sevastopol).

The predominant lowland is interrupted by several regions of modest elevation, such as the Volyn-Podolsk plateau (also called the Podolian plateau) in the west, the Dnipro (Dnieper) ridge in the center, and the Donets ridge in the southeast. The Carpathian Mountains (with their highest peak, Hoverla, at 2,062 m above sea level) and their foothills in the southwest, together with the Crimean Mountains (1,545 m above sea level) along the southern coast of the Crimean Peninsula, constitute the only mountainous sections of Ukraine.

The agricultural area, which is the sum of arable land, permanent crops and permanent meadows and pasture, is estimated at 41 million ha, which is 68 percent of the total area of the country. In 2014, the total physical cultivated area was estimated at 33.4 million ha, of which 97 percent (32.5 million ha) consisted of temporary crops and 3 percent (0.9 million ha) of permanent crops.³

³ http://www.fao.org/nr/water/aguastat/countries regions/UKR/index.stm



2.2 Physical Environment and Climate

The climate of Ukraine is temperate continental. The only exception is the southern coast of Crimea, where the climate is subtropical of the Mediterranean type. Warm low-snow winters and rainy summers are specific to the mild climate of the Zakarpatye region. Average winter temperatures in Ukraine vary from -8 to -12°C. The temperature in the southern regions approaches 0°C. The average summer temperature ranges from 18 to 25°C. Clear, sunny weather is typical for Ukraine (up to 230 sunny days per year). Precipitation falls unevenly across Ukraine. The most rainfall is recorded in the Crimean Mountains and the Ukrainian Carpathian Mountains.

There are four agro-climatological zones in Ukraine:

- The humid zone covers 35 percent of the country in the northwest. It is moderately warm in summer and cold in winter. The average annual precipitation is 600 mm, concentrated between May and October, but can reach 1600 mm. in the highest part of the Carpathian Mountains, with to up 300 mm. falling as snow. In these areas, the snow cover generally lies for 70-90 days, from early or mid-December to the end of February but can last until April and even mid-May. Average temperatures vary between -4°C in January and 17°C in July.
- The warm zone covers 25 percent of the country and comprises the eastern and central forested steppe. The average annual precipitation is 500 mm., concentrated between February and April. Average temperatures vary between -6°C in January and 21°C in July.
- The semi-arid zone covers 25 percent of the country and comprises the so-called northern steppe (central part of the country) and the far east of the country (Donets high

- plain). The average annual precipitation is 450 mm., concentrated between April and October. Average temperatures vary between -6°C in January and 21°C in July.
- The arid zone in the south covers 15 percent of the country, including the Crimean Peninsula. It is characterized by mild winters, with an average annual precipitation of about 360 mm, concentrated between December and May. Average temperature varies between 0°C in January and 23°C in July.

The average annual precipitation over the country is estimated at 565 mm. This figure includes snowfall, which is an important source of water, particularly in the west.

2.3 Topography and Drainage

The landscape of Ukraine is predominantly flat (93%). The rest of the territory (7%) has a mountainous landscape.

Over 73,000 rivers flow through Ukraine. Ukrainian rivers mostly belong to the basins of the Black and Azov seas. Only the Western Bug and other right influxes of the Vistula River flow to the Baltic Sea basin. The major rivers are the Dnieper (in Ukrainian - "Dnipro") (third longest in Europe), the Dniester, Southern Buh, Siverskiy Donets, and Prut. The mouth of the Danube is situated in Ukraine. There are over 3000 natural lakes (mostly situated in Polesye, Prichernomorskaya lowland, and the Crimean steppe) and about 22,000 artificial water reservoirs.

Though much of Ukraine's original plant cover has been cleared for cultivation, three main zones of natural vegetation are still distinguishable. From north to south, they are the Polissya (woodland and marsh), the forest-steppe, and the steppe. Forests cover about 14% of Ukraine's territory. Recreational landscapes occupy an area of 9.4 million hectares. Approximately 30,000 species of plants grow in Ukraine. More than 400 of them are included in the Red Data Book. Almost 19 mln. ha (nearly one third of Ukraine's territory) has natural vegetation. Approximately half of all ordinary and almost 30% of all rare and endangered species are concentrated in the Crimean and Carpathian Mountains. The animal life of Ukraine is diverse, with about 350 species of birds, more than 100 species of mammals, and more than 200 species of fish. A network of 11 natural national parks, 4 biosphere conservation areas, 16 wilderness areas, and more than 100 wildlife refuges has been established to protect wildlife.

2.4 Socio-Economic Background

In 2015, the total population was about 45 million, of which around 31 percent was rural. Average population density in the country is 74 inhabitants/km², varying from 164 inhabitants/km² in the Donetsk oblast to 33 inhabitants/km² in the Chernihiv oblast. The average annual population growth rate in the 2005-2015 period has been estimated at minus 0.4 percent.

In 2017, the Human Development Index (HDI) rank Ukraine 88, while the Gender Inequality Index (GII) ranks 61 among 189 countries. Life expectancy is 76,9 years for women and 67,1 for man with no significant distinction between boys and girls, around 100 percent of the children in 2017 are enrolled in primary education and 97 percent for secondary education. Adult literacy is 100 percent in 2017 (UNDP, 2018).

Inequities in Ukraine's education system start early and limit the potential of learners and the system. Access to preschool education has been unequal over a long period, particularly in rural areas and for poor families. These inequities persist over time, preventing many students from acquiring the foundation skills needed to succeed in higher education or the labor market. Evidence from external learning assessments (national and international) indicate that inequality is driven by (a) clustering of poor students in poor schools; (b) inadequate learning environments in small-sized and rural schools; and (c) practice of selectivity which took place until 2018 creating between-school inequality such as the difference in performance between selective, "elite" schools (gymnasiums, lyceums, specialized schools) and regular non-selective schools. Rural schools have substantially less access to learning materials and information and communication technologies (ICTs) and are more likely to have shortages of subject teachers. Such inequality in opportunity means that many students are not adequately prepared to enter higher education, even though this is the top objective and most common path for most young Ukrainians.

Although there is no significant gender gap in access to education for males or females, the review of Ukraine's education system (2019) by the Bank shows that male students perform statistically significantly worse than female students across the board on both the Ukrainian language and literature exam and the mathematics exam in Grade 11, although the size of the effect is much larger on the language exam. In fact, for language, gender is a main determinant of performance.

Apart from the above, the conflict in the Eastern part of the country has also had a significant impact on the education sector, resulting in internal displacement of students, teachers, and institutions. Between 200 and 300 schools in Donetsk and Luhansk oblasts have been damaged. Additionally, the Ukrainian government had to evacuate and move 17 state universities, 2 private universities and 11 research institutions in the temporarily occupied territories of Donetsk and Luhansk regions. It is estimated that around 40,000 higher education students and 3,000 research and teaching faculty fled the occupied territories. Because most of their assets remained in the temporarily occupied territories, the displaced institutions have been suffering from major infrastructural, financial and organizational losses.

Even though the education system in the Eastern part of Ukraine was disturbed due to the conflict and some of the institutions closed, the students in the Government controlled areas provided with opportunities to get enrolled in education institutions and able to get formal education without much hindrance over the past few years. Nearly 100 HEIs and schools in Eastern Ukraine closed but 17 universities and 11 research institutions had successfully moved out of the conflict zones and operate in other regions.

The Government education reform agenda include resource allocations for developing educational and scientific resources for all those unfairly affected, and the project aims at supporting these initiatives. The Project proposes to support quality higher education including facilities such as laboratories.

3 DESCRIPTION OF THE ADMINISTRATIVE, POLICY AND REGULATORY FRAMEWORK

3.1 The Legal, Regulatory and Policy Framework

3.1.1 Constitutional provisions (if any)

Article 53 of the Constitution of Ukraine adopted at the fifth session of the Verkhovna Rada of Ukraine in June 28, 1996 stipulates that everyone has the right to education.

3.1.2 Applicable laws and regulations

An overview of the legal framework of Ukraine in the field of environmental protection, occupational health and safety, and education is presented below.

- Law of Ukraine on Environmental Protection⁴, #1264-XII, adopted on June 25, 1991;
- Law of Ukraine on Labor Safety⁵, #2694-XII, adopted on October 14, 1992;
- Law of Ukraine on Ensuring Sanitary and Epidemiological Well-being of the Population⁶, #4004-XII, adopted on February 4, 1994;
- Law of Ukraine on Waste Management⁷, #187/98-BP, adopted on March 5, 1998;
- Law of Ukraine on Urban Planning Activities⁸, #3038-VI, adopted on February 17, 2011;
- Law of Ukraine on Access to Public Information, #2939-VI, adopted on January 13, 2011;
- Law of Ukraine on Higher Education #1556-VII? Adopted, adopted on July 1, 2014;
- Law of Ukraine on Environmental Impact Assessment⁹, #2059-VIII, adopted on May 23, 2017;
- Law of Ukraine on Education, #2145-VIII, adopted on September 5th, 2017; and
- Law of Ukraine on Strategic Environmental Impact Assessment, #2354-VIII, adopted on March 20, 2018.

Some of the Laws of Ukraine are discussed below.

The Law on Environmental Impact Assessment (hereinafter referred to as the EIA Law) came into force on December 18, 2017. The Law sets legal and organizational policies for an environmental impact assessment (EIA/OVD) with a view to avoid and prevent environmental damage, ensure environmental safety, environmental protection, rational use and restoration of

⁴ https://zakon.rada.gov.ua/laws/show/1264-12

⁵ https://zakon.rada.gov.ua/laws/show/2694-12

⁶ https://zakon.rada.gov.ua/laws/show/4004-12

⁷ https://zakon.rada.gov.ua/laws/show/187/98-%D0%B2%D1%80

⁸ http://zakon.rada.gov.ua/laws/show/3038-17

⁹ http://zakon.rada.gov.ua/laws/show/2059-19

natural resources, in the process of decision-making on economic activities likely to cause a significant impact on the environment, taking into account state, public and private interests.

As part of the EIA/OVD process, the environmental authorities (The Ministry of Energy and Environmental Protection (MEEP) or MEEP's regional offices) need to be provided with an assessment of the environmental effect and the resulting report will be subject to public discussion. Based on this, environmental authorities provide their opinion on the assessment. A report on the environmental impact assessment, a report for public discussion, and an opinion of environmental authorities, form the basis for local authorities to issue a relevant permit.

This law introduces a new European model of the Environmental Impact Assessment (EIA) procedure instead of the abolished Environmental Assessment in order to be consistent with European standards, namely with the control of the degree of environmental pollution, regulatory access to environmental information, and participation in decision-making by citizens whose rights to a safe environment are acknowledged.

The Law of Ukraine "On Regulation of Urban Planning Activity" establishes the legal and organizational foundations of urban planning activity and aims at ensuring the sustainable development of territories considering state, public and private interests.

This law is the key that regulates all types of construction work, specifies what documentation should be prepared for different types of construction projects by different types of consequences (responsibility) and how the examination of such documentation is conducted.

Occupational health and safety

The Law of Ukraine on Labor Safety defines the basic provisions for the implementation of the constitutional right of employed citizens to ensure occupational health in the course of their employment, as well as to proper, safe and healthy working conditions. In addition to many other provisions of the law, employees must receive training in occupational health and safety, as well as personal protective equipment. In the case of industrial accidents, the law provides that the employer is obliged to organize investigations and keep records in accordance with the procedure established by the CMU Resolution (No. 1232 of 30.11.2011).

Code Of Civil Protection of Ukraine defines the organizational and legal bases of protection of citizens of Ukraine, foreigners and stateless persons who are in the territory of Ukraine, protection of objects of industrial and social purpose, environment from of man-made and natural emergencies.

In addition, the various building codes, sanitary standards and norms should be taken into account when the renovation of HEI buildings is considered. Some of the relevant state building codes of Ukraine, sanitary rules and industry regulations are listed below:

DBN A.3.2-2-2009 OSBP "Occupational Safety and Industrial Safety in Construction. Substantive provisions";

DBN B.2.6-33:2008 Construction of buildings and structures. Construction of Envelope with exterior heat insulation. Requirements for Design, Installation and Operation

DBN B.2.6-31:2006 Construction of buildings and structures. Thermal Insulation of Buildings

DBN B.2.2-3:2018 Buildings and structures. Educational Institutions

DBN A.2.2-3: 2013 "Composition and content of project documentation for construction";

DBN B.1.2-7-2008 «Basic requirements for buildings and structures. Fire Security";

DBN B.1.2-9-2008 «Basic requirements for buildings and structures. Safety of operation »;

DBN B.1.2-10-2008 «Basic requirements for buildings and structures. Noise protection »;

DBN B.1.1-31: 2013 "Protection of territories, buildings and structures from noise";

DSTU-N 5 B.1.1-27: 2010 "Building climatology";

DSTU-N 6 B.1.1-33: 2013 "Guidance on the calculation and design of noise protection of rural areas" - NAPS A.01.001-14 "Rules for fire safety in Ukraine";

DSN 3.3.6.039-99 "State sanitary standards of industrial general and local vibration";

DSanPiN 2.2.4-171-10 "Hygienic requirements for drinking water intended for human consumption".

3.2 Relevant Sector Policies and Reforms

The Law on Higher Education (#1556-VII adopted on July 1, 2014) supported important reforms which aimed to align the Ukrainian higher education with the Bologna process commitments. It supported the implementation of the three-cycle structure of Higher Education – Junior Bachelor (short cycle), Bachelor – Master – PhD and a 4th or postdoctoral cycle – Doctor of Science. It encouraged the academic, organizational and financial autonomy of Ukrainian universities (by allowing international grants for research and education to be placed in private Banks's accounts and not only on the State Treasury). In September 2017, the Ukrainian Parliament passed amendments which increased student participation in university governance, tied financial aid to cost of living increases, improved financial transparency at HEIs, imposed term limits for university presidents and deans, and further promoted academic autonomy. They also restructured public university funding in a way that incentivizes universities to compete for the best students.

3.3 Relevant Institutions

According to the Cabinet of Ministers' Order 630 adopted on October 16, 2014, the Ministry of Education and Science of Ukraine (MoES) is the central governmental institution responsible for developing and implementing the state policy on education and science, supervising education institutions and organizations that provide educational services. The same Order covers MoES' main tasks, which include, among others: determines prospects and priorities for higher education development, develops strategy and development programs for higher education, conducts analytical and prognostic activities in higher education sector, identifies trends in its development, provides conditions to aquire all levels of education including higher education and lifelong learning.

4 RELEVANT WORLD BANK ENVIRONMENTAL & SOCIAL STANDARDS

The World Bank's Environmental and Social Framework (ESF) includes the Sustainable Development Concept, which reflects the Bank's commitment to achieving environmental and social sustainability and implies the implementation of ten World Bank Environmental and Social Standards (ESSs): ESS1 - ESS10.

The ESSs are designed to help MoES and PIU to manage the risks and impacts of a project, and improve their environmental and social performance, through a risk and outcomes-based approach. The desired outcomes for the project are described in the objectives of each ESS, followed by specific requirements to help Borrowers achieve these objectives through means that are appropriate to the nature and scale of the project and proportionate to the level of environmental and social risks and impacts.

The MoES may not be the entity directly implementing the changes in HEIs project activities. Nevertheless, the MoES is responsible for ensuring that project activities are prepared and implemented so that they meet all applicable requirements of the ESSs in a manner and timeframe agreed with the Bank. The MoES will ensure that any entity involved in implementing HEI project activities adopts all obligations and commitments of the Project in accordance with the requirements of the ESSs and the specific conditions of the legal agreement, including the ESCP. This is also applicable to Associated Facilities¹⁰ to the extent of the control and influence that the MoES and HEIs have over such Associated Facilities. Contractors retained by or acting on behalf of the MoES and HEIs will be under the direct control of the MoES/PIU.

The MoES is required to manage environmental impacts and social risks of the project throughout the project life-cycle in a systematic manner, proportionate to the nature and scale of the project and of the potential risks and impacts.

The Ukraine Improving Higher Education for Results Project activities that will be financed by the World Bank are subject to meet ESSs of the World Bank ESF. The relevance of each of the standards will be verified in relation to the project and its HEI project activities during scoping and further analysis of environmental and social impacts. The initial analysis of the Project activities suggests that the following ESSes are required to be met:

- ESS1 Assessment and Management of Environmental and Social Risks and Impacts;
- ESS2 Labor and Working Conditions;
- ESS3 Resource Efficiency and Pollution Prevention and Management;
- ESS4 Community Health and Safety;
- ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;

¹⁰ Associated Facilities means facilities or activities that are not funded as part of the project and, in the judgment of the Bank, are: (a) directly and significantly related to the project, and (b) carried out, or planned to be carried out, contemporaneously with the project; and (c) necessary for the project to be viable and would not have been constructed, expanded or conducted if the project did not exist. Page 5, ESF, World Bank 2017

- ESS8 Cultural Heritage;
- ESS10 Stakeholder Engagement and Information Disclosure.

It is determined that the ESS6 Biodiversity Conversation and Sustainable Management of Living Natural Resources is not currently relevant given the project's context and timing. The potential risks associated with planned activities (renovation of HEIs) have been screened and determined not to have an impact on biodiversity of living nature resources. The sub-projects will be in modified landscapes and modified environment i.e. already existing educational facilities of HEIs.

Also, ESS7 Indigenous People/Sub-Saharan African Historically Underserved Traditional Local Communities is not relevant. There are no indigenous peoples identified in Ukraine.

The ESS9 Financial Intermediaries is not applicable to the Project.

The standards relevant at this stage of the project are discussed below.

4.1 ESS 1 - Assessment and Management of Environmental and Social Risks and Impacts

ESS 1 sets out the Implementing Entities' responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSes). The MoES will apply the ESS 1 to identify and assess the environmental and social risks and impacts associated with each stage of the Project (HEI project activities whenever participating HEIs are identified) in a manner consistent with the ESSes in its area of influence. The ESS1 will also be used as guidance to address potential impacts on environment (air, water and land), human health and safety, social aspects, etc. through a planning and mitigation hierarchy approach. Application of the required risk mitigation measures will be ensured by their inclusion into the Environmental and Social Commitment Plan (ESCP) prepared by the Borrower/MoES in cooperation with the Bank.

To meet the requirements of ESS 1, the MoES will use the Environment and Social Incidents Response Toolkit (ESIRT), which is intended to assist implementing parties (HEI project activities) to address incidents that occur during implementation and to advise implementation agencies on their response to such incidents.

The Investment Project has a country wide coverage and will include renovation works inside and outside selected HEI (this would include, *inter alia*, laboratories, digital tools to support teaching and learning, and related instructional equipment). The renovation of HEIs will take place in existing facilities and involve civil works, contractors, and rehabilitation of existing facilities.

Based on the current understanding of the Project activities, potential environmental risks and impacts are predictable, expected to be temporary and reversible, low in magnitude, and site-specific. The ESMF refers to a list of HEI project activities that will not be eligible for financing, i.e., the ones with a potential substantial/high risk (e.g. in critical habitats or ecosystems) given that the overall project risk is Moderate. The activities implemented by HEIs and Associated Facilities/Activities that are to be identified under the Project most probably will not require preparation of ESIA. Instead, the MoES/PIU and HEIs should be responsible for the development of ESMP for each sub-project that is to be identified under the Project. The Resettlement Action Plans (RAPs) may be required in compliance with ESS 1 and ESS 5. The MoES should develop and maintain quarterly reporting on activities identified under the Project (this will be reflected on the ESCP). The proposed template for Project Activity Report can be found on Annex A.

Furthermore, the current ESMF and an RPF will be disclosed by the MoES in line with the requirement of relevant ESSs before Appraisal.

4.2 ESS 2 – Labor and Working Conditions

The ESS2 promotes basic principles and rights in the field of work, as well as issues related to child and forced labor, freedom of association and collective bargaining. The ESS2 also promotes safety and health at work and requires that all works should be carried out with the observation of construction safety measures: mandatory wearing of personal protective equipment and safe use, handling, storage and transportation of hazardous substances (e.g. paint, solvents, glues, petroleum products, disinfectants, lead containing materials, etc.). The same applies to the operational period for all new equipment installed (laboratories, wind turbines, solar panels etc.). While reflecting the requirements for occupational safety and health, the Standard also provides a grievance mechanism for employees working on the Project (including activities to be implemented by HEIs). Environmental and social risks/impacts related to labor rights and Occupational Health and Safety (OHS) are expected to be low. The project footprint is relatively small and does not entail a significant amount of labor as the project will refurbish existing HEI buildings only.

This ESS has several dimensions of application. The proposed Project calls for improved working and study environments, so all parties involved in the Project (PIU, HEI project activities, other implementing entities, contractors) are expected to follow the Labor Management Procedure (LMP) that MoES has drafted for the project. The LMP covers workers' rights and freedoms, as well as requirements of working conditions for conducting civil works, and describes (i) procedures relevant to each category of workers involved; (ii) terms and conditions of labor; (iii) overview of key potential labor risks (if any); (iv) overview of Ukraine's labor legislation; and iv) grievance redress mechanism or mechanisms available to all workers (and if relevant, to their organizations). The LMP will be updated during implementation when more details about the HEI project activities are known (in particular, the types and scale of civil works).

While tendering of civil works, bidders will be required to submit an Environment, Social, Health and Safety (ESHS) Code of Conduct prepared in line with the Environment, Health and Safety Guidelines of the World Bank Group¹¹. Contractors engaged in civil works will develop OHS measures (as part of ESMP), which will have a special focus on handling potentially dangerous or toxic materials, such as asbestos, lead-containing paints, and will include procedures on incident investigation and reporting (as per ESIRT in the Annex F. Incident Report in Annex B can also be used for reporting incidents and how they were addressed). Contractors will be contractually required to monitor and enforce safety plans.

A locally based HEI project activities-specific GRM, proportionate to the potential risks and impacts of those activities, will be established as a part of ESMP. In addition, a GRM specifically for direct and contracted workers will be provided. The HEI project implemented activities-specific GRM and workers' GRM will be designed at an early stage and will be formally established before the start of any civil works¹². Complaints received and resolved will be reviewed during the implementation support missions.

4.3 ESS 3 – Recourse and Efficiency, Pollution Prevention and Management

This ESS 3 sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle consistent with Good International Industry Practice (GIIP). The applicability of this ESS is established during the environmental and social assessment described in ESS 1.

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¹¹ The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP) and are referred to in the World Bank's Environmental and Social Framework and in IFC's Performance. The EHS Guidelines contain the performance levels and measures that are normally acceptable to the World Bank Group, and that are generally considered to be achievable in new facilities at reasonable costs by existing technology. The EHSG can be accessed at https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/EHS-Guidelines/

¹² More details on GRM establishment is provided in the Stakeholder Engagement Plan developed for the Project.

The overall level of environmental risks associated with the project is considered to be The limited moderate. Project's physical activities are to small-scale improvements/rehabilitations of education infrastructure within existing sites. The expected environmental risks are associated with handling and storage of construction material, waste, excessive noise and vibrations, dust emissions, and disposal of asbestos-containing material, if present. The ESMF includes a section on Pollution Prevention and Management, with a focus on those issues which might arise while conducting civil works for facilities rehabilitation activities. Assessment of associated activities with civil works risks and impacts and proposed mitigation measures related to relevant requirements of ESS 3, including raw materials, water use, air pollution, hazardous materials, and hazardous waste are clearly specified in the ESMF and requested to be included in the ESMPs as relevant, and further being part of bidding documents.

Air emissions will include exhaust from heavy vehicles and machinery, and fugitive dust generated by construction activities. Those most likely to be affected are students, teachers, and people living in areas close to the construction sites. Mitigation measures such as dust suppression, vehicle maintenance etc. will be applied to minimize the impacts and residual impacts are expected to be limited in scope and duration.

Noise will likely be generated from use of construction machinery and vehicle movements. The relatively short-term and small-scale nature of the works suggest that noise levels will not be excessive. Construction works will be scheduled to take place mainly during vacation periods, to the extent possible, in order to limit the impact on students and persons in the respective buildings.

Liquid and solid waste will mainly include oils from construction machinery, concrete blocks, metal and glass pieces from demolished walls etc. Waste will be segregated, stored and disposed at approved sites.

Due to the nature of proposed renovation works, it is not expected that the project will have significant water and energy use.

There is also a potential of rehabilitation activities that could involve demolition or replacement of existing infrastructure containing hazardous materials such as asbestos. The ESMF includes measures to consider for removal and disposal of hazardous materials such as asbestos.

To the extent possible, designs for rehabilitation of the existing premises of education facilities will include feasible elements of insulation (window frames, roofs, etc.) aimed at heating energy savings and introduction of energy-efficient lighting.

HEIs involved in the implementation of project activities will be required to prepare an ESMP, which will specify the risks/impacts and proposed mitigation measures related to relevant requirements of ESS 3. Those ESMPs will have detailed waste management comprehensive procedures (covering sorting, storage, transportation and utilization of hazardous, construction and household waste), as well as dust, noise and vibration mitigation measures.

To the extent possible, design for rehabilitation of the existing premises of EIs will include feasibility elements of insulation (window frames, roofs, etc.) aimed at heating energy savings and introduction of energy-efficient lighting.

4.4 ESS 4 – Community Health and Safety

ESS 4 focuses on the risks and impacts of projects on communities' health and safety. The MoES/PIU is responsible to address the health, safety, and security risks and impacts on project-affected communities by avoiding or minimizing such risks and impacts, with attention to people who, because of their circumstances, may be vulnerable.

The application of this ESS 4 is multidimensional. Community health and safety issues are associated with the typical risks / impacts of construction sites (renovation works planned under Components 2 and 3) such as dust, noise and vibration, waste and influx of labor. The project finances the rehabilitation of renovation/construction of HEI (laboratories) (component 3) that will be accessible to students, teachers and sometimes other people. Some risks / impacts are identified regarding the potential exposure of the public to operational accidents or natural hazards, including extreme weather events. The project will also apply the concept of universal access to the design and construction of these renovated HEI buildings when it is technically and financially feasible to accommodate the needs of persons with disabilities or who are mobility impaired and have access to HEIs and other facilities.

In addition, MoES will follow ESIRT procedure to comply with ESS 4. The Incident Register form template provided in Annex B to this document can be adapted to report different type of accidents that occur in HEIs during construction and operation phases.

4.5 ESS 5 – Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement

The project will not finance activities that would require land acquisition, access rights (short-term or long-term), or physical or economic displacement. The project's civil works consist of small scale rehabilitation/ repairs within the premises of existing education institutions. There are no specific target locations of project activities as institutions benefiting from them will be nationwide but located on lands owned by the state or local municipalities. Risks and impacts will be identified through a social screening process (checklist) and appropriate mitigation measures will be included in the site specific ESMPs or RAP, if necessary. The draft ESMF and RPF, prepared by the MoES, describe the process for screening of potential construction-induced social risks and impacts including land and resettlement-related impacts, as well as actions/steps and mitigation measures to be employed if such impacts are identified. ESMF and RPF also include supervision and monitoring requirements regarding ESS 5-relevant impacts.

4.6 ESS 6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources

The HEI project activities are not anticipated to have impacts on biodiversity or living natural resources. The project implementation sites will be in modified landscapes i.e. already used for educational facilities, training centers and universities.

ESS 6 recognizes the importance of maintaining core ecological functions of habitats, including forests, and the biodiversity they support. Habitat is defined as a terrestrial, freshwater, or marine geographical unit or airway that supports assemblages of living organisms and their interactions with the nonliving environment.

4.7 ESS 7- Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities.

The ESS 7 is not applicable for the Project. There are no identified indigenous people in the country.

4.8 ESS 8 – Cultural Heritage

The HEI project activities might, in some cases, include rehabilitation of facilities which are in the list of national or local Cultural Heritage sites. It is expected that these rehabilitation and restoration works will mainly include repair and upgrading of buildings and may also cover some interior utility networks (electricity, water, heating, a/c, etc.) and landscaping. As required by the ESS 8 and national legislation, rehabilitation of each such site will be developed and managed in accordance with principles of good practice in the cultural heritage field. In such a case, the PIU would include an ES specialist knowledgeable in aspects of heritage preservation. Sitespecific ESMPs under the project will address cultural resources preservation measures in detail.

Additionally, civil works may require undertaking of earth works that involve the likelihood of chance finds. To address this issue, ESMPs of all HEI project activities will have special clauses in all contracts for civil works on "chance finds procedure" which will set out how chance finds associated with project activities will be managed.

4.9 ESS 9 – Financial Intermediaries

No FI involvement is envisaged in the project.

4.10 ESS 10 – Stakeholder Engagement and Information Disclosure

Through the ESS 10 the WB recognizes the importance of open and transparent engagement between the implementing entity (MoES/PIU) and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.

ESS 10 applies to all projects supported by the Bank. The MoES/PIU/EIs will engage with stakeholders as an integral part of the project's environmental and social assessment and project design and implementation, as outlined in ESS 1.

The MoES have prepared a Stakeholder Engagement Plan (SEP) prior to the assessment in accordance with the requirements of the ESS 10. The stakeholder engagement plan (SEP)¹³ includes interested parties, various beneficiaries and those directly affected by the project (project affected persons – PAPs), including disadvantaged and vulnerable groups. The main stakeholders of the project are: (i) the Ministry of Education and Science (MoES); (ii) HEIs authorities at national, regional and local levels; and iii) HEIs administration and pedagogical staff; (iv) students.

The SEP draft will be released as early as possible prior to the assessment to allow meaningful consultation and input from stakeholders before it is finalized for evaluation. The MoES/PIU will put in place, within the framework of the SEP, external communication procedures on environmental and social issues proportionate to the risks and impacts of the project activities, in accordance with the requirements of the ESS 10.

MoEs will build upon the existing Grievance Redress Mechanism (GRM) as the project will also design a project-wide GRM which will enable stakeholders to channel concerns, questions, and complaints to the PIU (and where necessary to other actors at the local level). The GRM will be multi-faceted, to receive inputs from communities and external stakeholders, and be able to respond to issues related to a broad range of project implementation issues. A channel for confidential reporting and redress mechanisms for gender-based violence (GBV) issues will also be laid out. Given that project locations will be dispersed geographically, the project will identify local actors, including local government agencies as well as specific liaison officers at the PIU to help coordinate and implement the SEP.

The PIU will assist HEIs to include a HEI-level GRM to respond to inquiries and public concerns. The PIU will also assist civil works contractors to establish workers GRM.

Chapter 8 of this ESMF discusses public consultation, disclosure and GRM further and referes to SEP for more details on methodologies to apply, particularly with regards to ongoing COVID-19 crisis.

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¹³ SEP is available as a separate document and will be disclosed jointly with the ESMF.

5 DETERMINATION OF POTENTIAL ENVIRONMENT AND SOCIAL IMPACTS

Generic assessment demonstrate that environmental and social impacts will be limited, small to moderate, reversible and easy to control and manage.

The main environmental and social risks and impacts are related to the activities to be financed under components 2 and 3 (the renovation/rehabilitation of HEIs, installation of labs, etc.)

All renovation/construction works will be carried out exclusively at the existing facilities of HEIs: reconstruction and modernization of buildings of selected higher education institutions.

Since the HEI project activities¹⁴ will be identified in the course of the Project implementation, the identified environmental and social impacts are generic. To comply with the WB ESF, each identified HEI implementing project activities will develop an ESMP following the proposed template in the Annex E. The ESMP will account for each activity specific environmental and social impacts and benefits.

5.1 Potential positive social and environmental impacts

Program activities will have a significant positive impact on the quality of educational services in Ukraine, influencing educational environment and society, directly and indirectly, temporarily and permanently. The maintenance costs of buildings of the selected educational institutions will be reduced. The following positive impacts are anticipated on the environment and social aspects of the project during renovation (refurbishment) and the operational phase:

- Improved infrastructure of HEI for learning. The HEI buildings, classrooms, libraries, and their accessibility for persons with disabilities are crucial elements for better learning outcomes.
- Improved quality of educational services in HEIs with modern digital infrastructure for distance learning, digital devices and equipment, basic teaching laboratories and advanced scientific research laboratories, equipment, targeted managerial and faculty training, minor refurbishment and rehabilitation.
- Reduced maintenance cost due to energy and other resources (water consumption) efficiency measures implemented during renovation.
- Improve conditions for students to achieve academic success and equal opportunities;
- Create jobs and temporary incomes (contractors), then improve the incomes of employees;
- Establish a participatory system to hold public consultations on HEI renovation and adequately manage the grievances of students and parents or others directly or indirectly affected by the project activities. Due to COVID-19 outbreak the public

¹⁴ The ESMF provides a template for Project Activity Plan on Annex A.

- consultations and stakeholder engagement should emphasize on virtual methods for participation (vitual meeting, tv, social media publications, posters in public pleaces);
- Improve citizen participation by strengthening access to information mechanisms, consulting citizens, handling complaints and introducing measures to establish the right to petition and monitor user satisfaction.

5.2 Potential adverse social and environmental impacts

Potential environmental and social impacts for the renovation of HEIs are described below for design/bidding, construction works, and the operation phases. All the environmental and social impacts associated with renovation/rehabilitation of HEI cambuses under Sub-component 2.1 and Component 3 described below will be temporary (short-term), reversable and site specific (local), from low to moderate in magnitude and manageable. However, the listed below impacts could cause inconvenience to students, teachers, workers and general public. Particularly during the ongoing COVID-19 crisis, presence of contractors' workers on a campus can present an additional threat to the students on one hand and contractors' personel on the other hand and complicate tracing of COVID-19.

Expected negative impacts:

During the design phase

- neglect of environmental and social aspects, and COVID-19 preventive requirements, including cultural heritage (e.g. historical buildings) during preparation of HEI renovation design and bidding documents.
- disruption of HEI programs and academic activities due to wrong timing of renovation work.
- The overall design/technical plan on renovation/rehabilitation includes outdated technics for heating, ventilation and airconditioning (HVAC), other engineering solutions (underutilized energy efficient, water efficient etc. solutions), neglect of appropriate fire alarm and fire emergency escape plans and hazardous components in construction materials.

During the construction (renovation) phase

- air pollution (dust, concrete dust, particulate matters, exhausts) caused by extractions of materials, transport of equipment and trucks/machinery can have negative impacts on both human and environmental health;
- soil pollution due to stock piled construction materials, construction waste, oil leakage from machinery and the event of an uncontrolled spills;
- uncontrolled releases of hazardous materials (e.g. glues, petroleum products, solvents, paint, etc.) and waste (asbestos-containing roofing material, possibly, lead-containing paints in demolition debris due to their improper use, handling, storing and transporting;
- water pollution in the event of the release of pollutants (oils, oil products, etc.) into the HEI yards (temporary construction side), nearby streams and other water bodies;

- loss of flora and fauna habitats. The HEI project activities are not likely to be within sensitive areas, habitats for any threatened or rare species. However, the cleaning of vegetation during renovation activities is possible on HEIs backyards for storage of construction materials, equipment, and waste storage or some infrastructure improvement works (e.g. water pipes replacement, heating boiler installation, etc.)
- other nuisances like noise and vibration, the movements of vehicles (delivering construction materials, removing wastes, operation of cranes, lifts, front loaders etc.) and construction machinery may cause some nuisance in terms of noise and vibration of the machinery to which people will be exposed;
- health impact on teachers and students if rehabilitation of HEI premises happens during the educational period. Disruption of academic activities that may be temporarily shifted to another building while premises are being renovated.
- transmission of COVID-19 between university students and staff and contractors' workers;
- occupational health and safety hazards, the risk of construction site accidents for workers, teachers and students. Work related accidents such as burns, falls and cuts may also occur due to human errors, workers not wearing appropriate PPEs required for their assignments, and mechanical faults of equipment. Accidents may also result from improper storage of equipment, paints and other solvents and construction materials as well as poor management of construction waste. Another source of accidents during the construction phase of the project is human-vehicular conflicts as equipment and supplies are transported to the site and waste is hauled from the construction site to designated disposal site. Accidents of this nature can result in spills, destruction of property, injuries and fatalities on site. Several OHS risks may occur from the activities, processes, materials and equipment involved in the construction phase of the project;
- traffic accidents due to construction-induced traffic (incoming and outgoing trucks, workers, students and other pedestrians);
- fire risks since construction areas prone to spontaneous fire combustion activities especially at the fuel storage, mechanical workshop (welding and steel cutting), smoke from burning garbage, cigarette smoking sections and carpentry shops.

During operation phase

- health risk for students and safety hazards in case of exposure to toxins in construction materials (e.g. lead based pain, asbestos). It is expected that during HEI rehabilitation/renovation all major health hazards/toxic materials will be removed, so no major hazards are expected in renovated HEI. However, proper maintenance (e.g. sanitation system and cleaning services, repair services), internal communications and fire safety systems must be insured;
- health risk for students in case of non-compliance with food preparation and distribution procedures in canteens, drinking water (e.g. regular replacement of filters), quarantine and sanitation guidance (in case of viral infections, etc.);

- health impacts, injuries and infrastructure/equipment damage due to lack of safety rules and instructions on laboratory equipment and chemical materials in use;
- worsening of sanitary-hygienic conditions due to waste and wastewater generation during the operation of HEIs, inappropriate HVAC that can boost COVID-19 and other viral infection spread. Improper and non-timely collection, removal and disposal of waste accumulation and clogging of sewage system can cause odor and aesthetic impacts in the HEI building and nearby area.
- Not-enabled virtual learning that requires students and teaching staff to be present on campus during deseases outbreaks like COVID-19.

5.3 Impacts and mitigation measures

Table 5.1 below summarizes the potential environmental and social risks that were identified during ES impact screening of the Project, and the corresponding mitigation measures. The environmental and social impacts associated with the Project during design, construction and operation phases include air pollution, water pollution, soil pollution, noise, dust, removal of trees, destruction of existing structures, generation and handling of construction and other waste, health and safety concerns, etc. Mitigation measures are required to minimize the environmental and social impacts. When the participating HEIs are identified, the ESMP will be required for each HEI implementing project activities. The screening of environmental and social risks can be done by following the checklists offered in Annex D. The ESMP in **Annex E** also offers a comprehensive checklist for environmental and social impacts and mitigation measures.

Table 5.1. Summary of risks associated with HEI project implemented activities project implemented activities compliance with ESSs and mitigation measures

When and why	What (description of Impact)	What to do about it (mitigation measures)
Design Phase		
Preparation of Call for tenders (bidding documentation) and Contracting	Ignorance of environmental and social requirements, and COVID-19 preventive requirements, including cultural	Preparing TOR with ES provisions (for contractors), COVID-19 safety requirements (WHO guidance on dealing with COVID-19 ¹⁵). Including Part 2 and Part 3 of Environmental and Social Management

¹⁵ The WHO technical Guidances, including Guidance for schools, workplaces and institutions, can be found by following the link: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance

When and why	What (description of Impact)	What to do about it (mitigation measures)
	heritage (e.g. historical buildings) during preparation of bidding documents	Plan - Generic ESMP (Annex E) Adding contract clause on ES risks management as per national and WB ESF ESSs (requirement to comply with OHS provision, waste Management, dust Management, noise and vibration provisions). Including requirements on supplying nontoxic materials.
Inappropriate timing of renovation works	Interruption of teaching process; increase in magnitude of adverse impacts on students/teachers.	Scheduling renovation works during summer vacation as much as possible.
The overall design/technical plan on renovation/rehabilitation, with considerations of cultural heritage status of the HEI building	Ignorance/lack of knowledge of modern energy efficiency techniques, water saving, HVAC, neglect of appropriate fire alarm and fire emergency escape plans Incorporation of outdated materials with hazardous components, building technics, materials, not confirming cultural/historical value.	Ensuring that HEI infrastructure (entrance, class rooms, canteen, bathrooms, drinking water stations, fire alarm system, comprehensive evacuation plan, etc.) design provides unimpeded access to all, including persons with disabilities; Procurement of construction materials without hazardous components. Confirming cultural heritage value of buildings and renovating accordingly with the requirements.
Construction Phase		
Construction phase	Risks related to	Selecting of specialized companies;

When and why	What (description of Impact)	What to do about it (mitigation measures)
pollution, noise, traffic	excavations; digging trenches for laying extension and pipes; brining down internal walls and plastering, exterior walls insulation, etc.	Conducting of prior technical studies; preparing a detailed specification. ESMP to comply with ESSes
Air Pollution	Caused by excavation (cleared soil) and earthworks, extractions of materials, transportation of equipment and trucks.	Air pollution control system (compliance with standards for exhaust emissions of construction equipment (work phase); watering soil before excavation works; removing unused construction materials and waste; vehicle maintenance, etc.
Soil Pollution	Spills of oil from heavy machinery, paint, other chemicals (during renovation works)	Technical compliance of machinery; compliance with operation instructions, wastewater stored properly and disposed at approved sites, etc.
Water Pollution	Release of pollutants (oils, oil products, etc.)	The septic tanks to be placed in the construction camp(s) must be made of impermeable material and will be emptied in accordance with applicable rules. The wastewater will be stored appropriately and transported by a special truck to a centralized wastewater collector or to other approved site, based on the agreement reached with the local authorities during the design phase.
Loss of Flora and Fauna	Risk of cutting or removing vegetation (trees, shrubs) and the reduction or green areas around	Establishment of a green areas, search for alternative solutions (to avoid tree cutting), planting trees to compensate for the possible destruction of green spaces and the shortfall in terms of CO2

When and why	What (description of Impact)	What to do about it (mitigation measures)
	EI buildings for construction purposes	sequestration capacities.
Hazardous Waste (solid and liquid)	Construction waste accumulation; demolition debris, washing of equipment on site, inappropriate waste disposal	Separate waste collection and removal (designated areas); identifying and contracting waste removal companies (specified in contracting waste removal); provision of mobile toilets for both male and female workers. The demolished wooden (with paint) elements of insulation (window frames, roofs, etc.) are properly discarded, stored and transported to an approved location for further utilization and are not used for heating purposes.
Noise and vibration	Movements of vehicles and construction machinery.	Regular maintenance of machinery and equipment using equipment with noise suppressing technologies. Providing workers with personal protective equipment against noise e.g. ear plugs. Placing signs around the site to notify people about the noisy conditions. Regular maintenance of equipment to ensure they remain efficient and effective. Complying with the noise/vibration regulation of Ukraine and WB standards
Occupational health and safety issues	Health hazards (injuries and accidents), COVID- 19 spreading.	OHS provisions of ESMP, ESIRT Procedure. Ensuring all potential hazards are labeled. Educating workers on risks from equipment, providing adequate personal protective equipment and enforcing its usage. Providing safe storage for equipment and hazardous materials.

When and why	What (description of Impact)	What to do about it (mitigation measures)
Fire risk	Construction areas prone to spontaneous fire combustion	Providing firefighting equipment in easily accessible areas as well as ensuring site personnel are well trained to use them and maintaining them regularly. Creating safe and adequate fire and emergency assembly points and making sure they are well labeled. Providing training.
Operation Phase		
Toxins	Sourcing poor quality (uncertified) construction materials	Adding specific requirements (to use non-toxic materials) during tendering.
Epidemics	Due to improper design of waste management, HVAC; flu and other viral infections	During design stage, making sure that sewer pipes are separated from potable water pipes; HEI residents are familiar with hygiene procedures; Developing Plan to manage viral infections epidemics.
Safety risks	Harm, injury, death, or illness of a student/teacher in chemistry, physics, biology laboratories and workshop of HEIs	Preparing safety guidance/instruction (behavior, chemicals, equipment to be used, etc.). Labeling all chemicals, equipment that are in use and could expose users to health and safety risks. Training student/teacher to follow the safety guidance and prevent potential exposure. Equipping labs and workshops with protective gears and materials.

6 PROJECT REVIEW, COORDINATION & IMPLEMENTATION ARRANGEMENTS

6.1 ESMF Process Flow at the Project Level

In terms of ESMF implementation, the MoES/PIU will: (i) support the HEIs with information and capacity building (including ESSs requirements and other environmental criteria); (ii) guide environmental and social screening and evaluation of HEI eligibility from the ESF point of view; (iii) insure development and proper implementation of ESMP and ESS requirements for each eligible HEI renovation activity; (iv) address complaints and feedback from project stakeholders and public, including GRM, regarding environmental/social impacts of HEI project activities; (v) supervise environmental protection and mitigation measures stipulated in ESMPs for HEI project activities; (vi) provide monitoring of environmental and social impacts as part of overall monitoring of the HEI project activities; and (vii) report on environmental and social impacts and accidents originating during implementation of HEI project activities.

To implement the ESMF requirements the project team will follow the below steps:

STEP 1

Identification of HEI project implemented actitivitiess

STEP 2

Environmental and Social Screening

STEP 3

 Development of Safeguard Instruments, their review, public disclosure and consultation, and approval

STEP 4

• Implementation, Supervision, Monitoring and Evaluation

6.2 Non-Eligible Activities

The MoES/PIU via criteria established in the course of the Project implementation will provide overall strategic guidance for the Project on selection criteria for HEI project activities. The physical condition of HEIs buildings will be important for being selected to participate in the Project for full or partial renovation/rehabilitation. The selected HEIs will go through environmental and social screening process using the requirements of the national legislation and WB ESF (ESSs) in accordance with this ESMF. The determination of the environmental

and social risks of the HEI project activities will be determined by the results of the environmental and social screening.

Given that the overall project risk is Moderate, the selection for HEIs project activities should consult the list of non-eligible activities that will be not permitted by the WB with a potential Substantial/High risk and the IFC Exclusion List (2007)¹⁶. The Project will not support construction or rehabilitation activities that require land acquisition and/or resettlement; will cause negative impact on income/livelihood resources; involve any kind of forceful evictions of people; negatively impacts assets of individual(s) or household(s); do not meet the required technical and quality specifications; or do not provide equal pay for equal work for woman and men.

For every HEI project activity where risks to disadvantaged or vulnerable people have been identified during screening, social assessment should be performed to assure that the design of HEI project activities effectively mitigates potential negative impacts.

One of the PIU responsibilities will be to prepare and update periodically (quarterly and annually) a Project Activity Report (template is provided in Annex A). The Project Activity Report should be submitted to the Bank's Environmental and Social specialists for review every quarter (every three months) and supplemented by the Incident Register (Annex B).

6.2.1 HEI project activities' Screening Procedures

When it is confirmed that HEI project activities are all eligible, the MoES/PIU/HEIs (implementing entities) environmental and social staff will carry out an assessment of the likely environmental impact and the potential for involuntary resettlement, based on the requirements of national legislation and WB ESSs, completing the screening forms presented in Annex D. HEI project activities will be also checked against WB criteria for High and Substantial Risk rated Projects. This will help to identify the type and scale of potential environmental impacts and the risk category (low, moderate, substantial, high) of HEIs project activities.

Generally, the significance of impacts and risks leads to the resulting ES categorization which will depend on the *type* and *scale* of the HEI project activities, their *location*, *sensitivity* of environmental issues, and the *nature* and *magnitude* of potential risks and impacts.

"High Risk" project type and scale usually entail the following impacts: (a) significantly impact on human populations, including settlements and local communities (b) alteration of environmentally important areas, including wetlands, native forests, grasslands and other "critical" natural habitats and ecosystem services; (c) direct pollutant discharges that are large enough to cause degradation of air, water or soil, endangered species and "critical"

¹⁶https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/company-resources/ifcexclusionlist

habitats; (d) large scale physical disturbances of the site and/or surroundings; (e) extraction, consumption or conversion of substantial amounts of forest and other important natural habitats, including above and below ground and water-based ecosystems; (f) measurable modification of hydrologic cycle; (g) hazardous materials in more than incidental quantities; and (h) involuntary displacement of people and other significant social disturbances.

HEI project activities that are considered as "High Risk" and "Substantial Risk" will not be eligible for financing under this Project.

It is **not expected** that HEI project activities will take place in the vulnerable/sensitive locations that can result in a rating of "**High Risk**" or "**Substantial Risk**". However, the location of HEI project activities should be screened to ensure that it is not: (a) in or near sensitive and valuable ecosystems and "critical" habitats (b) in or near areas with significant archaeological and/or historical value where civil works may impede/damage such value; (c) in densely populated areas, where resettlement may be required or potential pollution impact and other disturbances may significantly affect communities; (d) in regions subject to heavy development activities or where there are conflicts regarding the allocation of natural resources; along watercourses, in aquifer recharge areas or in reservoir catchments used for potable water supply; and on lands or waters containing valuable resources (such as fisheries, minerals, medicinal plants, prime agricultural soils). HEI project activities located in the immediate proximity of environmentally or socially sensitive areas that can adversely impact such areas will be rated as "High Risk" or "Substantial Risk". These will not be eligible for Project support.

Sensitive issues may include (but are not limited to): conversion of wetlands, potential adverse effects on endangered species and habitats as well as protected areas or sites, involuntary resettlement, impacts on international waterways and other transboundary issues, and toxic waste disposal. There are several ways in which magnitude can be measured, such as the absolute amount of a resource or ecosystem affected, the amount affected relative to the existing stock of the resource or ecosystem, or the intensity of the impact and its timing and duration.

Other planned or ongoing actions may need to be considered. Considering the scale of the proposed HEI project activities, it is expected that the magnitude of their environmental and social impacts will be Low to Moderate. Therefore, only HEI project implemented activities that are rated as "Moderate Risk" or lower will be considered for Project support.

6.2.2 Development of Safeguard Instruments.

ESMP will be required to identify, evaluate and to prevent potential environmental and social risks and impacts. The mitigation measures for the identified impacts and risks will be incorporated into the project design of the ESMP (see Annex E). The site-specific ESMPs (compulsory) and ESIA/OVD (if required for some "Moderate Risk" HEI project activities under national legislation) will be prepared by the HEI with support of MoES/PIU.

When working on the ESMP for HEI project activities, the MoES and HEIs, will follow the steps outlined below:

<u>Step 1:</u> Keeping in mind preparation, construction and operation phases, PIU performs screening of environmental and social risks and impacts. The checklists for environmental and social screening of HEI project activities (provided in Annex D) should be used for initial screening. Checklists for chosen HEI activities should be provided to Bank's ES Specialists for review and no objection. A final list of HEI project activities is to be confirmed through the Project Activity Report submitted to the Bank's ES Specialists.

<u>Step 2:</u> With support from MoES/PIU, HEIs develop ESMPs for individual HEI project activities confirmed and listed on the Project Activity Report. The ESMP should be developed with the appropriate level of initial stakeholders' engagement (a template is provided in Annex E). ESMPs should, inter alia, list HEI the environmental and social impacts of HEI activities, appropriate mitigation measures, breakdown of responsibilities for all implementing parties, and stakeholders' engagement and reporting requirements (between contractors, HEIs and MoES/PIU).

<u>Step 3:</u> With support from MoES/PIU, HEIs disclose the information on ESMP (for HEI project activities), project-level GRM and hold virtual Public stakeholder consultations. The template proposed in Annex C should be used to summarize stakeholder consultations.

<u>Step 4:</u> With support from MoES/PIU, HEIs integrate environmental and social provisions stipulated in the ESMPs, as well as COVID-19 prevention requirements into tender documents for civil works. MoES/PIU provides oversight.

<u>Step 5:</u> The contractor/HEI implement mitigation measures (as per breakdown of responsibilities described in the ESMP). MoES/PIU provides supervision and support.

<u>Step 6:</u> MoES/PIU and HEIs monitor HEI project activities' Environmental and Social performance and compliance with ESMP provisions.

<u>Step 7:</u> Reporting: MoES/PIU reports on ES performance quarterly using Project Activity Report template (Annex A) supplemented by the Incident Register (Annex B).

6.2.3 ESMP Template

The ESMP is a site-specific plan that will be required for each HEI renovation activity. The ESMP assesses the site-specific impacts and identifies the appropriate mitigation measures that will be required to minimize the identified impacts. The ESMP includes monitoring and reporting procedures and the specific GRM for HEI project activities.

The ESMP template provided in Annex E should be populated in its three parts:

Part 1 includes a descriptive part that characterizes the project, specifies institutional and regulatory aspects, describes technical project content, outlines any potential need for capacity building and briefly introduces the virtual public consultation process, appropriate in current COVID-19 crisis. This section should indicatively be up to two pages long. Attachments for additional information may be supplemented as needed.

Part 2 represents the checklist to identify impacts (yes/no) and suggests environmental and social mitigation actions to follow up by properly implementing the measures listed and required in the table. Part 2 checklists have been structured in a way that displays concrete and enforceable environmental and social measures, easily understandable to non-specialists (such as Contractor's site managers) and easy to check and enforce.

Part 3 contains a simple monitoring plan to enable the Contractor as well as MoES/PIU and the WB' specialists to monitor the implementation of environmental management and detect deviations and shortcomings in a timely manner. Part 3 has also been designed in a deliberately simple way to enable monitoring of key parameters by non-specialist staff.

The ESMP Part 2 and Part 3 should be included into the bidding documents for contractors, priced during the bidding process and their diligent implementation supervised during works execution.

6.2.4 Monitoring of Project Environmental and Social Compliance

MOES/PIU will provide overall strategic guidance and support to HEIs in the development, implementation and monitoring of their project activities. The PIU will coordinate the environmental and social monitoring of the measures stipulated in the ESMF for HEI project activities' ESMPs. Through environmental and social monitoring, the project team will verify if the recommended actions are effective in mitigating potential negative impacts of Project activities.

The supervision of the execution of environmental and social measures will be ensured by the PIU Environmental and Social Specialist/Consultant and works inspectors (engineers/environmental engineers).

The PIU's monitoring responsibilities will include:

 Maintenance of an adequate environmental and social management system, ensuring compliance with the national legal framework, including current COVID-19 law and orders, and WB ESF and ESSes, and worker health and labor safety;

- Consolidation of HEI project activities (their current status and ESMPs) and submission
 of the Project Activity Report (Annex A) to the Bank every three months.
- Provision of technical supervision of the Project/HEI activities related construction and rehabilitation/modernization;
- Ensuring that activities under the Project and its components comply with the approved design and applicable laws, environmental and social requirements set out on tender documentation;
- Ensuring that activities and services for Program's employees comply with the requirements of health and safety norms and rules;
- Ensuring the rational use of resources and responsible waste management;
- Engagement with stakeholders, review complaints and grievances and address issues raised in relation to the Project activities;
- Control and supervise activities of subcontractors, ensuring compliance with Project (HEI project activities) environmental and social requirements;
- Monitor HEI project activities' impacts on the environment and social conditions and their compliance with the WB ESF (ESMP Monitoring Plans). Assess the level of ICT penetration and contractors' ability to apply remote monitoring tools that can be used effectively for civil works monitoring and stakeholder consultation and communication
- Report to the Bank (through the PIU's regular reporting) on ES performance of the Program.

6.2.5 Reporting on Environmental and Social Incidents

In order to fully comply with the WB ESF, all HEI project implemented activities, implemented under the Project, and Associated Facilities will be listed on the Project Activity Report¹⁷, template provided in Annex A. The up-to-date Project Activity Plan will be submitted to the World Bank ES Specialists every quarter.

Despite significant efforts to manage environmental and social risks associated with Project activities, incidents may always occur. An incident in this context is an accident or negative event resulting from failure on the part of the implementing party to comply with national legislation and Bank ESF requirements, or because of unexpected or unforeseen events during project implementation. Examples of incidents include: fatalities, serious accidents and injuries; social impacts from labor influx; sexual exploitation and abuse (SEA) or other forms of gender-based violence (GBV); major environmental contamination; loss of biodiversity or critical habitat; loss of physical cultural resources; and loss of access to community resources. The contraction of COVID-19 by contractors' workers or students/teaching staff on HEI campuses with ongoing civil works should be also reported on ESIRT and listed on the Project Activity Report (Annex A). The direct and secondary contacts should be traced and informed, and selfisolate for 14

¹⁷Annex A on this ESMF proposes a template to record the activities of the project and track their progress.

days.

This Environment and Social Incidents Response Toolkit (ESIRT) is intended to assist implementing parties to address incidents that occur during implementation of the Project and to advise implementing parties on their response to such incidents. ESIRT does not replace regular project supervision and reporting but has been prepared to help implementing parties respond when they learn of incidents during supervision, or at any other time.

ESIRT is comprised of the following six steps under the incident management and reporting process:

- A. Step 1 Initial Communication
- B. Step 2 Classification
- C. Step 3 Investigation
- D. Step 4 Response
- E. Step 5 Follow Up

The MoES roles and responsibilities in incident response are outlined in each of the steps. This ESIRT also contains a Section on Responses and Remedial Actions, where examples of possible responses by implementing parties to incidents are provided.

ESIRT detailed breakdown of steps is provided in Annex F.

7 CAPACITY BUILDING, TRAINING AND TECHNICAL ASSISTANCE

7.1 Institutional Capacity for ESMF Implementation

The overall responsibility for the implementation of the ESMF lies within the MoES with guidance and support from the World Bank, particularly during the preparation of HEI project activities. The capacity of MoES/PIU and HEIs in managing environmental and social issues is low. The MoES does not have experience working with the new World Bank Environmental and Social Standards (ESSs) and does not have the required environmental and social development personnel to oversee the preparation and implementation of the required ESF instruments, as all ES responsibilities for development projects are delegated by national legislation to other governmental agencies. The local councils have environmental inspectors and social protection officers, but these do not have the required mandate and capacity either.

The Ministry will employ an Environmental and Social specialist/consultant at the PIU to ensure Project and HEI project implemented activities compliance with the national legal framework and the World Bank ESF Standards that are applicable to the Project.

Staff and relevant stakeholders who will be involved in the implementation of the project should be trained to enhance their skills on environmental and social issues (including the PIU team to enable them to monitor implementation of the HEI project implemented activities). The MoES/PIU will be responsible for capacity building within the implementing parties (HEIs and contractors).

The MoES recognizes the crucial importance of stakeholder engagement and communication for achieving the ambitious development objective and outcomes that the project has set to achieve. To this end, the Ministry team defines several relevant stakeholders: students and parents, community at large, government officials, multiple education agencies subordinated to the Ministry, higher education institutions and rectors/deans) that can be influential or have a stake in the Project/HEI project implemented activities. The Project Components have subcomponents and resources allocated specifically for building tools and systems to facilitate stakeholder consultation and discussions for the Project/HEI project implemented activities and have meaningful consultations on all project activities that are likely to have profound consequences for the project-affected parties (PAP). The estimated budget for stakeholder engagement is yet to be determined (Section 7.2).

The monitoring during the implementation of the HEI project activities will be required in order to measure the effectiveness of the mitigation measures. The monitoring and reporting procedures will ensure early detection of impacts/risks that necessitate specific mitigation measures. The MoES/PIU environmental and social specialist/consultant is expected to report on project progress towards meeting the Bank ESSes. The Project Activity Report in Annex A is one of the tools that can be used for monitoring and reporting on HEI project activities. The monitoring plans that will be developed as a part of ESMP for each HEI could also serve as a reference document (Part 3 Monitoring Plan in Annex E Environmental and Social Management Plan) for HEI project implemented activities monitoring. Component 1 and Component 4 of the Project put emphasis on the MoES capacity building to manage and monitor the tertiary education system and the Project implementation. The capacity building of MoES/PIU to monitor all Project activities in order to ensure compliance with the WB ESF and ESSes will be an integral part of the TA and capacity building program under the Project.

7.2 ESMF Implementation and Capacity Building Budget

ESMF implementation budget will be developed at the earlier stages of project implementation and will refer to all costs implied in the proposed recommendations of the ESMF, including ESMP development for each HEI project activities, stakeholder engagement, etc.

The ESMF implementation budget will include a plan for capacity building exercises and respective budgets. The ESMF implementation budget will be developed within 3 (three) months of Project effectiveness.

8 PUBLIC CONSULTATION AND DISCLOSURE

8.1 ESMF Disclosure and Consultation

The draft Environmental and Social Management Framework for Ukraine Improving Higher Education for Results Project will be disclosed on the Ministry of Education and Science website for consultation purposes with stakeholders and public in general. The draft ESMF will be presented to key stakeholders, development partners, civil society organizations and the private sector. Comments from the workshop will be incorporated into the final version of the ESMF (with a complete list of participants).

A meeting with the general public should be held remotely/virtually due to COVID-19 pandemic crisis in case a request to hold one comes from the public after disclosure (see Chapter 8.3 of this ESMF and Chapter 6 of the SEP). Given the evolving situation around COVID-19 in Ukraine and around the world, face-to-face consultations, workshops for stakeholder engagement are not advisable. Alternative means of consultations should be explored by implementing entity, following the latest public health guidelines of Ukraine, WHO and World Bank stakeholder's engagement guidelines closely in order to adjust the format of consultations taking to account some restrictions. According to the results of public discussions, minutes will be drawn up with comments and suggestions from the interested public. The ESMF will be finalized considering the comments and suggestions provided within 30 calendar days of disclosure and its final version will be uploaded on the Ministry of Education and Science and the World Bank websites.

The Chapter 5.4 "Proposed Information Disclosure Approach" of the SEP defines the information disclosure provisions under the Project in details.

8.2 Public Consultations on ESMP

Consultations on HEI ESMPs will ensure stakeholder involvement in the design of HEI project activities. More specifically, HEIs with support from MoES/PIU will: (i) involve the various stakeholders in highlighting environmental and social issues of the project; (ii) explain the HEI activities to local communities; (iii) encourage the participation of local people (opinions, fears, concerns, suggestions and expectations); (iv) collect socio-economic data and information from local communities related to HEI project activities; (v) lay the foundations for implementation of the actions planned under the HEI project activities.

To ensure above objectives, HEI will publish their respective ESMP on their website and distributed via e-mail to regional (oblast) and district (rayon), united territory communities (hromadas), local educational departments and other relevant interested parties (student administration bodies, NGOs etc.). No earlier than 10 business days and not later than 20 business days after disclosure/dissemination of ESMP, HEIs will hold virtual public hearings (announced on the website and through other appropriate channels) to discuss HEI project implemented activities, its impacts and mitigation measures described in the ESMP.

Annex C provides a template that MoES/HEIs will use during Project implementation for stakeholder consultation and registration of participants, and to capture the issues discussed during virtual meetings/hearings.

The revised final version of the ESMP will be made public on MoES and HEIs websites and sent to the Bank for information.

8.3 Grievance Redress Mechanism

Addressing grievances raised by individual affected by World Bank-funded projects is an important component of managing project risks. A GRM serves as an effective tool for early identification, assessment and resolution of grievances and therefore for strengthening accountability to beneficiaries. The GRM serves as an important feedback mechanism that can improve project impact and mitigate the undesirable ones. The Project-level GRM mechanism will be available to project stakeholders and other affected parties to submit questions, comments, suggestions and/or complaints and provide any form of feedback on all project-funded activities. Each ESMP will included establishment of HEI project implemented activities-level GRM, as well as workers' GRM and will carry the same functionality as Project-level GRM but of local scale (GRM requirement are described in Chapter 6 of SEP).

Grievance Investigation and Resolution Process is discussed on Chapter 6 of the SEP and covers:

- Channel to Make Complaints
- Receipt and Referral
- Investigation
- Response to the Complainant
- Right to Appeal

Please refer to the GRM procedure described in detail in SEP.

9 SUPPORTING DOCUMENTS

This ESMF is supported by and works in conjunction with the Project-level documents discussed below:

The LMP is to be developed by the MoES and meet national requirements as well as the objectives of the World Bank's ESF, specifically ESS2 on Labor and Working Conditions and ESS4 on Community Health and Safety. The LMP is covering the workers' rights and freedoms, as well as requirements for working conditions for conducting civil works, including (i) procedures relevant to each category of workers involved; (ii) terms and conditions of labor; (iii) overview of key potential labor risks (if any); (iv) overview of Ukraine's labor legislation; and iv) grievance redress mechanism or mechanisms available for all direct workers and contracted workers (and if relevant, to their organizations). The LMP will be updated during implementation when more details about the HEI project activities is known, particularly the type and scale of civil works. The HEI project activities will be expected to develop LMP and/or require them from the contractors whose workers will be engage in the implementation of HEI activities (rehabilitation/renovation of HEI buildings).

It is not envisaged that land acquisition and resettlement will be required in the course of Project implementation. However, since the HEI project activities are not defined yet, the RPF is required to meet the World Bank's ESF requirements. The MoES is expected to develop the RFP with defined procedures for acquiring land (voluntary and involuntary after all technical alternatives have been exhausted), dealing with any residual impacts from land acquisition (i.e. identifying, establishing the valuation of, and compensating people that suffer economic losses or loss of private property, monitoring and verification that policies and procedures are followed, and GRM (GRM can be adopted from the SEP).

SEP developed by the MoES is providing a framework for appropriate stakeholder consultation (to be held virtually while during COVID-19 crisis) and information disclosure. SEP's goal is to facilitate decision-making on HEI renovation by involving project-affected people and other stakeholders in a timely manner so that these groups are provided enough opportunity to express their concerns and support. The SEP document includes the GRM (Chapter 6). The grievance investigation and resolution process is described in detail, including awareness building on GRM, roles and responsibilities for GRM and monitoring and reporting on GRM. Grievance/Inquiry Record is also added in the Annex A on the SEP.

All the documents listed above are disclosed and consulted upon jointly with this ESMF.

Annex A. Project Activity Report

The current status of works column should contain detailed month/year timeline with the corresponding month marked for different stages of the HEI project activities (development, civil works)

Name of the HEI project implemented activities / brief description of activity	Status of national environme ntal permitting procedure – EIA (OVD): Not Required/ In progress/ Completed	Status of ESMP/aRAP/Sta keholder Engagement Plan/public consultations	Grievances received during reporting period, subject of grievances, resolution status (pending / in process / resolved)	Current status of works (timeline for design work and start/completion, outstanding issues, GRM data)	Site visits during reporting period (dates, findings, corrective action requests issued, follow-up actions)	Next site visit planned (dates, specific issues to be checked)
HEI NAME/HEI PRO	DJECT					
HEI NAME/HEI PRO ACTIVITIES 2	DJECT					

Annex B. Incident register

Date	Subject of incident (what happened)	Causalities (None, Hospitalization, Fatality)	Informed parties # of report filed with whom (depending on the accident: either authorities, etc.), Case number and date	provided by	Pending issues

Annex C: Summary of Stakeholders Consultations (Issues, Concerns, Participants)

Date	Participants	Venue (could be on-line)	Main topics of discussion
(from – to)			

Due to worldwide COVID-19 pandemic any follow up public consultation meetings with stakeholders to present and discuss the ESMF and RPF, LMP, ESCP and other project related documents will be conducted remotely / virtually. Given the evolving situation around COVID-19 in Ukraine and around the world, face-to-face consultations, workshops for stakeholder engagement are not advisable. Alternative means of consultations should be explored by implementing entity, following the latest public health guidelines of Ukraine, WHO and World Bank stakeholder's engagement guidelines closely in order to adjust the format of consultations taking to account some restrictions

Annex D. Checklists for environmental and social screening (selection) of HEI project implemented activities (activities of the Project)

Checklist for filling out and keeping in documentation.

CRITERIA	YES	NO	Comment by the PIU ES Specialist
Proposed HEI project implemented activities			
Will the planned activities be located within or close to protection natural areas/ facilities or the areas/ facilities under consideration of the Ministry of Energy and Environmental Protection for providing them with the official status of a protected facility?			
Can the work carried out within HEI project activities potentially have impact on the areas of importance for local or national cultural heritage?			
Have the population of the district (region) or public associations expressed any concern or explicit opposition regarding environmental aspects of the planned economic activities?			
Is damage to plantation cover planned when carrying out reconstruction and modernization of the facility?			
Is disturbance to soil cover, lands and landscapes envisaged when carrying out reconstruction and modernization of the facility?			
Will the planned activities contribute to increase of noise level, ion radiation and vibration, which will require arranging for the monitoring of noise, vibration and radiation?			
Will the noise increase (level and/or frequency) have impact on students and teachers of the institution or locations close to the site (natural habitat, hospitals and health facilities, social centers)?			

Will measures be taken to decrease pollution of atmospheric air when carrying out construction works?		
Is it planned to organize and timely maintain dry (bio) closets at the construction site?		
Is it planned to use hazardous materials and/ or substances when carrying out reconstruction and modernization works, which:		
 require special permits and licenses require licenses or trained staff are prohibited in the European Union have requirements for management in compliance with the legislation of Ukraine may lead to pollution of soil and water in case of lack of adequate monitoring and control measures 		
Will a system of construction management and solid municipal waste management be used/created when carrying out construction works?		
Will a plan of emergency response be developed/used?		
Will large scope of construction work such as roof repair, facade replacement, partitioning involving the bearing structures, etc. be performed?		
Will works be performed in parallel with educational activities in the immediate vicinity of such activities?		

Screening checklist to assess social impacts and risks of HEI project implemented activities

Probable Social Impacts/Risks	Yes	No	Not Known	Details
Will the intervention include new physical construction work?				
Does the intervention include upgrading or rehabilitation of existing physical facilities?				
3. Is the intervention likely to cause any permanent damage to or loss of housing, other assets, resource use?				
4. Is the site chosen for this work free from encumbrances and is in possession of the Public/government/community land?				
5. Is this sub project intervention requiring private land acquisitions?				
 6. If the site is privately owned, can this land be purchased through negotiated settlement? (Willing Buyer – Willing Seller) 7. If the land parcel must be acquired, is the actual 				
plot size and ownership status known?				
8. Are these land owners willing to voluntarily donate the required land for this HEI project implemented activities?				
Whether the affected land owners likely to lose more than 10% of their land/structure area because of donation?				
10. Is land for material mobilization or transport for the civil work available within the existing plot/ Right of Way?				
11. Are there any non-titled people who are living/doing business on the proposed site/project locations that use for civil work?				
12. Is any temporary impact likely?				
13. Is there any possibility to move out, close of business/commercial/livelihood activities of persons during constructions?				
14. Is there any physical displacement of persons due to constructions?				
15. Does this project involve resettlement of any persons? If yes, give details.				
16. Will there be loss of /damage to agricultural lands, standing crops, trees?				
17. Will there be loss of incomes and livelihoods?				
18. Will people permanently or temporarily lose access to facilities, services, or natural resources?				
19. Will project cause loss of employments/jobs				
 Will project generate excessive labor influx as a result of new constructions 				
21. Does construction activities require additional/skilled labor from outside the locality				
22. Will HEI project implemented				

activities/construction activities cause destruction/disturbance to host community living	
 Will construction of new buildings, drainage lines create any degradation for the adjacent houses, wells, lands, 	
24. Will this intervention create any inter-group or intragroup tensions/conflicts	
25. Are any disadvantaged & vulnerable groups (including indigenous people, socially marginalized communities such as Roma, elderly, homeless, ethnic minorities living in proposed locations or affected by the intervention?	

Results of Environmental and Social Screening

Mark the one that applies	Prepared by:
Risk Category "High". Adverse impact,	Name and Signature:
exclude from financing	Designation:
Risk Category "Substantial". Limited or temporary but significant impact, exclude from financing	Date:
	Approved by:
Risk Category "Moderate" Limited or temporary impact	Name and Signature
Risk Category "Low" Minimum impact	Designation:
L. See J.	Date:

Annex E. Environmental and Social Management Plan

The checklist-type format provided below has been developed by the World Bank safeguards team to provide "example good practices" and designated to be user friendly. The proposed below ESMP checklist format can be used for low-risk HEI project implemented activities, such as HEI rehabilitation activities.

Part 1. General information about the HEI project implemented activities that includes a descriptive part characterizing the project and specifying the institutional and legislative aspects, the technical project content, the potential need for capacity building program and description of the public consultation process (remote/virtual during COVID-19 crisis). This section could be up to two pages long. Attachments for additional information can be supplemented when needed.

Part 2. Checklist to determine the assessment scope and application of the WB ESMF and ESSs includes an environmental and social screening checklist, where activities and potential environmental issues can be checked in a simple Yes/No format. If any given activity/issue is triggered by checking "yes", a reference is made to the appropriate section in the following table, which contains clearly formulated management and mitigation measures. If there is a borrow pit to be used for construction materials, its size and location should be clearly indicated. Impact mitigation actions on ESMP for each HEI project implemented activities should contain detailed description of the attributes that will be monitored. For example, for "Noise" attribute the sensitive receptors should be indicated and limits of noise that will be monitored.

Part 3. Content of the Monitoring Plan represents the monitoring plan for activities during project construction and implementation. It retains the same format required for ESMPs proposed under normal Bank requirements for Category B HEI project implemented activities. It is the intent of this checklist that Part 2, Part and Part 3 be included into the bidding documents for contractors, priced during the bidding process and diligent implementation supervised during works execution.

Part 1: General Information about the HEI project implemented activities.

INSTITUTIONAL AND ADM	IINISTRATIVE INFOF	RMATION	
Country			
Title of the Project			
Area and scope of application of the HEI project implemented activities			
Institutional mechanisms (WB)	World Bank	Project management	Higher Education Institution (Beneficiary of Investments)

			I	
Implementation	Supervision of	Local supervision	Supervision	Contractor
arrangement	execution of ESSs	by the district	of	
(name and contact		educational	construction	
information)		department	works	
iniomation				
DESCRIPTION OF THE FA	CILITY (EI)			
Name of the facility				
Describe location			Enclosure 1:	Map of facility
			[] Yes [] No	
			[] 163[]140	
Who is the owner of the				
land plot?				
Description of				
geographical, physical,				
biological, geological,				
hydrographical and socio-				
economic background				
Indicative need of				
construction for raw				
produce and materials				
LEGISLATION	L			
Determine national and				
regional legislation &				
permits applicable to the				
project activities				
PUBLIC CONSULTATION				
Indicate when/ where				
did/will public discussions				
take place				

Part 2 Example of the Checklist to determine the impacts and impact mitigation actions (measures)

ENVIRONMENTA	L/SOCIAL SCREENING		
	Activity/ issue	Status	Applied measures
	Informing and creating safe working conditions	[] Yes [] No	If Yes, see section 0 below
	A. El building rehabilitation/renovation	[] Yes [] No	If Yes, see section A below
Do the activities	B. Impact on surface and underground waters	[]Yes []No	If Yes, see section B below
at the facility	C. Buildings of historical and cultural heritage and artifacts	[] Yes [] No	If Yes, see section C below
include the	D. Hazardous or toxic materials and waste	[]Yes []No	If Yes, see section E below
following aspects?	E. Preservation of forests, wetlands and(or) protected natural areas	[]Yes []No	If Yes, see section F below
	F. Unexploded ordnance risk	[]Yes []No	If Yes, see section G below
	G. Traffic, public transport and pedestrians' safety	[] Yes [] No	If Yes, see section H below
	H. Social Risk Management	[]Yes []No	If Yes, see section I below

Impact Mitigation Actions.

Actions	ATTRIBUTE	CHECKLIST OF ACTIVITIES FOR IMPACT MITIGATION
0. General conditions	Informing and creating safe working conditions	Local departments of architecture and construction and territorial authorities of the Ministry of Energy and Environmental Protection are informed about the forthcoming works.
		The general public is informed through mass media and (or) information in open access places (including the facility itself).
		All permits for construction and installation works required by the legislation are received.
		The Contractor officially agreed that all works would be carried out with observation of construction safety measures (mandatory instructions on occupational safety) and the rules of construction and installation works for maximum mitigation of the impact on public health and environment. The same applies for operational period for all new equipment installed (laboratories, wind turbines, solar panels etc.)
		Notice boards at the construction sites should determine the schedule of construction and installation works with indicated breaks for lunch, etc.
		PPE (Personal Protective Equipment) of all workers will meet the requirements of international standards (hard hats are always used, respirators and protective glasses, protection harnesses and special footwear are used where necessary). Same applies for operational period for all new equipment installed (laboratories, wind turbines, solar panels etc.)
		The respective notice boards should inform workers about key rules and requirements to be observed. Same applies for operational period for all new equipment installed (laboratories, wind turbines, solar panels etc.)

Actions	ATTRIBUTE	CHECKLIST OF ACTIVITIES FOR IMPACT MITIGATION
A. HEI building rehabilitation/renovatio	Atmospheric air quality	During excavation works the methods of dust control are applied, e.g. water spraying or land wetting.
n and (or) construction activities		Use debris-chuts during interior demolition above the first floor.
activities		Construction waste (demolition debris), removed ground and non-metallic construction materials are stored at specially designed sites with timely wetting and dust control.
		During pneumatic drilling or removal of the surface layer of the pavement and foundation, dust should be suppressed by constant irrigation and / or protective screens should be installed at the facility.
		The surrounding pavements (sidewalks) and roads are kept clean from dust and construction waste to reduce dust.
		All machinery should have timely technical inspections at maintenance stations regarding CO emissions and smoke, idle construction equipment with engines turned on at the sites is not allowed.
	Noise	Construction works should be carried out only at the time indicated in a permit/bidding documents/contract.
		Notify local communities on the works schedule if it deviates from standard working hours.
		For the period of works, the engine covers of generators, air compressors and other similar devices will be closed, the equipment will be at the maximum distance from the places of residence of the population.
	Water quality	Anti-erosion and anti-landslide measures should be taken at the facility, the laying of the construction site, construction of storm sewers or reclamation to prevent the displacement of the settled soil outside the construction site.

Actions	ATTRIBUTE	CHECKLIST OF ACTIVITIES FOR IMPACT MITIGATION	
	Waste management	For all major types of waste expected from the works on removal of fertile soil, dismantling and construction, collection sites and facilities for the use, neutralization and disposal of waste should be identified.	
		Construction waste will be separated from municipal waste by collecting it in separate containers.	
		Construction waste will be collected and transferred to facilities for use, neutralization in accordance with the Register of objects for use, neutralization, storage and disposal of waste in Ukraine.	
		Waste management documentation will be kept as evidence of proper waste management.	
	Accessibility and inclusivity	Designs for rehabilitation of the premises of educational facilities will include retrofitting for universal access – ramps, lifts etc. – if missing in the existing layout.	
	Resource efficiency (use of materials).	To the extent possible, designs for rehabilitation of the existing premises of education facilities will include feasible elements of insulation (window frames, roofs, etc.) aimed at heating energy savings and introduction of energy-efficient lighting.	
B. Impact on surface and underground waters	Water quality	Uncontrolled groundwater withdrawal or uncontrolled dumping of cement mortars or any other polluted water into soil or nearby surface waters will not be carried out at the facility. The contractor will receive necessary permits for water use and drainage.	
		Sewerage systems should be organized at the facility and measures should be taken to prevent pollution, blocking or other possible negative impacts on natural ecosystems by construction works at the facility.	
		Measures should be taken to prevent spills of fuels and lubricants and other toxic or hazardous substances.	

Actions	ATTRIBUTE	CHECKLIST OF ACTIVITIES FOR IMPACT MITIGATION
		Cleaning of construction vehicles and machinery should be carried out only in specially designated areas to prevent getting polluted wastewater into surface waters.
C. Buildings of historical and cultural heritage and artifacts	Cultural heritage	If construction works are carried out in a building of historical and cultural value, it is necessary to ensure notification of the Ministry of Culture and Information Policy and get all necessary permits from the local authorities, and to plan and carry out all construction works in accordance with the requirements of the legislation of Ukraine.
		It is necessary to ensure that all rules and requirements are met for the artifacts or other possible "accidental finds" found during excavation or construction works to be described and entered in the register, for the responsible persons to be informed, and all works to be suspended or plan of their carrying out to be modified, depending on the finds.
D. Hazardous or toxic materials and waste	Work with asbestos	If works with asbestos are carried out at the facility, it should be clearly marked/ labeled as a hazardous material.
		All asbestos-containing waste (roof slate, etc.) should be transferred to waste disposal facilities.
	Management of hazardous materials and waste	Temporary storage of all hazardous or toxic substances and waste of Hazard Classes 1 and 2 at the facility will be organized in separate premises in accordance with the legislation of Ukraine (mercury-containing waste, lead batteries, intact with unused electrolyte batteries, etc.) without unauthorized access of people and with the respective marking/labeling.
		The procedure for hazardous waste management should be specified in the waste management instructions.
		Waste should be transported in accordance with the legislation of Ukraine on transportation of hazardous waste.
		Paints or solvents with toxic ingredients or lead-based paints will not be used.

Actions	ATTRIBUTE	CHECKLIST OF ACTIVITIES FOR IMPACT MITIGATION
E. Preservation of forests, wetlands and(or)	Protection of ecosystems	All natural ecosystems, wetlands and protected areas in the vicinity of the construction facility will not be damaged or used.
protected natural areas		Examination and inventory of large trees in the vicinity of construction works should be carried out. Large trees should be marked and fenced for protection, their root system should be protected and any damage to the trees should be prevented.
		Protective measures should be provided for adjacent wetlands to avoid erosion and precipitation, including, e.g., the laying of a construction site.
		In adjacent areas, especially in unprotected areas, it is prohibited to create unauthorized quarries, storage sites or unauthorized waste disposal.
		It is prohibited to damage or use natural ecosystems, wetlands and protected areas located in the vicinity of the construction facility.
		Install devices to prevent birds from nesting in the vicinity of wind turbines.
F. Unexploded ordnance risk	Danger to human health and safety	Before the start of any excavation works, the contractor should ensure that the construction site has been preliminarily inspected for unexploded ordnance.
G. Traffic, Public transport and	Direct or indirect dangers posed by construction	In accordance with the requirements of national legislation, the contractor ensures that the construction site will be fenced, and construction works are clearly regulated in the area:
pedestrians' safety	vedestrians' safety works for public transport traffic and pedestrians	Clear warning signs must be displayed for the public and public transport about all potentially hazardous works.
		A traffic control system and staff training have been organized, especially for providing access to the facility and nearby intensive traffic. Safe walkways and passages for pedestrians in places of public transport traffic and construction vehicles are provided.
		Working hours should be adjusted depending on local traffic, e.g., in order to avoid active

Actions	ATTRIBUTE	CHECKLIST OF ACTIVITIES FOR IMPACT MITIGATION
		traffic during rush hours or during movement of livestock.
		If necessary, traffic should be controlled at the facility to ensure safe passage of people.
		Safe and continuing access of the population to all nearby offices, commercial and residential buildings during construction works should be provided.
H. Social Risk Management	Public relationship management	All arrangements related to continuation of HEI learning process have been made (e.g., temporary accommodation for students, transport, etc.).
		Local liaison person within Contractor's team in charge of communication with and receiving requests/complaints from local population/HEI administration is assigned.
		Local communities are consulted to identify and proactively manage potential conflicts between an external workforce and local people.
		Local community awareness is raised about sexually transmitted disease risks associated with the presence of an external workforce and include local communities in awareness activities.
		The information about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, blasting and demolition, is reported as appropriate.
		Limit construction activities at night. When necessary ensure that night work is carefully scheduled, and the community is properly informed, so they can take necessary measures.
		At least five days in advance of any service interruption (including water, electricity, telephone, bus routes), advice community through postings at the work site, at bus stops, and in affected homes/businesses.
		Address concerns rose through Grievance Redress Mechanism established by the Employer within the designated timeline within the scope of Contractor's liability.
		To the extent possible, work camps should not be near local communities.

Actions	ATTRIBUTE	CHECKLIST OF ACTIVITIES FOR IMPACT MITIGATION
		Sitting and operation of worker camps should be undertaken in consultation with neighboring communities.
	Labor management	Where and when feasible unskilled or semi-skilled workers from local communities should be recruited, and worker skills training provided to enhance participation of local people.
		Adequate lavatory facilities (toilets and washing areas) in the work site with adequate supplies of hot and cold running water, soap, and hand drying devices are provided. A temporary septic tank system should be established for any residential labor camp and without causing pollution of nearby watercourses.
		Raise awareness of workers on overall relationship management with local population, establish the code of conduct in line with international practice and strictly enforce them, including the dismissal of workers and financial penalties of adequate scale.

Part 3. Content of the Monitoring Plan (Compulsory)

Stage	Monitoring Parameter Which attribute will be monitored?	Location of monitoring activity Specify the place for monitoring for each selected attribute	Monitoring Procedure How will the measuremen ts be taken?	Monitoring Timeline What is the timeframe/ or it is regular?	Monitoring Organization Specify the responsible people for monitoring of each attribute	Cost of monitoring Specify costs related to monitoring if not included in the project budget
Design						
Construction						
Operation						

Annex F. ESIRT reporting requirements

1. Incident Management and Reporting Process

A. Step 1 – Initial Communication

In case of the accident, COVID-19 case among students/teaching staff/ workers on any of the project sites, the Contractors will inform the PIU and/or the Bank Team; inform appropriate authorities in compliance with local regulations; secure the safety of workers, public, and provide immediate care.

As soon as any member of the Contractor's or PIU team member becomes aware of an alleged or actual incident, the team member will notify the PIU and/or the Bank Team. This initial communication will be sent regardless of the severity of the incident. The most crucial element of this communication is speed. When an incident is reported, the following questions are a guide to the type of information to be gathered quickly:

- What was the incident? What happened? To what or to whom?
- Where and when did the incident occur?
- What is the information source? How did you find out about the incident?
- Are the basic facts of the incident clear and uncontested, or are there conflicting versions?
- What were the conditions or circumstances under which the incident occurred?
- Is the incident still ongoing or is it contained?
- Is loss of life or severe harm involved?
- How serious was the incident? How is it being addressed? How is the MoES responding?
- What, if any, additional follow up action is required, and what are the associated timelines?
- Are any Bank staff involved in the incident?

The requirement to report will be defined in the Project's ESCP. As required by the contracts, the Contractor will report incidents to the PIU – the MoES will ensure that reporting obligations on compliance with ESHS requirements are incorporated into works and other relevant contracts. MoES will monitor the reports for incidents.

B. Step 2 – Classification (done by the Bank Team)

Based on information received, the Bank Team will classify the incident based on several factors, including the nature and scope of the incident, as well as the urgency in which a response may be required. There are three levels of classification: Indicative, Serious and Severe. Overview of different levels is provided in the box below.

Box 1: Incident Classification Guide

Indicative

- •Relatively minor and small-scale localized incident that negatively impacts a samll geographical areas or small number of people
- Does not result in significant or irreparable harm
- Failure to implement agreed E&S measures with limited immediate impacts

Serious

- •An incident that caused or may potentially cause significant harm to the environment, workers, communities, or natural or cultural resources
- Failure to implement E&S measures with significant impacts or repeated non-compliance with E&S policies incidents
- Failure to remedy Indicative non-compliance that may potentially cause significant impacts
- •Is complex and/or costly to reverse
- •May result in some level of lasting damage or injury
- •Requires an urgent response
- •Could pose a significant reputational risk for the Bank.

Severe

- Any fatality
- •Incidents that caused or may cause great harm to to the environment, workers, communities, or natural or cultural resources
- Failure to remedy serious non-compliance that may potentially cause significant impacts that cannot be reversed
- Failure to remedy Serious non-compliance that may potentially cause severe impacts Is complex and/or costly to reverse
- May result in high levels of lasting damage or injury
- Requires an urgent and immediate response
- Poses a significant reputational risk to the Bank.

C. Step 3 – Investigation – What happened?

MoES will:

- Promptly provide information requested by the Bank and facilitates incident site visits.
- Undertake or cause the Contractor to undertake a Root Cause Analysis (RCA) to
 understand and document the root cause(s) of the incident. The RCA will be based on
 existing country processes. The extent of the investigation (RCA) carried out by the
 MoES's Contractor will be proportionate to the severity of the incident. The MoES or
 Contractor will be responsible for funding the preparation of the RCA.
- An RCA will be completed as soon as possible, ideally within 10 days of the incident.
 The findings of the RCA will be used by the Contractor and MoES to develop measures
 to be included in a Standards Corrective Action Plan (SCAP) as a complement to
 existing project safeguards instruments.

• Share the RCA with the Bank and provide complete information about the incident; facilitate additional site visit(s) if needed.

MoES will ensure that incidents are investigated to determine what happened and why, so that processes and measures can be put in place to avoid reoccurrences and so that appropriate remedies are applied. The Bank Team may support the MoES in ensuring an appropriate RCA is conducted by the Contractor or the MoES.

D. Step 4 – Response

MoES will design the SCAP and discuss with the Bank, including actions, responsibilities and timelines for implementation, and MoES monitoring program.

For *Indicative* incidents, documentation of the incident and the MoES/Contractor response may be the only action required. For serious and severe incidents, where an RCA or other investigation is conducted by the MoES/Contractor, the Bank and the MoES will agree on a set of measures as appropriate to address the root causes to help prevent any recurrence of the incident. The measures determined as appropriate by the Task Team will be captured in a Standards Corrective Action Plan (SCAP).

Box 2 – Example of a MoES's Action Plan Following a Project Related Fatality

- 1) Monthly site meetings attended by PIU and covering safeguards updates (should be held virtually due to COVID-19 crisis).
- 2) The supervision consultant monthly progress report will provide details on ESMP implementation status as well as accidents and grievances
- 3) PIU will send to the Bank monthly progress reports within 1 week of receipt from the supervision consultants
- 4) Accidents and grievance log books are placed in all construction sites
- 5) Any severe injury (requiring off-site medical care) or fatality incident shall be reported to the Bank within 48 hours with basic information and a detailed incident report including the following will be submitted as soon as possible, ideally within 10 working days:
 - a) root cause analysis and
 - b) corrective action plan on:
 - i) immediate mitigation measures in case of continuing danger (e.g. fencing, signboard, guards)
 - ii) compensation to the affected family based on a clear rationale
 - iii) risk assessment and correct application of ESHS management procedures, and
 - iv) medium- and long-term mitigation measures including enhancement of safety measures, audits, and additional training.
 - c) Progress monitoring and reporting

The SCAP will specify the actions, responsibilities, and timelines to be implemented by MoES. MoES will be responsible for implementation of the SCAP. The SCAP may include, for example, MoEs actions such as the design or upgrading and implementation of Environmental, Social, Health and Safety management systems, processes and training to support consistent safe

performance, compensation for injuries or a fatality, pollution prevention and control remedies to be implemented over a few weeks or a multi-year period, according to the specific project circumstances. The SCAP might include requirements for community consultation (conducted virtually due to COVID-19 crisis), compensation payments relating to a resettlement program, or remediation of farmland damaged by contractors. The SCAP also may include or request Bank actions such as provision of technical assistance by the Bank, and/or loan restructuring, including additional financing, if necessary.

If the Bank considers that the SCAP measures will not be effective, or where MoES has shown itself unwilling or unable to put corrective measures in place, the Bank may consider a decision to fully or partially suspend disbursements until such actions are in place, or, in some circumstances, may consider cancelling all or part of the project following the suspension.

E. Step 5 - Follow up

MoES will implement SCAP; monitor progress; report on implementation to the Bank.

If the Bank considers that the SCAP measures will not be effective, or where MoES has shown itself unwilling or unable to put corrective measures in place, the Bank may consider a decision to fully or partially suspend disbursements until such actions are in place, or, in some circumstances, may consider cancelling all or part of the project following the suspension.

2. Responses and Remedies

Illustrative examples of responses and remedies available for different types of incidents prior to and during project implementation are set out in this section for guidance of task teams and management.

Health and Safety Examples

Examples of **potential responses** by the Bank and MoES to worker occupational health and safety incidents of varying severity are presented in Table 1.

Table 1. Potential Responses to Health & Safety Incidents of Different Severity

Health & Safety Issues	Potential MoES actions
Severe Any fatality, permanent disability, or outbreak of life-threatening project-related communicable disease	 Improve barriers, alarms, signage, training, work processes and procedures Address gaps in competence, expertise, numbers of project OHS team and/or project management team Ensure that Health and Safety risk assessment has been conducted and appropriate management plans are put in place, implemented and enforced
Serious Major (non-fatal) accident or near-miss	 Review relevant sections of health and safety risk assessment for adequacy Improve barriers, signage, training, working methods Enforce use of personal protective equipment

Health & Safety Issues	Potential MoES actions
	Complement Project Implementation Unit (PIU) with adequate competencies and expertise with OHS specialist
Serious	Improve use of grievance redress mechanism
Repeated observations of dangerous behavior or	Review relevant sections of health and safety risk assessment for adequacy
clear violations of safety protocols	Implement (revised) OHS management plan, including training
Indicative	Remedy the outstanding issues
Repeated failure to	Repeat awareness training and messaging
respond to notification to	Improve work process or procedure
remedy safeguards issues	
(e.g., safety kit incomplete	
or not present)	

E&S Examples

Examples of **potential responses** by the Bank and the MoES to Environmental and Social incidents of varying severity are presented in Table 2.

Table 2 Potential Responses to Environmental and Social Incidents of Different Severity

Environmental/Social	Potential MoES actions
Severe (Social) Forced resettlement without due process or compensation	• Identify evicted people and provide compensation and support for identification of new housing/other facilities as relevant, in line with Bank safeguards requirements, including appropriate consultation
	• Clear instructions to project implementer(s) with respect to resettlement process, including sanctions for non-compliance with MoES/Bank requirements;
	Implement all measures identified in SCAP
Severe (Environmental)	Engage with law enforcement to halt the poaching
Poaching or trafficking in endangered species	Anti-poaching training for project workers and community members to make clear incentives and penalties
	• Include sanctions for inappropriate worker behavior, including poaching, in Contractors' contracts
	Develop an alternative livelihoods program for communities around protected areas
Serious (Social)	Review GRM and address issues (upgrade, improve access,

Environmental/Social	Potential MoES actions
GRM not functioning	publicize GRM in community/ies, better organize response process)
	Train PIU staff on GRM management and monitoring
	Assign responsibility to qualified PIU staff
Indicative (Environmental) Hydrocarbon or chemical spills with low to medium environmental impact	Improve work process or procedures as necessary
	Train project staff on spills and associated procedures
	Increase on-site monitoring if necessary
	Review contract language for appropriate sanctions language