Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

Date Prepared/Updated: 03/03/2020 | Report No: ESRSC01147
# BASIC INFORMATION

## A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukraine</td>
<td>EUROPE AND CENTRAL ASIA</td>
<td>P172998</td>
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</tbody>
</table>

**Project Name**: Modernization of Gas Transmission System Project

**Practice Area (Lead)**: Energy & Extractives

**Financing Instrument**: Investment Project Financing

**Estimated Appraisal Date**: 9/7/2020

**Estimated Board Date**: 1/21/2021

**Borrower(s)**: Ministry of Finance, JSC Mahistralni Gazoprovody Ukrainy (MGU), Gas Transmission System Operator of Ukraine LLC

**Proposed Development Objective(s)**

The Project Development Objective is to help improve the efficiency of the natural gas Transmission System Operator (TSO) and to strengthen its technical and institutional capacity.

**Financing (in USD Million)**

<table>
<thead>
<tr>
<th>Amount</th>
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<tbody>
<tr>
<td>Total Project Cost</td>
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## B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

## C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

In the context of the recent unbundling of the gas transmission system operator (GTSO), the Project will support the modernization of the natural gas transmission sector through the following activities and investments:

- Support to adoption of modern Information technology and automation systems to meet the demand of a competitive gas market environment (real time information/metering/balancing for reliable functioning of
competitive and transparent natural gas market, transparency and information sharing requirements...). Typical activities could include support to digitization and SCADA.

- Efficiency investments: this would consist in investments which would increase the technical efficiency of transmission operations, in particular the reduction of energy consumption (replacement of compressors).
- Capacity-building/institutional strengthening of the TSO.

D. Environmental and Social Overview

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]

Implementing Agency, the newly-created MGU GTSO, upon transfer from the UTG, will own and operate up to 702 gas pumping units and 1473 gas distribution stations (GDS) throughout the country. The Project activities will take place nationwide and the beneficiary institutions (pumping units and distribution stations) will be selected on the basis of technical/economic analysis as part of a long-term modernization and optimization strategy.

The territory of Ukraine is equal to 603,7 thsd. sq km or 5.7% of European territory. The territory from North to South is 893 km, from West to East - 1316 km.

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. Precipitation falls unevenly across Ukraine. The most rainfall is recorded in the Crimean Mountains and the Ukrainian Carpathian Mountains.

Ukraine occupies the southwestern portion of the Russian Plain (East European Plain). The country consists almost entirely of level plains at an average elevation of 175 meters above sea level. Mountainous areas such as the Ukrainian Carpathians and Crimean Mountains occur only on the country’s borders and account for 5% of its area. 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. Three main zones of natural vegetation are 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. 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.

Historically, the energy sector in Ukraine was characterized by inefficiency, widespread corruption fostered by non-market pricing, and by management structures non conducive to accountability and transparency. As a result, Ukraine had a very energy-intensive economy due to inefficient energy use, while the reliability and quality of service was declining due to minimal investment and decaying infrastructure. Since 2014, and in the context of its accession to the Energy Community, the country has implemented energy sector reform on multiple fronts. For the gas sector, key milestones were the partial opening of gas supply competition and the progressive alignment of gas prices for households to market levels.

Due to Soviet era gasification policies, the Ukrainian population is a major user of natural gas either directly or through District Heating companies which use gas a primary fuel. An important dimension of gas sector reform has been the alignment of regulated gas tariffs in Ukraine with European market prices. This transition has been achieved from 2016 onwards with the scaling-up of the Housing and Utilities (HUS) program which has provided means-tested benefits to households to ensure that there total utility services budget (primarily for heating) was capped as a percentage of total household income (the cap in percent being a function of income per person in the household, e.g. 7.5% at the subsistence income level, 15% at twice the subsistence level).

While the HUS program is being rationalized, its focus is mostly on improved targeting of social support to avoid excluding any vulnerable segment of the population.
Traditionally, gas prices for both Ukrainian households and municipal heating utilities have always been heavily regulated and subsidized. The government reimburses to the energy company that provide utility services part of the energy bill based on the consumer’s official income and utility expenses. The project will contribute to support the government’s ongoing reform on the energy sector and would contribute to the government’s efforts to ensure a long term affordability of gas for the population.

D. 2. Borrower’s Institutional Capacity

The newly created entity (MGU GTSO) following ownership unbundling on January 1st, 2020 will have a critical role in ensuring that a transparent and competitive gas market structure becomes entrenched and credible. Establishing the operational and financial independence of the GTSO from Naftogaz Group (in particular UTG) is critical to enable the attraction of long-term private actors/investors in the Ukrainian gas sector (retail supply segment, domestic gas production). MGU GTSO has respective Department of Occupational Health, Safety and Fire in the organizational structure together with regional divisions, Department in charge of Land Acquisition and Assets, Department of Social Responsibility and Department of Social Development, etc.

The team’s assessment on client capacity also suggests that the implementing agency does not have prior experience with implementation of World Bank projects or the ESF, however, they do have experience in implementing projects with other international financial institutions like EBRD and EIB and have good knowledge of their environmental and social standards. Overall, the implementing agency’s capacity for social and environment risk management will require significant technical support to ensure compliance with the ESF. Hence, borrower’s capacity to manage environmental and social risks will be developed through project specific training on ESF and for environmentally and socially responsive subproject planning and implementation. The borrower will be suggested to engage qualified E&S support either from external consultants or from other parties involved with the project during implementation. The Borrower’s environment and social implementation will be assessed regularly based on project reports and site visits during implementation review. The new project will also benefit from the experience of the Ukrtransgaz PIU Project closed as the end of 2019 as many E&S staff may become available after the closure.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)  

Environmental Risk Rating  

The project will finance modernization of physical infrastructure of GTSO by replace aging and obsolete equipment in order to improve reliability and reduce operating costs, in particular energy costs. Investments would include modernization and rationalization of compression equipment, and of gas distribution stations (GDS). The investments may range from full reconstruction of compression stations and GDS in some cases to partial modernization (replacement of compressors, system of automatic controls, protection systems, cooling equipment...) to be carried out within the footprint of existing GTSO facilities (compressor and distribution stations). These investments will be associated mainly with labor safety risks during replacement of old equipment (which will be reused or in some cases of totally obsolete equipment, - disposed or used as scrap metal), and installation of new one. The project might also support minor civil works for rehabilitation of selected GDSs which can generate site temporary, specific and well known impacts. Overall the proposed activities may generate moderate adverse environmental impacts, which are expected to be temporary, reversible, moderate in magnitude and site-specific and will be related to (i) waste management of construction spoils, (ii) noise, vibration and air pollution; (iii) hazardous waste, including asbestos, and maybe old lead containing paints; (iv) health and safety of labor force, (v) impacts on water and soil quality in
case of spills; etc. Adequate adoption of work-related health and safety practices (OHS requirements) during construction both for the construction workers and the GTSO personnel would be a requirement by the Bank. During the operational phase environmental risks might be related to labor safety issues, explosions, fire, leaks and spills, etc., which may cause serious impacts to the environmental and workers health, in the case no adequate measures are undertaken to prevent them. In this regard the Ukrainian GTSO has good track record which shows these risks are adequately addressed by applying relevant risks reduction mitigation measures, providing training and by other activities very well prescribed in the Technical Regulations of the GTS in Ukraine.

MGU GTSO team has some prior experience working with IFIs and satisfactorily implemented an IFI-financed project for rehabilitation works of main gas pipeline in Ukraine. The Bank team will work closely with MGU GTSO for ensuring that ESF principles and requirements are well understood and addressed and the ESCP is prepared consistently with the risk profile of this project. The Project will provide resources (under subcomponent 3.2) to support the PIU and build its capacity with regard to ESF implementation and compliance.

Due to the nature of proposed works and associated environmental risks, and some capacity of the Borrower with proposed additional capacity building under the project on ESF the project is classified as Moderate risk from environmental perspective and as defined under the Bank's ESF.

Social Risk Rating

The Project will not support construction or rehabilitation activities that cause land acquisition and/or resettlement impacts. Physical Investments would include in particular modernization and rationalization of compression equipment, and of gas distribution stations (GDS). The investments may range from full reconstruction of compression stations and GDS in some cases to partial modernization (replacement of compressors, system of automatic controls, protection systems, cooling equipment) within the current footprint. The major investment will also be SCADA system. Most of these new investments located in sites which are demarcated as no-man zone by the Government and less populated remote rural areas. Nevertheless, initial social assessments during preparation period will identify potential stakeholders including settlements nearby the proposed sites and involve them in stakeholder consultations.

There is a low risk of labor influx as most civil works are expected to be conducted by local workers. Since no changes in organization structures of supply entities, there will be no retrenchment issues under the project. However, a GRM will be established to ensure any issues related to labor management addressed in a diligent manner. Gender Based Violence (GBV) risk is estimated to be Low based on the scale of activities, existing analysis of the country context on GBV, and of referral mechanisms and support services. Moderate risk is proposed due to potential occupation health and safety issues. The risk will be reassessed at the appraisal stage.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

Project investments have a country wide coverage and will include locations in the remote areas of outside of settlements, - no not in proximity to areas of natural habitats. Operations will involve minor civil works for contractors, rehabilitation of existing GTSO facilities, dismantling and disposal of existing and obsolete equipment and installing of new one. and facilities, and in some cases reconstruction. All activities will take place within the footprint of existing GTSO facilities. These investments will be associated mainly with labor safety risks during
replacement of old equipment (which will be reused or in some cases of totally obsolete equipment, disposed or used as scrap metal), and installation of new one. Some environmental risks may be generated also during the minor civil works for rehabilitation of selected facilities. Overall project environmental impacts are expected to be moderate, temporary, reversible, and site-specific and will be related to: (i) waste management of construction spoils; (ii) noise, vibration and air pollution with dust; (iii) hazardous waste, including asbestos, and maybe old lead containing paints; (iv) health and safety of labor force; (v) impacts on water and soil quality in case of spills; etc. Adequate adoption of work-related health and safety practices (OHS requirements) during construction both for the construction workers and the GTSO personnel would be a requirement by the Bank.

During the operational phase environmental risks might be related to labor safety issues, explosions, fire, leaks and spills, etc., which, in the case no adequate measures are undertaken to prevent them, may cause serious impacts to the environmental and workers health. In this regard the Ukrainian GTSO has good track record which shows these risks are adequately addressed by applying relevant risks reduction mitigation measures, providing training and by other activities very well prescribed in the Technical Regulations of the GTS in Ukraine.

To address specified risks and impacts, the borrower will prepare, before appraisal, an environmental and social management framework (ESMF) to be disclosed and consulted upon by the borrower in line with the requirement of the WB Environmental and Social Standards. The ESMF document will provide procedure and criteria for the environmental screening of selected facilities during implementation as well as requirements for the development of site specific Environmental and Social Impact Assessments (ESIAs) and preparing Environmental and Social Management Plans (ESMPs), as required by the ESS1. The ESMF will also include a generic ESMP with good-practice mitigation measures for construction and operational phases for gas station facilities, including the roles and responsibilities, time plans, costs and implementation agencies. Furthermore, the ESMF will specify the roles and responsibilities in terms of supervision, monitoring and reporting on ESMPs implementation. It will also outline the process for screening and verification of use of land and assets to ensure that selected sites for civil works do not affect private property or assets, that there is no prior use of lands by private entities as a source of livelihoods, and that land ownership is adequately registered to the relevant public body (GTSO). This generic ESMP will then be adaptable for specific facilities as they become identified during project implementation. Contractors will be required, as a condition of their contracts with the Project, to implement and comply with the ESMP, including preparing construction management plans consistent with the specific management plans provided in the ESMF and measures will be put in place to monitor contractors and subcontractor’s compliance. For minor rehabilitation or small-scale civil works, site-specific ESMP Checklists will be prepared in accordance with the ESMF provisions aiming to mitigate any environmental and social risks and impacts. The ESMP checklist-type format will cover typical core mitigation approaches to civil works contracts with small, localized impacts. The intention of the ESMP Checklist is that it would be applicable as guidelines for the small works contractors and constitute an integral part of bidding documents for contractors carrying out small civil works under the Project. In case of beneficiaries that might require a larger and more complex volume of rehabilitation works, site-specific ESMPs will be prepared and implemented. However, at this stage, details about the candidate beneficiaries are not available.

Furthermore, the ESMF will provide necessary requirements for addressing potential project risks during operation phase, with the focus on preventing labor safety accidents, explosions, fire, leaks and spills. As part of project preparation, the capacity, organization and procedures of the GTSO on the above E&S aspects will be further assessed in detail so as to inform capacity-building support activities. Respectively, the ESMF will include a special section on assessing the GTSO’s environmental and social management system, its track record and propose adequate capacity building activities to ensure ESMF and ESMPs implementation and consistency with the WB ESSs.
The ESMF should assess related OHS risks/impacts and will identify all mitigation measures to be incorporated into labor management procedures. The ESMF should also contain provisions to ensure labor aspects, including child labor and labor influx, are properly addressed in the documents prepared during project implementation, including construction phase ESMPs, bidding documents, and civil works contracts. In addition, Labor Management Procedure (LMP) will be developed to cover issues related to labor rights and working conditions of direct and contracted workers, and possible risks related to primary suppliers.

For public consultation on the ESMF, the borrower will maintain and disclose a documented record of stakeholder engagement, including a description of the stakeholders consulted, a summary of the feedback received, and a brief explanation of how the feedback was considered, or the reasons why it was not.

**Areas where “Use of Borrower Framework” is being considered:**

Ukraine’s Environmental and Social Framework is not being proposed to be applied in whole or in part for this project.

**ESS10 Stakeholder Engagement and Information Disclosure**

Stakeholder engagement is key to the success and sustainability of the project development objectives. The key stakeholders identified at present include Ministry of Finance, Ministry of Energy and Environment, National Energy Regulation Committee. Other interested parties may include government agencies responsible for management of gas transit, NAK Naftogas, government agencies responsible for management of environmental protection, cultural heritage, as well as occupational safety; local communities in close proximity to the stations where modernization of the equipment will take place under planned project activities. Exact locations will be identified on the later stage and representatives of those communities are expected to be involved in the stakeholder’s consultations.

MGU GTSO will prepare a Stakeholder Engagement Plan (SEP) for meaningful consultation in a participatory manner. The SEP will map project-affected persons and other interested parties, summarize their views on preferred modes of engagement throughout the project, propose stakeholder engagement activities with he respective implementation responsibilities, timeline and budget to be carries out through the life of the project. The list of key stakeholders and their areas of interest will be analyzed and assessed as part of preparing the Stakeholder Engagement Plan. Draft SEP should be disclosed prior to appraisal and will be updated, as necessary, throughout the project cycle (preparation and implementation).

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

**ESS2 Labor and Working Conditions**

Project work force will include direct workers (JSC Mahistrotni Gazoprovody Ukrainy (MGU) GTSO staff and consultants), and contracted workers (employees of civil works contractors and sub-contractors). The project would primarily rely on supply of construction materials from the local market where there is no known track record of child/ forced labor, hence no such risk is expected. The borrower will prepare an LMP for the project outlining the expected number and type of workers, key gaps between national legislation and regulations that need to be addressed at the project level, as well as monitoring and supervision arrangements. Key aspects of the LMP pertaining to contracted workers, such as Occupational Health and Safety (OHS), adequate working conditions,
adequate living conditions in the unlikely event of work camps, a functioning grievance and redress mechanism for workers, will be included in Contractors' ESMP. Furthermore, as during operation phase, there might be some risks related to labor safety accidents, explosions, fire, leaks and spills, the relevant requirements for addressing them will be included in the ESMF and in the site specific ESMP documents. Bidding documents will make explicit reference to these aspects to ensure the commitment of selected contractors to adhere to ESS 2 principles. A LMP will be prepared including assessment of the borrower’s internal HR procedures to ensure consistency with ESS 2 requirements and propose any gap filling measures. Ukraine's legislation on labor and working conditions is relatively advanced. The Labor Code includes measures on equal opportunity and non-discrimination, regulates hiring and firing procedures, allows for collective organization and bargaining; however, it lacks the requirement to establish worker’s grievance mechanism. Such mechanism will need to be established at project level.

ESS3 Resource Efficiency and Pollution Prevention and Management
The overall level of environmental risks associated with the project is considered moderate. The project’s physical activities are limited to equipment replacement and rehabilitation/reconstruction of existing GTSO facilities within existing sites. The expected environmental risks are associated with handling and storage of construction material, waste, noise and vibrations, dust emissions, and disposal of hazardous waste, including asbestos, as well as with OHS issues. The ESMF will include a section on Pollution Prevention and Management, with a focus on those issues which might arise while conducting civil works, dismantling old equipment and installing new ones, as part of the rehabilitation or reconstruction of existing facilities. Assessment of associated activities with civil works risks and impacts and proposed mitigation measures related to relevant requirements of ESS3, including raw materials, water use, air pollution, hazardous materials, and hazardous waste will be specified in the ESMF and requested to be included in the ESMPs as relevant, and further being part of bidding documents. Required building material will potentially include stones, sand, concrete blocks and timber. Borrow material will be obtained from already existing and licensed borrow pits within Ukraine and possibly close to the project area to reduce the transportation distance. Air emissions will include exhaust from heavy vehicles and machinery, and fugitive dust generated by civil works for rehabilitation or reconstruction activities. Those most likely to be affected are construction workers, facilities’ staff. 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. Liquid and solid waste will mainly include excavated soil, oils from construction machinery, concrete blocks, metal and glass pieces from facilities to be rehabilitated, etc. Waste will be segregated, stored and disposed at approved sites. Due to the nature of proposed rehabilitation/reconstruction works, it is not expected that the project will have significant water and energy use. Designs for rehabilitation/reconstruction of the existing facilities will include feasible elements of insulation (window frames, roofs, etc.) aimed at heating energy savings and introduction of energy-efficient lighting.

ESS4 Community Health and Safety
Communities health and safety issues are associated with typical risks/impacts of construction sites as, dust, noise and vibrations, waste and labor influx. Since the project’s civil works will exclusively be undertaken in existing gas
transportation system facilities, maintaining the health and safety of workers throughout the construction phase is critical. Movement of heavy goods vehicles can lead to accidents. Without proper efforts to minimize impacts, the rehabilitation and/or reconstruction activities in such premises could have negative health impacts through dust emission, noise, increased generation of solid waste, etc. The ESMF will evaluate the risks and impacts of the project on health and safety of the gas infrastructure workers during project life cycle, and propose mitigation measures in accordance with the mitigation hierarchy for maintaining the safety of workers and all staff involved in daily operational activities of the facilities to be rehabilitated/reconstructed, including, as relevant, the roles and responsibilities for making alternative arrangements for continuing gas distribution activities during the construction periods.

The project will ensure safety of workers during the rehabilitation/reconstruction works by adopting adequate OHS protocols following WBG Environmental, Health and Safety Guidelines. The ESMF will also assess their exposure to construction stage-related traffic, accidents. Partition of construction area by putting in place fences, signaling, mitigation measures to control excessive noise and dust levels, and secure access to the area in the building for the workers will be ensured through a robust mitigation and management plan in the proposed ESMPs or site-specific EMP Checklists.

For operational phase, emergency protocols will be prepared/updated. Such protocols would cover personnel actions in case of emergency, alert mechanism and necessary training for persons and communities, if needed.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

No physical or economic displacement or land acquisition is expected under this project. Project activities will take place in lands belong to MGU GTSO and the Government. The full reconstruction of compression stations and GDS in some cases and partial modernization (replacement of compressors, system of automatic controls, protection systems, cooling equipment) will be done within the current footprint of the facilities.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

Potential environmental risks and impacts associated with this ESS have been screened and determined to be not currently relevant given the project’s context and timing. The project is not anticipated to have activities with impacts on biodiversity or living natural resources. The project implementation sites are located in modified landscapes already used for gas system facilities.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

There are no identified indigenous people in the country which require special attention.

ESS8 Cultural Heritage

Rehabilitation/reconstruction works will be carried out in gas system facilities which do not have known historical/cultural value.

ESS9 Financial Intermediaries
No FI involvement is envisaged in the project.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways
No

OP 7.60 Projects in Disputed Areas
No

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered?
No

Financing Partners
N/A

B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:
1. Preparation before Appraisal of draft Environmental and Social Management Framework (ESMF) for entire project;
2. Preparation before Appraisal of a draft Stakeholder Engagement Plan (SEP) for the entire project;
3. Preparation before Appraisal of a draft Labor Management Procedures (LMP) for the entire project; and
4. Preparation before Appraisal of draft Environmental and Social Commitment Plan (ESCP).

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):
1. Preparation of ESIAs/ESMPs;
2. Requirements for monitoring the progress made on implementing the agreed measures for mitigating environmental and social risks;
3. Establishment and operationalization of project-level GRM;
4. Preparation and implementation of Labor Management Procedures (LMPs);
5. Design and Implementation of capacity building plans to develop a robust Environmental and Social Management System for the implementing agency.

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS
14-Aug-2020

IV. CONTACT POINTS

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Borrower/Client/Recipient
Borrower: Ministry of Finance

Implementing Agency(ies)
Implementing Agency: JSC Mahistralni Gazoprovody Ukrainy (MGU)
Implementing Agency: Gas Transmission System Operator of Ukraine LLC

V. FOR MORE INFORMATION CONTACT
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VI. APPROVAL
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Safeguards Advisor ESSA: Nina Chee (SAESSA) Cleared on 05-Mar-2020 at 15:49:34 EST