Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 03/01/2024 | Report No: ESRSA03340

I. BASIC INFORMATION

A. Basic Operation Data

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P179950	Investment Project Financing (IPF)	ESPIRE Program	2024
Operation Name	Enhancing Energy Security through Power Interconnection and Renewable Energy Program		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Georgia	Georgia	EUROPE AND CENTRAL ASIA	Energy & Extractives
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Georgia	Georgian State Electrosystem	16-Feb-2024	30-Apr-2024
Estimated Decision Review Date	Total Project Cost		
07-Dec-2023	35,000,000.00		

Proposed Development Objective

Enhance the implementation readiness of the Black Sea Submarine Cable Project.

B. Is the operation 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 Activities

[Description imported from the PAD Data Sheet in the Portal providing information about the key aspects and components/sub-components of the project]

Background The Black Sea Submarine Cable (BSSC) Project represents one of the most strategic and ambitious energy and digital connectivity initiatives in the South Caucasus and Southeast Europe. The proposed BSSC Project would include parallel electricity and fiber-optic submarine cable interconnections across the Black Sea, with landing points in Georgia and Romania. Increased electricity trade through the electricity interconnection is expected to enable renewable energy (RE) development in the South Caucasus and contribute to the decarbonization of energy supply,

enhanced energy security, and electricity supply reliability on both sides of the interconnection. The digital interconnection would reduce internet connection costs, improve bandwidth, and build redundancy for international digital connectivity across the Black Sea. Besides Georgia and Romania, Hungary, Azerbaijan, and potentially other countries in the South Caucasus and Southeast Europe are expected to participate in the financing of the BSSC Project. With the proposed Enhancing Energy Security through Power Interconnection and Renewable Energy (ESPIRE) Multiphase Programmatic Approach (MPA) Program, the World Bank will support the preparatory activities for the BSSC Project (Phase 1), enabling on-land infrastructure (Phase 2), as well as the BSSC Project itself (Phase 3). The Bank's involvement would provide systematic, multi-year support under the MPA framework to help improve the quality of preparation of the BSSC Project and increase its like likelihood of success. Phase 1 would enhance the technical, commercial, institutional, social and environmental framework of the BSSC Project through preparatory studies, capacity building and technical assistance, including the establishment of adequate institutional mechanisms for intergovernmental coordination and decision-making; Phase 2 would finance on-land transmission grid strengthening in Georgia (and in other countries, if requested by the respective governments) to enable electricity exchanges through the submarine cable system; and Phase 3 would finance, together with other financiers, the eventual construction of the submarine cable system (the BSSC Project itself) if it goes ahead. The financing for the fiber-optic cable component in the same seabed corridor is expected to attract significant private sector investment. Georgia would be the Borrower for Phase 1 and 2, while other participating countries may be supported in Phases 2 and 3. MPA Framework The MPA will be structured as a simultaneous MPA with partially overlapping phases supporting a clearly defined overall MPA Program scope. This will provide the ability for the phases to adapt to reflect overall progress and timelines, as well as structuring and financing decisions for the BSSC Project. A description of the activities expected in each phase is summarized below: a. Phase 1: Preparatory activities for the BSSC project including technical assistance and capacity building (US$35 million IBRD loan). This phase would finance: (i) the geophysical and geotechnical investigations of the Black Sea seabed to identify a corridor for the power and fiber-optic cable system (the two key technical studies that still need to be carried out as part of the feasibility study process), and (ii) legal and financial advisory, TA, capacity building, and knowledge transfer to support financial negotiations, institutional strengthening and stakeholder engagement at both the Georgian and intergovernmental levels, and preparatory technical and Environmental and Social (E&S) studies. More details on Phase 1 are provided in the Section II (Project Description). The borrower will be Georgia, while the implementing agency will be GSE. b. Phase 2: On-land transmission grid strengthening. The second phase would finance investments required to strengthen the Georgian transmission network to interconnect and transmit power through the BSSC. These investments would include an overhead transmission line (OHL) connecting the site of the new converter station at the landing point of the BSSC (near Anaklia, on the Black Sea coast) to Georgia's backbone high-voltage transmission network. The expected connection points with Georgia's transmission network would be the Jvari substation (approximately 40 km of OHL) and/or the Tskaltubo substation (approximately 75 km), but the exact routing of the OHL is still under consideration. Procurement for the construction of the OHL would start early enough to be ready for construction immediately after the final investment decision (FID) of the BSSC is taken. The borrower would be Georgia, while the implementing agency would be GSE. Phase 2 would also include a comprehensive TA component to support fulfilment of the pre-conditions to proceed with Phase 3 as well as, inter alia, the development of a roadmap for ENTSO-E integration and continued support for the cooperation and coordination among the countries involved in the Project. c. Phase 3 (BSSC Project): Submarine cable system including converter stations (estimated IBRD financing envelope of up to US$420 million). The interconnection would stretch for an estimated 1,200 km, of which about 1,100 km would be via a submarine cable system at a depth of up to 2,200 m. The overall cost estimate for the BSSC and the two associated converter stations (in Georgia and Romania) is in the range of US$3.1-3.7 billion, depending among other things on the capacity of the interconnection. While the evaluation of project

structuring and financing options is still ongoing as part of the feasibility study, the government of Georgia expects a substantial share of public financing to be needed to build the project. Substantial leveraging of public and private financing from a range of investors and financiers is expected as part of the overall project structure. Private financing is expected especially for the fiber-optic cable portion, to be confirmed by market sounding. Phase 3 would provide financing for a share of Georgia's public borrowing for the BSSC, as well as TA. The implementing agency would be the BSSC Project company. Detailed Description of Phase 1 (i) Component 1: Geophysical and geotechnical surveys of the Black Sea seabed (US$30 million) This component would finance (i) the surveys of the Black Sea seabed ("seabed surveys"), (ii) the supervision of the two studies, and (iii) capacity building and knowledge transfer to support GSE and the government of Georgia in designing, procuring, and executing them. The seabed survey corridor is based on the geological investigation, which is part of the scope of the ongoing feasibility study and recommended a corridor for the interconnector routing based on all applicable guidelines and laws, available knowledge of the geological and geotechnical aspects of the Black Sea, existing subsea infrastructure, fishing locations, shipping routes, environmental aspects, and other constraints that may impact the installation and maintenance of the interconnector. The seabed surveys consist of geotechnical and geophysical investigations of the seabed corridor and an unexploded ordinance (UXO) survey. Besides financing the investigations, this component will finance the supervision contract for the two studies and will offer GSE and the government capacity building for the definition of the technical design of the studies, their procurement process, and their implementation. (ii) Component 2: Legal and financial advisory and technical assistance (US$5 million) This component would finance advisory and TA activities to support the preparation of the BSSC Project: • Institutional, legal, and financial advisory. This activity would provide: (i) capacity building to the government for the establishment and operationalization of the IWG, and (ii) legal and financial advice to it on the most relevant tasks needed for the successful preparation and implementation of the BSSC Project, including the structuring of the project transaction and related market sounding, alignment with ENTSO-E requirements and relevant EU and national regulations, obligations under the United Nations Law of the Sea Convention (UNCLOS) and the Bucharest Convention, and RE and wholesale market development. • Preparatory technical studies for the on-land OHLs connecting the BSSC to Georgia's domestic high-voltage grid. The scope of the ongoing feasibility study includes a high-level study of the on-land OHLs but no detailed routing and design, so this component would finance additional technical work and related capacity building and knowledge transfer to support the preparation of the bidding documents of the OHLs. • Environmental and social instruments for the BSSC Project and the on-land OHLs in Georgia and Romania. This will include the development of studies not prepared before submission to the World Bank's Board of Directors, namely the Resettlement Policy Framework, site-specific Resettlement Action Plans, and the Environmental and Social Impact Assessment (ESIA) of the on-land OHLs in both countries and the submarine cable system. This activity will also provide capacity building and knowledge transfer to GSE and the government to support the development of the environmental and social instruments. • Stakeholder engagement and communication support. This activity would provide capacity building and help the government of Georgia coordinate discussions with the other countries involved in the BSSC Project, as well as international partners and other stakeholders (e.g., the EU, other international financial institutions, technical consultants, and private companies). In addition, this activity would finance citizen engagement and communication campaigns related to the preparation and implementation of the BSSC Project. • Security study. This activity would finance just-in-time security risk assessments to provide up-to-date information on security risks and support the preparation and implementation of the BSSC Project.

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

[Description of key features relevant to the operation's environmental and social risks and opportunities (e.g., whether the project is nationwide or regional in scope, urban/rural, in an FCV context, presence of Indigenous Peoples or other minorities, involves associated facilities, high-biodiversity settings, etc.) – Max. character limit 10,000]

The Program envisions geophysical and geotechnical investigations of the Black Sea bed (Phase 1 or "the Project"), building OHLs to connect the underwater cable landing point to the national grid (Phase 2), and laying an underwater cable from Georgia to Romania across the Black Sea bed, passing exclusive economic zones of Georgia, Romania, Turkiye, and Bulgaria (Phase 3). OHLs will connect the undersea cable with the Georgian backbone power transmission infrastructure (partially under construction) and then onto Azerbaijan and Armenia. Connection of the undersea cable landing point on the Romanian coast to Romania's power transmission infrastructure will be an associated facility for the Program. The considered Georgian landing point of the undersea cable is located on the Southern side of the administrative border of occupied Abkhazeti (the Autonomous Republic of Abkhazia), south of the Anaklia settlement. In recent years, the Government of Georgia had some attempts to develop the coastline of Anaklia and its neighboring Ganmukhuri as tourist destinations. However, this has not led to major infrastructure investments. The Government also intends to revitalize the idea of developing Anaklia as a major seaport. To this end, some land acquisition has already been undertaken by the Government of Georgia. Protected areas of Kolkheti are situated south of Anaklia. They include terrestrial and marine parts, wetlands of international importance protected under the Ramsar convention, sites included in the Emerald Network of protected habitats, and natural heritage protected under UNESCO. Prospective port of Anaklia and the existing Kolkheti Protected Areas are significant limiting factors for the selection of the undersea cable landing point. According to the IUCN, there are over ten Important Marine Mammal Areas in the Black Sea. They provide habitat for three dolphin and porpoise species that are found only in the Black Sea and are considered threatened. However, in deep waters, closer to the sea floor where the cable will be laid, the aquatic life is minimal. OHLs are expected to pass Samegrelo-Zemo Svaneti and Imereti regions of the country. The considered OHL corridors are very diverse, including lowlands and mountainous terrain, densely populated areas and natural ecosystems, agricultural fields and forests. Overall, the environmental impact of the Program is likely to be high, given the potential overlap with important biodiversity areas, natural and/or critical habitats, and nationally/internationally designated protected areas. Resettlement impacts are hard to estimate at this point, as the preliminary design of the Program infrastructure is not yet available. The Project (Phase 1 of the Program) will not finance any physical works, though, investing only into the studies required for undertaking Phases 2 and 3 of the Program.

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts

[Description of Borrower's capacity (i.e., prior performance under the Safeguard Policies or ESF, experience applying E&S policies of IFIs, Environmental and social unit/staff already in place) and willingness to manage risks and impacts and of provisions planned or required to have capabilities in place, along with the needs for enhanced support to the Borrower – Max. character limit 10,000]

While the arrangements for carrying out Phase 3 of the Program are yet to be confirmed and may imply the establishment of a new agency, Phases 1 and 2 will be implemented by the Georgian State Electrosystem (GSE), a State-owned joint stock company, which is the single electricity transmission system operator acting in Georgia. GSE has been actively working on strengthening the electricity transmission grid in Georgia for the last 10 years and has tangibly improved in capacity and expertise. GSE has recently completed the implementation of one World Bank financed operation and the other is ongoing. Both of these projects carry high and complex E&S risks. The recently completed project was under the Safeguard Policies (Transmission Grid Strengthening Project, P147348) and the active Energy Supply Reliability and Financial Recovery project (P169117) follows the Environmental and Social Framework (ESF). The latter has a satisfactory E&S performance rating, whilst the Transmission Grid Strengthening Project (TGSP) had

moderately satisfactory rating. TGSP was not compliant with the Bank's E&S requirements during the early stage of implementation, as compensation payments for easement were delayed. However, this was later rectified as the GSE developed a Standard Operating Procedure (SOP) to ensure that E&S safeguards were mainstreamed into operations. To duly identify and manage E&S risks, GSE has optimized institutional set-up and increased staff capacity. The improvements included establishing a unified E&S department and hiring Community Liaison Officers (CLOs). At present, the department employs 52 staff members. One full-time Environmental Specialist, one full-time Social Specialist, as well as one OHS Specialist and one Community Liaison Specialist will be assigned for the implementation of the Project. Also, with support and guidance from the Bank, GSE has adopted a corporate Environmental and Social Management System (ESMS) and developed an operations tracking software that allows to effectively monitor the resettlement process, including handling of grievances. The software continues to evolve and is likely to include other useful functions, including environmental management features. By the time the decision is made to construct the OHLs and the undersea cable (Phases 2 and 3), the Project (Phase 1 of the Program) will have contributed to further strengthening the E&S capacity of GSE to ensure that E&S considerations are effectively identified and managed.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) — High

A.1 Environmental Risk Rating — High

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

Physical activities under the Project (Phase 1) will be confined to seabed investigation, and the associated environmental risks are expected to be moderate. However, E&S Scoping Report producing during the Project preparation as well as technical studies to be undertaken in Phase 1, and site-specific E&S instruments to be prepared for works planned n Phases 2 and 3, will shape E&S risk management during future construction and operation of the submarine cable and OHLs. Because physical works to be undertaken in Phases 2 and 3 are likely to carry high environmental risk, the Project (Phase 1) is also rated high on environmental risk. Part of works for the construction of OHLs in Phase 2 of the Program may have to be undertaken on steep slopes with natural forest ecosystem with limited existing access roads. Vegetation clearance for the right of way of the OHLs and access roads will affect the natural forests, disturb the wildlife, and generate spoils (excess earth) requiring disposal, and may trigger landslides. Construction of foundations and erection of towers, including stringing, in the mountainous terrain will be challenging, with significant occupational health and safety risks. The extent of the impacts will become known at the detailed design stage and the alignment of the proposed OHLs will be finalized considering the E&S implications of various routing alternatives. An Environmental and Social Impact Assessment (ESIA) to be undertaken as part of the Project (Phase 1) will inform the detailed design to minimize negative impacts to the extent feasible. Seabed studies, also to be undertaken during Project (Phase 1) implementation, will provide technical information required for exhaustive understanding of environmental dimensions of laying the undersea cable in Phase 3 of the Program. It is known that construction of the deep sea section of the submarine cable will imply its dropping to the bottom with moderate physical intervention to the seabed landscape. However, in the shallow waters, the cable will require protection against anchoring and trawling. Depending on the seafloor structure, this would be achieved by laying the cable into trenches dug on into the seafloor or placing it into the conduit pipes. The former method is known to be cheaper but more damaging for benthic environment, while the latter is more expensive and less impactful.

Technology alternatives will be considered at the ESIA stage and will depend on the selection of the cable landing point. The extent of mandatory separation between the upcoming Anaklia seaport and the undersea cable will define northern limit for the landing point. Environmental risks associated with works in shallow waters and on the shoreline will include increased turbidity of seawater, damage to benthic flora/habitat, and disturbance of sea mammals and fish, including endangered species. These risks may be amplified in case works are to be undertaken not only in the immediate proximity to Kolkheti Protected Areas, but within their boundaries as well. In the course of the Project preparation (since the Concept stage), alternatives to the cable routing that do not pass marine protected area have shrunk based on the incoming additional information about the design of Anaklia deep sea port to be constructed adjacent to the submarine cable corridor, confirming high environmental risk of cable laying. Scope and nature of terrestrial works to be undertaken in the territory of Romania are yet to be identified in cooperation with the Romanian stakeholders of the Project and the Bank staff engaged in Romania. Works on this associated facility in Romania will be regulated by the national legislation of the EU member state of Romania and the external financier, if involved.

A.2 Social Risk Rating Moderate

[Summary of key factors contributing to risk rating, in accordance with the ES Directive and the Technical Note on Screening and Risk Classification under the ESF – Max. character limit 4,000]

The social risk is classified as moderate. The Program in its Phase 1 will finance the geophysical and geotechnical investigations of the Black Seabed towards optimizing the routing of the cable, the preparatory studies for the connection to the domestic high-voltage grid, as well as related preparatory technical assistance including the preparation of the E&S documents, and the legal and commercial advisory. The seabed studies and siting of the landing site will have very limited social impacts, mostly relating to labour and working conditions on board of the vessels and the potential for disrupting fisheries-based livelihoods. These impacts are expected to be mostly temporary and predictable and can be managed with adequate management plans, and human and financial resources. In recent years, GSE has optimized institutional set-up and increased staff capacity in terms of E&S with specialists in place. Improvements also include the establishment of a unified E&S department and hiring of CLOs. GSE also has operationalized an ESMS which allows management and monitoring of risks and impacts. With support and guidance from the Bank, GSE also has developed an operations tracking software that allows to effectively monitor the resettlement process, including handling the grievances. The software continues to evolve and is likely to include other useful functions covering other aspects of E&S risk management. Phase 2 would finance investments required to strengthen the Georgian high-voltage electricity transmission network to interconnect and transmit power through the undersea cable. The expected connection points with Georgia's transmission network would be the Jvari and Tskaltubo substations, but the exact routing of the OHLs is still under consideration. The construction and operation of the OHLs will mainly have risks related to minor permanent and temporary land acquisition or easement restrictions affecting livelihoods; labour and working conditions risks during construction; community health and safety risks during construction and operation; sexual exploitation and abuse/sexual harassment (SEA/SH) risks during construction; and risks relating to inadequate stakeholder engagement and grievance management. Phase 3 would provide financing for a share of Georgia's public borrowing for the undersea cable. As is usual for seabed impacts, laying down of the cable will have very limited social impacts mainly relating to labour and working conditions and the potential for disrupting fisheries-based livelihoods.

[Summary of key factors contributing to risk rating. This attribute is only for the internal version of the download document and not a part of the disclosable version – Max. character limit 8,000]

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

B.1 Relevance of Environmental and Social Standards

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts Relevant

[Explanation - Max. character limit 10,000]

All ESSs, other than ESS7 on Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and ESS9 on Financial Intermediaries, are considered relevant. OP 7.60 Projects in Disputed Areas is not triggered. OP 7.50 Projects on International Waterways is triggered as geophysical and geotechnical studies to be financed from the Project concern future investments that may cause pollution of the Black Sea, which is considered an international waterway according to OP 7.50. However, since the Project is confined to these seabed studies and does not support any physical works, the exception from the requirement for the communication to riparians was granted by the ECA Regional Vice Presidency. The memo documenting this exception stipulates that the Project-supported studies will include an assessment of potential riparian impacts of the construction and operation of the underwater cable planned under Phase 3 of the Program. The Project will finance preparatory studies for the intended infrastructure and provide TA for the preparation of the required E&S documents. This would include further strengthening of E&S capacity of GSE and ensure that all E&S aspects of the construction and operation of the proposed infrastructure are duly identified and managed. The seabed studies and siting of the landing site will have limited E&S impacts. Social impacts will relate mostly to labour and working conditions on board of the vessel(s) and the potential for disrupting fisheries-based livelihoods. Environmental risks associated with seabed studies will be modest, confined to sea water pollution from the research vessel(s) and OHS incidents at sea. These risks are well known and could be avoided by adhering to international rules of navigation, safety at sea, and pollution prevention. However, conclusions of seabed studies undertaken as part of the Project (Phase 1) and site-specific E&S instruments to be prepared for the construction of OHLs and the underwater cable will shape E&S due diligence to be applied at Phases 2 and 3. ESIA for all infrastructural elements of the Program to be carried out in Phase 1 will find out whether the planned works will affect critical marine and terrestrial habitats and will examine impacts on natural habitats; specify the extent of negative impact on flora and fauna as well as on the provision of ecosystem services; explore proximity to as well as possible overlap of the undersea cable and OHLs with other existing or upcoming pieces of infrastructure, Anaklia Port being the most important one, and discuss cumulative impacts; analyze environmental aspects of the alignment and technologic alternatives; formulate measures for addressing expected risks and adverse impacts based on the mitigation hierarchy; and lay out institutional and financial arrangements for environmental management of the construction and operation of the proposed infrastructure. Due to significant implications of possible shortfalls and errors in the seabed studies and ESIA to be undertaken in Phase 1, the environmental risk of the Project is rated High. E&S screening and scoping of the Program, covering terrestrial and marine sections of the proposed infrastructure, were undertaken during the Project preparation, the latter including preparation of the draft terms of reference (TORs) for ESIAs of the construction and operation of OHLs to be constructed in Georgia and in Romania as well as of the underwater cable. Key social risks and impacts associated with the seabed studies to be supported by the Project relate to potential disruption to fisheries and labor and working conditions on board of the vessel(s). Draft Labor Management Procedures (LMP), including workers' grievance mechanism and a template of Contractor's LMP (C-LMP) to be attached to the Bidding Documents and draft Stakeholder Engagement Plan (SEP) were produced during the Project preparation, along with the draft Environmental and Social Commitment Plan

(ESCP). E&S Scoping Study, including terms of reference (ToR) for ESIA was disclosed by the Borrower through the GSE website on November 28, 2023. Draft LMP, SEP, and ESCP will also be disclosed and consulted with stakeholders, including representatives of affected communities. ESCP will be finalized in the course of Negotiations with the Borrower, LMP and SEP - within 60 days after the Effective Date, and ToR - prior to commencing procurement of consultant services for the ESIA. During the Project implementation, draft ESIA reports for the construction and operation of OHLs in Georgia and Romania and of the undersea cable, including Environmental and Social Management Plans (ESMPs); draft Resettlement Policy Framework (RPF) covering the OHL and any impacts on livelihoods from laying down of the undersea cable; and site-specific Resettlement Action Plans (RAPs) will be produced. These documents will cover all physical activities to be undertaken as part of the Program, including those that may not be financed from the proceeds of the Bank loans to Georgia but are essential for operationalizing the underwater cable and hence, considered associated facilities for the Bank-financed operations.

ESS10 - Stakeholder Engagement and Information Disclosure Relevant

[Explanation - Max. character limit 10,000]

In general, the potential ESPIRE Program has high visibility in Georgia and in Europe and is generally viewed as a positive and welcome initiative in light of achieving energy security and greater connection between the EU and the South Caucasus. In Phase 1 of the Program, there will be no infrastructure works and the planned technical studies will not significantly affect population. Nevertheless, GSE has already drafted a comprehensive Stakeholder Engagement Plan (SEP). A core Community Liaison Team comprised of GSE staff from the Project Permissions Department, the Technical Supervision Department and the Public Relations Department take responsibility for and lead all aspects of the stakeholder engagement. To implement the various activities envisaged in the SEP, the GSE closely coordinates with other key stakeholders, such as the Ministry of Economy and Sustainable Development, Ministry of Finance, Ministry of Regional Development and Infrastructure, Ministry of Environmental Protection and Agriculture, National Agency of Public Registry, Agency of Protected Areas, Georgian National Energy and Water Supply Regulatory Commission, Communication Commission, State Hydrographic Service of Georgia, Anaklia Deep Sea Port Development Agency, Operational Technical Agency of Georgia, Maritime Transport Agency of Georgia, and civil society organizations. Under the Project, a dedicated website will be set up for the Black Sea Submarine Cable (BSSC) project to disseminate the outcomes of the ongoing feasibility study and the preparatory technical work, which offer an excellent entry point for early public outreach and citizen engagement. The dedicated website could include: (i) information on the BSSC Project's scope, activities, status, and its relevance for the power sectors of countries in the South Caucasus and Southeast Europe; (ii) explanations on the importance of RE and how the Project can support the energy transition; (iii) interactive elements that invite citizens and stakeholders to ask questions, provide feedback and inputs, and receive timely responses; (iv) a calendar for planned citizen and stakeholder engagement activities. The launch of the website will be accompanied by a public awareness-raising campaign that will include participatory consultations and roundtable discussions with civil society organizations, citizens (especially representatives of vulnerable and minority groups), and environmental organizations. The effectiveness of the citizen engagement efforts under the Program will be measured through beneficiary/community surveys carried out on a yearly basis. In addition to the BSSC project website, a multi-stakeholder group will be established to foster continuous dialogue among a variety of stakeholders and support international coordination. This group could include representatives of the countries involved in the BSSC project, stakeholders from the energy and other potentially important or affected sectors (e.g., fisheries, gas pipeline owners), as well as civil society organizations. Facilitated exchange will take place regularly (possibly biannually) and take the form of a two-way communication

through which the project is informed by inputs from the multi-stakeholder group, and stakeholders are updated about project development and have the opportunity to raise potential concerns or grievances. The Project, given its focus on seabed studies, is not expected to have disproportionately negative impact on vulnerable groups. Overall, expected vulnerable groups in the Program will be those registered as poor with the local social services; women-headed households; elder-headed households without any other household member bringing in income; and households headed by disabled people. No ethnic or religious minorities are known to be present in project areas. Vulnerable groups are likely to include low-income households and families with persons with disabilities. The alignment for the OHLs is not known and depending on which settlement they cross, there is possibility that vulnerable groups may include internally displaced persons. In 2019-2020, GSE participated in GRM strengthening capacity-building initiative delivered by the Bank. As a result, GSE has strengthened its recording and classification system of grievances and is preparing an electronic database to ensure efficient data management. GSE staff has also undergone trainings on prevention and mitigation of sexual exploitation, abuse, and harassment and received support from a SEA/SH expert in conducting service provider mapping, developing Codes of Conduct, and developing SEA/SH-sensitive grievance protocol. GSE's CLOs work with local communities to identify and record grievances. GSE allows multiple channels for grievance intake. In 2022, GSE also developed a s software for resettlement that also functions as grievance collecting and monitoring tool. The SEP will summarize and build on any consultation activities that have already been conducted. The ongoing Energy Supply Reliability and Financial Recovery Project is being implemented in Samegrelo region, and GSE has conducted stakeholder engagement with some of the local communities there. To support stakeholder engagement, GSE has produced two types of communications materials/brochures for awareness-raising on the Program SEP, GRM, and health risks from electric magnetic fields. Social media is being handled by the Public Relations Department of GSE, with frequent posting of relevant information on their Facebook page. However, recommendation of the ESMS Action Plan is to consider development and adoption of the corporate Stakeholder Engagement Plan for a more systemic approach to public relations. To ensure capacity building on GBV, the human resources department of GSE worked with a qualified expert to deliver awareness sessions; prepare and adopt Code of Conduct and protocol for sensitizing on GRM to address SEA/SH complaints; and introduce a mechanism to ensure that such complaints are dealt with confidentially and anonymously.

ESS2 - Labor and Working Conditions Relevant

[Explanation - Max. character limit 10,000]

Project workers include direct workers (GSE's core staff assigned to work on the Project and a few consultants hired on part-time basis), and employees of contractors and their sub-contractors. The exact number of Project workers who will be engaged is currently not known. In addition to GSE staff, a company will be hired to conduct geological, geophysical, and geotechnical studies, which will require deployment of specialized vessel(s) and personnel. Community workers will not be engaged. The minimum age for Project workers will be 18 years. GSE has drafted LMP which provides details on specific OHS challenges associated with marine activities under the ESPIRE Program. These include malfunctioning or mishandling of specialized equipment; person overboard incident; fire and explosion; enclosed space accidents; falling objects; slips, trips and falls; collisions and groundings; and electrocution. OHS risks associated with the construction of OHLs in mountainous terrain under Phase 2 of the Program are well known from the similar activities undertaken under past and ongoing projects. The most important aspects calling for attention are disciplined use of harnesses and other protective gear while working at heights, standard and reliable scaffolding, safe operation of machinery, safe handling of electric wiring and equipment (especially during test powering of the

stringed OHL), proper warning and limiting signage at worksites, and relevant training of personnel. Part of works may be undertaken in remote and poorly accessible terrain. If an accident occurs in such locations, availability of proper medical kits and presence of staff trained in delivery of emergency medical aid may be a lifesaver. Based on the experience under the Bank-financed infrastructure projects, OHS management will be a challenge requiring much effort from GSE and tight oversight by the Bank. Georgia's OHS regulatory framework, including institutional set-up, has been upgraded and reorganized not long ago, and national capacity to implement it requires significant enhancement. Law on Labor Safety, passed in 2019, provides adequate frame for OHS management and the Labor Inspection Office under the Ministry of Internally Displaced Persons from Occupied Territories, Labor, Health, and Social Affairs is mandated to oversee safety at worksites and working conditions of workers through the specially accredited staff. Regulations are in place for identifying, recording, and reporting on OHS incidents, and the list of activities entailing heavy labour and working under high risk and hazardous conditions is also formally established for the purposes of closer monitoring. However, limited manpower, experience, and technical means prevent the Labor Inspection Office to have sufficient presence at the multitude of worksites all over the country and to invest sufficient effort in proactive action. Therefore, ensuring good OHS discipline and preventing incidents will greatly depend on GSE's own due diligence. In-house capacity of GSE for OHS management remains in the need of considerable enhancement. The national Labor Code includes provisions on non-discrimination, freedom of association, minimum employment age, OHS and dispute resolution. However, the enforcement of workers' rights under the Labor Code is weak. In line with the EU-Georgia Association agreement, Georgia has introduced some mechanisms of OHS inspection, but enforcement and the capacity of the Labor Inspectorate remains low. Draft LMP produced by GSE for the Project addresses potential labor risks, including OHS risks. Contractors, when selected, will prepare their own labor management procedures (C-LMPs), including the GRM for their own workers (contacted workers) in line with the requirements of ESS2, based on the principles, procedures and responsibilities laid out in GSE's LMP. The risks associated with GBV, and child or forced labour are considered low for all phases of the Program. Risks related to labour and labour influx relate mainly to the works for the OHL and onboard the vessel(s) conducting sea-bed studies for the cable.

ESS3 - Resource Efficiency and Pollution Prevention and Management Relevant

[Explanation - Max. character limit 10,000]

Waste management will not be a challenge during the Project preparation, as it does not include civil works. Household waste and other refuse generated on the vessel(s) deployed for undersea studies will be stored and disposed according to standard maritime procedures. Contractor undertaking seabed studies will be requested to produce on-board waste management plan in line with the good international industry practice. Depending on the type of vessel(s) to be used for cable laying, operational and accidental fuel spills may need to be considered and risk of their occurrence mitigated in line with the recommendations under relevant international treaties concluded under the auspices of the International Maritime Organization. ESIAs for terrestrial and marine works planned for Phases 2 and 3 of the Program to be undertaken as part of the Project will explore specific risks and impacts associated with generation of various types of waste, such as excess earth and rock, cleared trees and other vegetation, waste from servicing of construction vehicles and machinery, household waste and wastewater generated at construction camps, etc., and will provide measures for handling these risks based on the mitigation hierarchy. While undertaking works under Phases 2 and 3, contractors will be obligated to commit to the development of a detailed Waste Management Plans, as part of C-ESMPs, prior to mobilization to the site, having it approved by the GSE, and implementing throughout the contract life. GSE will operate OHLs constructed in Georgia.

No significant streams of waste are expected in the operation phase. Vegetation trimming under the OHL wires will be undertaken on regular basis and no large volumes of organic waste will accumulate, therefore. Herbicides are not used for vegetation control under OHLs in Georgia. The type of works to be undertaken at sea while placing the cable on the bottom are known not to cause much pollution. As for the associated facility, construction waste management during terrestrial works in Romania is likely to be less challenging because this country is already a long-time member of the EU.

ESS4 - Community Health and Safety Relevant

[Explanation - Max. character limit 10,000]

Community health and safety risks relate mainly to activities to be financed under Phase 2. Based on the country experience, public perception of health risks coming from Electro Magnetic Fields (EMF) existing around OHLs and the distances to which the radiation may be emitted by power lines is often distant from the scientifically proven facts. Lack of knowledge and trust among local population has fueled public pushback and caused issues during construction of OHLs in the past. Georgia's national regulatory framework requires transmission lines of various capacity to have buffer zones with no artificial structures and no residence allowed inside. Standard width of these buffer zones is greater than the distance at which EMF impacts may be felt. However, there will be a need to educate local communities on the above in a simple, clear, and convincing manner. This is captured in the SEP and will be achieved through a communication campaign. For the previous projects, GSE has produced print and video content to address the concerns about EMF. Under TGSP, a high-level communications specialist was hired who developed the tailored communication plan and recorded videos with leading energy experts talking about EMF. The printed booklets were distributed by CLOs in target communities. Landslides triggered by construction works on the slopes is another concern often voiced by people residing in proximity of corridors of linear infrastructure. This concern is valid due to general instability of slopes and multitude of landslide-prone areas in west Georgia. At higher altitudes, vegetation clearance on hill and mountain slopes may also increase the likelihood of avalanches in winter and threaten safety of communities residing at foothills. Increasing occurrences of extreme weather conditions (e.g., heavy rainfall, heatwaves causing rapid snow melting, etc.) as a result of climate change further increase risks of flooding, mudflows, and landslides around the construction sites where tree-cutting and excavations are being undertaken. Therefore, exposure of communities to such risks of uphill construction works expected under Phase 2 of the Program will be carefully examined and mitigation measures will be included in the ESMPs to be produced as part of ESIA to be supported by the Project. Disruption to livelihoods related to the construction and operation of the BSSC project infrastructure can also impact well-being in particular vulnerable persons and households that may be disproportionately impacted. Such risks, identified through the E&S Scoping Study, will be considered during the preparation of RPF, will be further assessed as part of the ESIA and addressed in ESMPs. The SEA/SH risk is considered low. Awareness of community health and safety risks, including on SEA/SH, and systems in place to address these will be communicated to workers and any communities neighboring work sites. The details of the campaign are included in the draft SEP and will be captured in the LMP for workers.

ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement Relevant

[Explanation - Max. character limit 10,000]

The Project doesn't lead to any resettlement impact, as it mainly consists of technical studies. Resettlement-related risks and impacts are likely to result mainly from the construction of OHLs (Phase 2) and, to a lesser extent, from laying of the undersea cable and arrangement of its landing points (Phase 3). The exact scale and scope of land acquisition and relocation required for the construction of OHLs (Phase 2) is currently not known, since the exact locations of towers, as well as the exact location of the landing point of the cable or the converter station in/around Anaklia will be determined later. If the cable landing point or the converter station will be placed in the area where the Government has already acquired land for the purposes of Anaklia port, the Bank would have to undertake a social audit of the land acquisition process. Any potential disruptions to fisheries, which will be very temporary, as a result of the seabed studies will be identified as part the engagement for the SEP and measures identified to avoid and minimize. To understand and manage resettlement risks of the Program, an RPF will be prepared as part of the Project in line with requirements of ESS5, based on the information collected for the preliminary route and based on the experience from the two Bank-financed operations.

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources Relevant

[Explanation - Max. character limit 10,000]

Minimal impacts on biodiversity and natural resources are expected from the Project implementation, as it does not imply any physical works and has no actual environmental footprint. Seabed studies to be supported by the Project will comprise of geophysical and geotechnical investigations. The former implies seabed scanning with high-tech equipment without physical contact. The latter requires collection of samples from the sea floor using specialized devices. Sampling will not require deployment of heavy drilling machinery. Instead, less invasive equipment with localized impacts will be used. Seabed studies will be performed in compliance with the Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention), decreasing risk of negative impact on marine biodiversity. Research vessel(s) will be obligated to strictly follow rules and standards for the safety of navigation established by the International Maritime Organization of the UN, also minimizing risk of marine habitat pollution with spillage resulting from navigation accidents. Geotechnical studies to be undertaken as part of OHL ESIA may include vegetation clearance on a few small sample plots for drilling. If this includes tree cutting, it will be undertaken based on the permission and under oversight from the National Forest Agency. Should any sampling be required within marine of terrestrial parts of Kolkheti Protection Areas, special permission and close control from the Agency of Protected Areas will be mandatory. Construction of OHLs (Phase 2) will affect forest ecosystems, including natural habitats and areas of high conservation value. It is also expected that parts of the OHL corridors will be poorly accessible due to lack of existing road infrastructure. Environmental footprint of construction will be significant in such locations. ESIA will identify importance of the affected forest ecosystems for supporting populations of rare/threatened animal and plant species and will identify presence any critical habitats in the proposed OHL corridors. OHL alignment will be adjusted to avoid/minimize impact on the most sensitive receptors and avoid entry to the natural areas allocated for protection to the extent feasible. Access roads will also be designed with full consideration of environmental impacts, confines clearing of vegetation to the designated corridors of OHLs and access roads, prevents uncontrolled movement of construction machinery and vehicles outside of these corridors, and restricts environmentally damaging behavior of contractor's personnel. Presence of and adherence to the agreed-upon arrangements for on-site storage and final disposal of construction waste, use of excess material for backfilling, and timely reinstatement of landscape around each OHL tower and service road will be critical to keep residual biodiversity impacts low, and to create enabling environment for natural revegetation of the affected sites.

Detailed plans for landscape restoration must be produced by contractor as part of C-ESMP, be approved by GSE in consultation with the Bank, and enforced during construction. In Phase 3, works at the cable landing point may damage sand dunes, wetlands, and other fragile elements of the valuable coastal landscape. Marine ecosystem in proximity to the shoreline is also known to be important for supporting aquatic life (including the high-profile species of dolphin) and vulnerable as well. Depending on the selection of the landing point location, it may be in immediate proximity to terrestrial and marine parts of the Kolkehti Protected Areas or enter their boundaries. Impact on the wetlands of international importance protected under the Ramsar convention, Emerald Network sites, and natural heritage sites protected under UNESCO is not excluded either. ESIAs of OHLs and underwater cable, to be undertaken contemporaneously with the design, will identify impacts of various types of habitats and species and prescribe relevant mitigation measures. If impacts are significant and mitigation / compensation measures are complex, ESIA report may include Biodiversity Management Plan. Development and provision of biodiversity offsets may also be required. Information on the likely biodiversity impacts will inform the design of the infrastructure so that exact alignment minimizes impacts to the extent feasible. Coastal and forest biodiversity impacts of the ESPIRE Program are likely to generate much attention from the civil society of Georgia.

ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities Not Currently Relevant

[Explanation - Max. character limit 10,000]

This standard is not relevant as there are no Indigenous Peoples in Georgia who meet the definition provided in this standard.

ESS8 - Cultural Heritage Relevant

[Explanation - Max. character limit 10,000]

Impacts on cultural heritage are not expected from the Project implementation. Once the OHL corridors are identified, the area will be screened for the presence of tangible cultural heritage and alignment will be adjusted to void/minimize impacts. The latter may include (in Phase 2) noise and vibration from the movement and operation of construction machinery, presence of work force, etc., as well as permanent impact on the visual/aesthetic view and tourist experience during visitation of these heritage monuments. Mitigation measures will be worked out as part of the ESIA. Georgia's coastal area has been inhabited since time immemorial and many unique artifacts have been retrieved by archaeological expeditions over the years. There is a high likelihood of a chance finds in the course of earth works to be undertaken as part of ESPIRE Program (Phases 2 and 3). Therefore, the ESIA report will include change find procedures and respective guidance for contractors will be included in the ESMPs. Whether placement of towers and other OHL infrastructure will affect intangible cultural heritage, will be explored during the ESIA.

ESS9 - Financial Intermediaries Not Currently Relevant

[Explanation - Max. character limit 10,000]

Project implementation will not require involvement of any financial intermediaries.

B.2 Legal Operational Policies that Apply

OP 7.50 Operations on International Waterways	Yes
OP 7.60 Operations in Disputed Areas	No

B.3 Other Salient Features

Use of Borrower Framework No

[Explanation including areas where "Use of Borrower Framework" is being considered - Max. character limit 10,000]

The Borrower's framework will not be used neither for the Project not for the subsequent phases of the Program. However, Program implementation will comply with all relevant national legal and regulatory requirements.

Use of Common Approach Yes

[Explanation including list of possible financing partners – Max. character limit 4,000]

Common approach will not be applied to the Project. The involvement of additional financiers is expected in works for laying the undersea cable which is expected in Phase 3. This decision is yet to be undertaken by the Government of Georgia and its development partners. At that point, a common approach will be considered depending on whether the World Bank and other bilateral/multilateral agencies are involved in financing the undersea cable and what is the modality of such financing. Decision on sources for funding for the construction of on-land infrastructure in Romania is yet to be taken.

B.4 Summary of Assessment of Environmental and Social Risks and Impacts

[Description provided will not be disclosed but will flow as a one time flow to the Appraisal Stage PID and PAD – Max. character limit 10,000]

All Environmental and Social Standards (ESSs), other than ESS7 on Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and ESS9 on Financial Intermediaries, are considered relevant for the Project. OP 7.60 on Projects in Disputed Areas is not triggered. OP 7.50 on Projects on International Waterways is triggered and an exemption from the requirement to communicate to riparians is granted by ECA Regional Vice Presidency.

The environmental risk of the Project is rated High. Physical activities under the Project (Phase 1) will be confined to seabed investigation, and the associated environmental risks are expected to be moderate. However, E&S Scoping Report producing during the Project preparation as well as technical studies to be undertaken in Phase 1, and site-specific E&S instruments to be prepared for works planned n Phases 2 and 3, will shape E&S risk management during future construction and operation of the submarine cable and OHLs. Because physical works to be undertaken in Phases 2 and 3 are likely to carry high environmental risk, the Project (Phase 1) is also rated high on environmental risk. Part of works for the construction of OHLs in Phase 2 of the Program may have to be undertaken on steep slopes with natural forest ecosystem with limited existing access roads. Vegetation clearance for the right of way of the OHLs and access roads will affect the natural forests, disturb the wildlife, and generate spoils (excess earth) requiring disposal, and may trigger landslides. Construction of foundations and erection of towers, including stringing, in the mountainous terrain will be

challenging, with significant occupational health and safety risks. The extent of the impacts will become known at the detailed design stage and the alignment of the proposed OHLs will be finalized considering the E&S implications of various routing alternatives. An Environmental and Social Impact Assessment (ESIA) to be undertaken as part of the Project (Phase 1) will inform the detailed design to minimize negative impacts to the extent feasible.

Seabed studies, also to be undertaken during Project (Phase 1) implementation, will provide technical information required for exhaustive understanding of environmental dimensions of laying the undersea cable in Phase 3 of the Program. It is known that construction of the deep sea section of the submarine cable will imply its dropping to the bottom with moderate physical intervention to the seabed landscape. However, in the shallow waters, the cable will require protection against anchoring and trawling. Depending on the seafloor structure, this would be achieved by laying the cable into trenches dug on into the seafloor or placing it into the conduit pipes. The former method is known to be cheaper but more damaging for benthic environment, while the latter is more expensive and less impactful. Technology alternatives will be considered at the ESIA stage and will depend on the selection of the cable landing point. The extent of mandatory separation between the upcoming Anaklia seaport and the undersea cable will define northern limit for the landing point. Environmental risks associated with works in shallow waters and on the shoreline will include increased turbidity of seawater, damage to benthic flora/habitat, and disturbance of sea mammals and fish, including endangered species. These risks may be amplified in case works are to be undertaken not only in the immediate proximity to Kolkheti Protected Areas, but within their boundaries as well. In the course of the Project preparation (since the Concept stage), alternatives to the cable routing that do not pass marine protected area have shrunk based on the incoming additional information about the design of Anaklia deep sea port to be constructed adjacent to the submarine cable corridor, confirming high environmental risk of cable laying. Scope and nature of terrestrial works to be undertaken in the territory of Romania are yet to be identified in cooperation with the Romanian stakeholders of the Project and the Bank staff engaged in Romania. Works on this associated facility in Romania will be regulated by the national legislation of the EU member state of Romania and the external financier, if involved.

The social risk of the Project is classified as moderate. The seabed studies and siting of the landing point will have very limited social impacts relating to labor and working conditions on board the vessel and the potential for disrupting fisheries-based livelihoods. The construction and operation of OHLs will mainly have risks related to minor permanent and temporary land acquisition or easement restrictions affecting livelihoods; labor and working conditions risks during construction; community health and safety risks during construction and operation; SEA/SH risks during construction; and risks relating to inadequate stakeholder engagement and grievance management. Similar to the social risks for the seabed studies, the laying down of the cable will have very limited social impacts mainly relating to labor and working conditions and the potential for disrupting fisheries-based livelihoods. The social impacts are expected to be mostly temporary and predictable and can be managed with adequate management plans, and human and financial resources.

In preparation of the Project, the following documents were produced before appraisal: (i) Scoping Study for a detailed understanding of the risks, expected impacts, and measures to address them and ToR for the ESIA of the Georgia and Romania OHLs and the underwater cable; (ii) draft Labor Management Procedures; (iii) draft Stakeholder Engagement Plan, including Grievance Redress Mechanism; and (iv) draft Environmental and Social Commitment Plan. The Scoping Report, including ToR, was disclosed by the Borrower through GSE website on November 28, 2023. Draft LMP, SEP, and ESCP will also be disclosed and discussed with stakeholders. LMP and SEP will be finalized and adopted within 60 days after the Effective Date, while ESCP will be agreed upon and finalized during Negotiations. A Resettlement Policy

Framework, site-specific Resettlement Action Plan(ss), and ESIA for the OHLs and the underwater cable will be developed during Project implementation, when the exact scope and scale of impact become clear.

C. Overview of Required Environmental and Social Risk Management Activities

C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by implementation?

[Description of expectations in terms of documents to be prepared to assess and manage the project's environmental and social risks and by when (i.e., prior to Effectiveness, or during implementation), highlighted features of ESA documents, other project documents where environmental and social measures are to be included, and the related due diligence process planned to be carried out by the World Bank, including sources of information for the due diligence - Max. character limit 10,000]

Project financed activities will not require development of additional documents to assess and manage its environmental and social risks during implementation, because LMP, SEP, Grievance Mechanism, and ESCP were developed during the Project preparation and are sufficient for managing E&S risks of studies to be carried out under the Project. The Project will not support any physical works. However, Project implementation includes the preparation of Resettlement Policy Framework, Resettlement Action Plans, and Environmental and Social Impact Assessment Reports for works to be undertaken in the next phases of the Program. These documents will be prepared following relevant ESSs and TORs developed in the Project preparation phase.

III. CONTACT POINT

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