Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)
## BASIC INFORMATION

### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
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</thead>
<tbody>
<tr>
<td>Sierra Leone</td>
<td>P160719</td>
<td>Extractive Industries Technical Assistance Project 2</td>
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<table>
<thead>
<tr>
<th>Region</th>
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<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
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<td>22-Nov-2017</td>
<td>Energy &amp; Extractives</td>
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<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
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### Proposed Development Objective(s)

The proposed project development objective is to strengthen governance, knowledge, and sustainability of the extractives sector in Sierra Leone.

### Components

- **Component A**—IMPROVE MINERAL SECTOR GOVERNANCE
- **Component B**—ENHANCE GEOLOGICAL KNOWLEDGE
- **Component C**—ARTISANAL MINING
- **Component D**—PROJECT MANAGEMENT
- **Component E**—CONTINGENCY FOR DISASTER RISK RESPONSE

### Contingency Financing (in USD Million)

<table>
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<th>Financing Source</th>
<th>Amount</th>
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<tr>
<td><strong>Total Project Cost</strong></td>
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### Environmental Assessment Category

- **B - Partial Assessment**

### Decision

The review did authorize the preparation to continue
B. Introduction and Context

Country Context

1. Sierra Leone has a population of about 7 million with approximately 39.1 percent living in urban areas and the urbanization rate is projected to reach 43.8 percent in 2030. Sierra Leone failed to achieve most Millennium Development Goals (MDGs) by 2015. Basic infrastructure is lacking throughout the country and living standards remain very low. Sierra Leone ranks 179th out of 188 countries on the UN’s 2016 Human Development Index. Poverty remains widespread with more than 50 percent of the population living on less than US$1.25 a day, and unemployment and illiteracy levels remain high, particularly among youth. It is obvious, that to achieve the Sustainable Development Goals (SDGs) by 2030, the Government must improve the development work across all sectors.

2. Strengthening the management of mineral resources is identified in the SCD as one of the four pathways by which Sierra Leone can accelerate growth and reduce poverty. This is the overarching rationale for the development of this follow-on Extractive Industries Technical Assistance Project.

3. From 1991-2002, Sierra Leone suffered a devastating civil war that was fueled in great part by conflicting investment interests in extractive industries, specifically alluvial diamonds. From the end of the conflict to 2014, the country’s political and economic landscapes progressively improved, benefiting from improved policies and economic recovery of extractive industries, triggered by booming commodity prices. Many public services were restored, investors returned, and new investors showed interest. Regional transport corridors and infrastructure linkages were also pursued.

4. Sierra Leone’s period of steady growth ended in 2015, as the country was severely affected by the twin shocks of the Ebola outbreak and the downturn in international iron ore prices. The economy contracted more than 20 percent due to the spread of the Ebola epidemic and after both iron ore operations ceased production due to low international prices. Iron ore production declined by 84 percent in 2015 and growth of the rest of the economy slowed to near zero, with the services sector being particularly hard-hit. Growth resumed in 2016 following the end of the Ebola outbreak and the return to operation of the largest iron ore mine.

5. Despite favorable geography and abundant resources, and after hundreds of millions of dollars in soft loans, grants and sound technical approaches, Sierra Leone continues to have development outcomes that rate among the worst in the world. The 2017 SCD argues that without the two foundational requirements—governance and fiscal space—this situation is unlikely to change. If the foundational requirements can be addressed, the priority technical interventions proposed here have the potential to unlock accelerated growth, reduce poverty and improve the lives of the Sierra Leonean population. Sierra Leone’s main assets are abundant resources and a young and dynamic population.
6. **The most recent Poverty Reduction Strategy Paper (PRSP) (2013 to 2018) has set the ambitious goal of achieving middle income country status by 2035.** Reflecting the positive economic advances in 2002-2014, the “Agenda for Prosperity”¹ (AfP) has established annual per capita expenditure growth targets of 4.8 percent. The SCD notes, however, that per capita growth of this magnitude would require Gross Domestic Product (GDP) growth of around nine percent annually, substantially higher than the average 6.4 percent achieved between 2003 and 2013. In addition, while recognizing that management of the economy had been effective in achieving growth and macroeconomic stability, the 2013 International Monetary Fund (IMF) program review also cautioned that the small revenue base and persistent pressures on government expenditure could threaten this stability. This was subsequently demonstrated by the derailing of the government’s economic program during the recent Ebola epidemic.²

7. **Though Sierra Leone has effectively been Ebola-free since November 2015, the epidemic had devastating consequences for the country.** Economic outcomes deteriorated sharply and growth declined dramatically from 4.6 percent in 2014 to -21.1 percent in 2015. The country budget was under extraordinary pressure, and government authorities had difficulty funding routine expenditures in a timely manner. The country currency depreciated and banking sector vulnerabilities also increased. More than a year after these shocks, difficulties persist but the economy showed signs of recovery in 2016. Despite a slight economic recovery, future growth prospects remain uncertain caused by the continued volatility in commodity prices hindering the development of the mineral sector and an extremely constrained fiscal environment.

**Sectoral and Institutional Context**

8. **Sierra Leone has substantial mineral and potential oil reserves and production capabilities,** which have the potential to underpin much higher GDP growth rates, notwithstanding the current slump in the minerals sector due largely to the downturn in global prices and higher cost structures in the country. Apart from iron ore, the country has proven deposits of bauxite, chromite, diamonds, gold, platinum and rutile with several foreign operators already involved in most of these sub-sectors. All operators are being challenged by current adverse world supply and demand conditions, and it is highly likely that these conditions will persist for the foreseeable future.

9. **The country is the world’s third largest producer of rutile, tenth largest producer of diamonds, a surging iron ore exporter and an oil exporter in waiting.** Foreign direct investment (FDI) net inflow as a percentage of GDP, buoyed by rising global mineral prices, grew steadily from 2008 until 2011, when it reached a peak of 24 percent growth. In 2012 and 2013, Sierra Leone achieved GDP growth of 15.2 and 20.7 percent, respectively, faster than any other economy in Sub-Saharan Africa. The known mineral and (offshore) oil prospects are sufficiently promising to suggest the development of the extractive industries sector in the future; to date these developments have been conducted in a virtual geo-data vacuum resulting in ad hoc mapping, geological uncertainty and likely miscalculation of significant extractives wealth. Based on regional geo-data information, significant development potential lies in the modern investigation of Sierra Leone’s geology.

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¹ The Agenda for Prosperity is Sierra Leone’s Third Generation Poverty Reduction Strategy Paper covering the period 2013-2018.

² The Bank estimates that GDP declined by more than 20 percent during the period 2014-2015, leading to losses of some US$1.4 billion and a collapse of domestic revenue. Macroeconomics & Fiscal Management, Recent Economic Developments (September 2015).
10. **The World Trade Organization** estimates that the mining sector in Sierra Leone accounts for about 90 percent of export revenues annually, comprising mainly diamonds and iron ore. Mineral exports generate most foreign exchange with gem-quality diamonds accounting for nearly half of exports and for high rates of economic growth. In 2013 the extractive industries in Sierra Leone accounted for 23 percent of GDP, of which iron ore accounted for around two-thirds. In 2014, there was a dramatic decline of global iron ore prices (to around US$70/ton) due to a substantial increase in world supply and a slowdown in Chinese demand, which in turn led to a hiatus, and then much lower production of iron ore in Sierra Leone.

11. **Ebola and global commodity prices impacts.** The impact of Sierra Leone’s Ebola outbreak on extractive industries led to some expatriate workforce reductions, but production largely continued. The crisis did create significant challenges for supply chains, including the declaration of force majeure by subcontractors and restrictions on air and sea transport access for needed imports. Positive outcomes of the crisis have been an extreme heightening of citizen awareness and Government response preparedness, including deeper reflection on the potential of market interruptions to the economy. At the same time, low commodity prices jeopardized the viability of extractive industries, specifically mines, and the sector’s collective viability.

12. **These events have confirmed the critical role of Sierra Leone’s minerals sector in the country’s economy, generating significant revenues, contributing to job generation, strengthening economic and environmental governance, and fostering improved infrastructure, education and other ancillary economic activities.** It is estimated that more than 400,000 Sierra Leoneans are directly employed in the country’s extractive industries sector (government and mining operations), with approximately 300,000 employed in artisanal mining operations. Despite recent declines, primarily attributed to fallen commodity prices, long-term global demand for minerals and oil will mean that the extractive industries will continue to be an important contributor for Sierra Leone’s economic recovery, development and growth. Now that iron ore has reached a price of over US$80 per ton, there is evidence that iron ore companies have started production again.

13. **Extractive Industries Governance.** The country has made commendable efforts to modernize the legislative framework for the sector. Centralized institutional reform has produced some successes in the country’s extractives sector, but has not yet created the institutional capabilities or incentives to sustainably manage impacts. The Ministry of Mines and Mineral Resources (MMMR) remains the responsible government agency for policy-making and the management of the minerals sector; the Petroleum Directorate of the Office of the President regulates oil and natural gas. The newly established National Minerals Agency (NMA) plays the role of a semi-autonomous regulator, with a clear emphasis on technical strengths, and serves as the lead technical group to implement all Government geological survey, mining cadastre and inspectorate functions. The 2009 Mines and Minerals Act and 2011 Petroleum Act provide legislative grounding for sector operations but in today’s market context, the legislation is rife with inconsistencies leaving Government, license holders and citizens to rely on highly interpretive and often personalized agreement on operating terms.

14. **World Bank (WB) Engagement.** With support of the World Bank’s Mining Technical Assistance Project (MTAP), approved in FY09, which received an additional financing to broaden its scope in FY11 and was renamed the Extractive Industries Technical Assistance Project 1 (EITAP1), the Government embarked on a series of institutional and administrative reforms to refocus the role of the State and remove inefficient and discretionary regulation. The main objective of the EITAP1 was to support the government in its institutional strengthening and further enhancement of extractives sector regulatory framework. Under this support, Sierra
Leone advanced in the reforms necessary to improve governance in the mining sector. New legislation, institutions, capacity building and increased transparency have attracted new investments to the sector allowing its revenues and associated activities to make significant contributions to the country’s economic growth. Among the most important achievements was the creation of the National Minerals Agency (NMA), the sector’s regulatory and survey institution. The NMA attracted young and capable professionals that have maintained the provision of reliable and professional services.

15. **EITAP1 also supported the preparation of a new Minerals Policy (MP) and Minerals Policy Action Matrix, and a new Artisanal Mining Policy (AMP) with accompanying Action Matrix.** Both the MP and AMP are expected to be finalized and approved in 2017. The project also supported legislation that is currently pending review and approval such as the “Petroleum and Gas Law”.

16. **In the present context, Government recognizes that absent regulatory reform and attendant capacity building, it will be impossible to effectively manage the sector, adequately capture revenues, safeguard the environment, and ensure long-term benefits to the country.** Continued policy, legal and institutional reform matched with human and institutional capacity building and practical strategic planning are required if sustained extractive industries’ growth is to be leveraged. The Core Minerals Policy of 2003 is obsolete and does not capture most of the recent global and regional trends in the minerals sector. The new Minerals Policy for Sierra Leone reflects the role expected of the sector as a driver of economic growth, taking into account citizens’ expectations, to capture the imperatives of sub-regional collaboration, outline inclusive, transparent, and streamlined governance measures, ensure social protection, promote the shared use of infrastructure with appropriate linkages within and outside of Sierra Leone, and incorporate the principles of the African Mining Vision (AMV) adopted by African Heads of State in 2009.

17. **The country also recently took further steps on transparency.** Sierra Leone maintained its EITI (Extractives Industries Transparency Initiative) compliant country status by publishing its EITI report for 2014 before the extended deadline of April 2017. Sierra Leone also published a beneficial ownership roadmap and has begun collecting beneficial ownership information from the 20 largest extractive taxpayers. Sierra Leone became one of 16 national governments that have adopted the open data charter. Lastly, Sierra Leone has continued to store information on revenues generated from mining companies on its Online Repository, which contains all mining licenses and payments, published directly from the mining licensing system at the National Minerals Agency. However, access to the portal is still not available to the public and wider civil society.

18. **There also remain certain EITI implementation areas that will benefit from clarified institutional oversight including the promotion of investment and handling of grievances.** The EITI was expected to play a more proactive role in the extractives sector, but to date, its impact has been limited, and further enhancement of activities aiming to increase transparency in the sector is required. It is important that EITI mechanisms be integrated into existing governance frameworks to limit duplication of activities and build comprehensive measures for increased transparency.

19. **Social impacts.** Despite myriad reforms, breaching historical enclaves remains a challenging proposition in Sierra Leone’s post-conflict environment. Legacies of war remain in political factions, prioritization of social relief, and development preferences. Legitimized large-scale iron ore mining, though still in relatively early operational stages, is generating revenues but has yet to tangibly impact communities or broader social improvement. In particular, illicit diamond and gold mining has similarly failed to provide more than sub-par wages to local community members on whom little factual data has been gathered. It is known that these
workers are typically seasonal, work without contract typically following a “produce or perish” payment system, and are members of the local mine community. Some migration of miners is emerging with a shift to gold mining as diamond deposits are depleted. Virtually no tenure-secure jobs are accessible to limited local skill sets and, competing with migrant labor (some foreign), local communities have generally failed to secure employment benefits on the scale expected. While safeguarding revenues for economic growth is a primary concern, so too is realizing the broader development benefits that may be garnered from the extractives sector as well as mitigating the negative impacts of sector developments. Sierra Leone, like its neighbors in the Mano River Union, has historically witnessed that mining results in “growth without development.” Local grievances continue, revolving around ineffectually mitigated land and compensation claims, environmental and social impacts, exclusion from expected employment opportunities, and elite capture of local benefit sharing.

20. **Environmental Management.** Over the years, all categories of mining activities have operated under less than ideal environmental standards and have flagrantly neglected their mine rehabilitation responsibilities due to lack of clarity in the legal and regulatory frameworks as well as limited inspection of operations. This has resulted in unproductive land, deforestation, degradation with biodiversity loss, and water impacts due to dredging. To address this EITAP1 provided support to a series of activities aiming to fill legislative gaps as well as provide much-needed capacity building to the NMA as the mining regulatory body, as well as to the Environment Protection Agency (EPA). The project prepared a Strategic Environmental and Social Assessment (SESA), which had as its main objective to propose recommendations for the resolution of the critical environmental and social issues, as identified by key stakeholders. These issues needed to be confronted for mining sector reform to be sustainable and to contribute to long-term development of affected communities and Sierra Leone. As a result of the recommendations from the SESA, a series of laws and regulations were drafted and approved: (a) Mines and Minerals Operational Regulations passed into Law on October 14, 2013; (b) Social and Environmental Regulations passed into Law on October 14, 2013; (c) Precious Minerals Trading Act approved by Cabinet in 2015; and (d) Resettlement Policy has been the subject of studies and consultation in 2014, including a major exercise with affected communities in Lunsar, and was finalized. Despite the many advances, capacity is still lagging and needs to be addressed. EITAP1 also supported a baseline study to provide strategic information on progressive measures to ensure adequate mine closure and land rehabilitation due to mining activities around the country. Its objective was to provide the necessary tool to propose measures to mitigate or reverse land degradation in mining communities. It established social, environmental, legal and operational baselines with respect to compliance with the mine closure requirements, as stipulated in the Mines and Minerals Act.

21. **Artisanal Mining.** In Sierra Leone, artisanal mining activity is widespread. The country has long been associated with artisanal diamond mining, brought to the world’s attention through its protracted civil war in the 1990s. Today, an estimated 80 percent of Sierra Leone’s diamonds originate from artisanal workings, mostly in Kono District and Kenema District. The country also has a burgeoning—albeit, poorly analyzed—artisanal gold mining sector. Both artisanal diamond and gold mining have become inseparable, however, in recent years: a growing number of individuals engage in the two activities simultaneously. Although the precise legal definitions of mine scales could be strengthened, artisanal mining is recognized to be a poverty-driven enterprise that is conducted using rudimentary tools and ad hoc mining methodologies. It is clear throughout Sierra Leone that artisanal mining impacts on local livelihoods are tremendous albeit informal.

22. Alongside larger-scale extractives activity, Government is continuing to develop an approach to manage the positive and negative impacts of Artisanal Mining (AM) and other local livelihoods. Estimates from 2010 suggest that there are between 300,000 and 400,000 artisanal miners working in Sierra Leone, compared to
approximately 14,000 employed in large-scale mines. Refinement of how “small-scale mining” is defined is essential in the current context where illicitly obtained, multiple holdings of artisanal licenses, including by single foreign entities, effectively translates into a small-scale mining operation but is beholden only to artisanal legal (and environmental) requirements, of which there are few. In addition to significant direct employment, in Sierra Leone evidence reflects that artisanal mining generates considerable indirect employment, particularly in agricultural production. The NMA estimates that at least 50 percent of artisanal mining in Sierra Leone is ongoing without a valid license and that the sector is under-regulated; “rush” mining (temporary, immediate discoveries) in protected areas and elsewhere contributes to harmful environmental and social impacts that are not adequately understood or addressed. Alluvial diamond mining underpinned earlier local patronage systems and, as recently as 2006, accounted for upwards of 80 percent of Sierra Leonean diamond exports. But, as commodity price trends vacillate and deposits are depleted, artisanal miners have necessarily moved back and forth between alluvial diamond mining and higher-value propositions such as gold mining. These shifts in activity and geography entail changing impacts, and dialogue on how to situate the new Artisanal Mining Policy within a broader Mineral Policy is ongoing.

23. **The Ebola outbreak did not have a long-lasting significant impact on the large-scale mining sector in Sierra Leone, but the effects on the artisanal mining sector were significant**, mostly related to the increased number of women who have turned to mining after being widowed and having to provide for their families or even extended family members. A recent joint IFC/WB study on Women and Mining clearly shows that link. EITAP2 will be supporting some recommendations from that report once the report is finalized. The EITAP2 Project Preparation Advance is already financing an alternative livelihoods study to propose concrete activities to support mining communities with a special focus on women and youth.

24. **Baseline Study on Artisanal Mining.** Although it is widely agreed that the artisanal mining sector in Sierra Leone is significant in terms of numbers of artisanal miners and production quantities, there is only anecdotal evidence to support this claim. EITAP2 will fund a formal Baseline Study on Artisanal Mining in Sierra Leone, to quantify, document and analyze the extent to which artisanal mining happens, where it happens, who does it, what they mine, and why.

25. **Mineral Production.** A change in ownership of the two main iron ore mines has occurred: Africa Minerals was bought by Shandong Iron and Steel Group, and London Mining was bought by Timis Corporation. Production at the Tonkolili mine (Shandong) resumed in January 2016. All key contracts are now in place and projections are for a total production of 12 metric tons in 2016. Total mineral production increased from US$31.1 million in January 2017 to US$55.8 million in March 2017. Iron ore accounted for over half of total mineral production and total exports. The viability of the mining sector is vital to economic recovery and macroeconomic stability. The challenge continues to be the ongoing fall in iron ore prices, high production costs due to an existing production contract, pressure to maintain workforce through MOUs signed between the Government and Shandong Iron and Steel Group, and historic debt payment that has yet to be resolved. Shandong’s plans remain unclear given that the mine is highly likely to be significantly loss making at current prices. Market estimates indicate a breakeven price for Shandong of US$65-75 per metric ton and the Shandong Group continues to do poorly, limiting the scope for cross-subsidizing operations over the value chain (See Figures 1 and 2 below for illustration).
26. Large-scale diamond production continues to grow and the projections for 2016 surpass 358,000 carats (industrial and artisanal production). The expectation is that this number will increase considerably as Sierra Leone's second-biggest diamond mine from two high-grade deposits is expected to begin operations in early 2018. Stellar Diamonds will acquire the Tonguma project from Octea Mining and combine it with its own neighboring Tongo deposit to build a mine with a resource of five million carats underground. The company hopes to raise US$25 million from various sources—including existing investors, private equity and offtake agreements—to pay for the development of the mine, which it says could be up and running in early 2018. The Tongo-Tonguma project is expected to create up to 1,000 jobs and have an 18-year life.
27. **Oil and Gas Sector.** The discovery of oil in Sierra Leone’s offshore waters has sparked considerable interest in the country as reflected in the surge of investors obtaining exploration rights through petroleum agreements. At the same time, because of low global oil prices and unsatisfactory offshore exploration results, the oil and gas sector in Sierra Leone is currently experiencing serious difficulties, and to capture sector benefits, Government must prepare a strategy for development of the oil and gas industry, and identify main areas and forms of Government’s contributions in its further enhancement. In parallel with the development of the oil and gas strategy document, the World Bank will continue to support the Petroleum Directorate’s ongoing activities on obtaining data, its interpretation and management, and staff capacity building.

28. **Relationship to the World Bank’s Gender Strategy.** Large-scale mining is an overwhelmingly male occupation, but women tend to play a significant role in artisanal mining activities. In 2014, UN research identified the various challenges facing women in artisanal mining in sub-Saharan Africa, which are also applicable to Sierra Leone. These challenges include critical inaccessibility of capital and financing for the mining operations from mainstream financial facilities; the lack of appropriate machinery and technology; and lack of access to information on availability of mining claims, among other things.

29. A recent study, “Women Economic Empowerment in Sierra Leone: Gender Empowerment in Mining” found that there appears to be consensus that the expansion and diversification of livelihoods is the answer for economic regeneration and stabilization in artisanal mining communities in Sierra Leone, but there is insufficient information regarding which livelihood activities are viable. The study consulted with a broad spectrum of stakeholders in Kono and Tonkolili to identify alternative livelihoods, especially those with potential to involve women in viable income generation activities and drive economic growth in artisanal mining communities. A parallel objective was to assess market opportunities for the identified alternative livelihoods. The findings of the study will be used to inform the project-level interventions in Component C on Artisanal Mining.

C. Proposed Development Objective(s)

**Development Objective(s) (From PAD)**

The proposed project development objective is to strengthen governance, knowledge, and sustainability of the extractives sector in Sierra Leone.

**Key Results**

The PDO will be achieved by:

1. Improving overall sector governance and removing key constraints to development of the minerals sector (Component A);
2. Enhancing geological knowledge of Sierra Leone and attracting private sector investment (Component B); and
3. Increasing formalization of artisanal miners and implementing the Green Gold Pilot (Component C).
D. Project Description

30. The proposed project will be financed through an IDA Grant in the amount of US$20 million. Targeted activities are expected to build and consolidate previous reforms supported under EITAP1, which closed in December 2016, as well as a series of DPOs and grants to continue building governance in the management of the extractive industries aiming at enhancing the sector’s support to the Sierra Leone’s growth and development.

31. **Project Components.** The project design includes activities to be implemented under three main technical components, in addition to a project implementation component.

32. **Component A—IMPROVE MINERAL SECTOR GOVERNANCE.** Component A is aimed at enhancing the overall governance of the sector and removing several key constraints to sector development. This component is comprised of the following subcomponents: (i) Strengthening extractive sector governance, transparency, accountability, and administration. (ii) Strengthening the legal and regulatory frameworks; (iii) Supporting the implementation of the recently updated Minerals Policy and Artisanal Mining Policy; and (iv) Conservation of resources, environmental monitoring, and public participation.

The activities under Component A will therefore include:

33. **A1. Enhancing overall extractives sector governance.** In moving toward the elimination of Sierra Leone’s natural resource paradox—a resource-rich country amid high levels of poverty—this sub-component aims to improve and strengthen overall sector governance through the following activities: (i) Strengthen capacity of Government institutions to more efficiently and effectively implement their mandates; (ii) Support the improvement of provincial, district, chiefdom and local-level participation in mineral sector developments through the establishment of “Local Oversight Committees” (LOCs) in mining communities to monitor use of local funds relative to mining to promote local development. (iii) Clarify and strengthen the role of the Minerals Advisory Board (MAB); (iv) Support transparent revenue management through the development of “Mineral Revenue Management Program” and Quarterly meeting of mine operators (by category) with MMMR, NRA and MOFED to review revenue rules, issues and provide policy frameworks for Mineral Revenue Management and appropriate Fiscal Regimes; (v) Provide support for the implementation of selected activities in the Extractive Industries Transparency Initiative (EITI) Work Plan with an emphasis on capacity building and training for the EITI National Secretariat and multi-stakeholder working group to meet the EITI Standard, especially in relation to the requirements on beneficial ownership and mainstreaming. The subcomponent will also support a successful implementation of Sierra Leone’s Minerals Policy and Artisanal Mining Policy guiding a series of institutional, legal and regulatory reforms. The recently prepared Minerals Policy (MP) and Artisanal Mining Policy are expected to go to Cabinet for approval in November 2017. Successful implementation of these policies is essential to establish the role expected of the sector as a driver of economic growth, considering citizens’ expectations, to capture the imperatives of sub-regional collaboration, outline inclusive, transparent, and streamlined governance measures, promote the shared use of infrastructure with appropriate linkages within and outside of Sierra Leone. In support of these objectives, this subcomponent will (i) Further support the consultation, publication and dissemination of the policies including support to the already-established inter-agency Minerals Policy Working Group led by MMMR; (ii) Assist with the implementation of the Minerals Policy Action Matrix once approved by Cabinet; (iii) Establish and structure a Policy Directorate within MMMR to ensure stronger policy formulation and implementation as recommended by the Management and Functional
34. **A2. Remove key constraints to extractives sector development.** An effective, transparent and consistent legislative framework is essential for a functioning extractives sector which would also attract the “right” investor type to Sierra Leone. To support this objective, this subcomponent will undertake the following core activities: (i) Harmonize legislative regimes applicable to the minerals sector through a comprehensive review of policies and legal and regulatory provisions to avoid overlaps; (ii) Revision of licensing procedures and systems; (iii) Review and amend the current Mines and Minerals Act and regulations to reflect new policy guidance; (iv) Amend specific legislation to ensure that minerals legislation related to granting mineral rights is applied consistently and guarantees security of tenure; (v) Review and amend health and safety laws and regulations; and (vi) Guide the preparation of “Mining and Environment” regulations to guide investor, community and government actions.

35. **Component B—ENHANCE GEOLOGICAL KNOWLEDGE.** This component entails building Sierra Leone’s geological infrastructure by completing the coverage of geological maps and acquisition of airborne geophysical data. The expected outcome of this component is to provide basic and reliable geological information necessary to facilitate the promotion of private investments in the mining sector and to support the planning of the socio-economic development of the country. The subcomponents include: (i) Airborne geophysical survey; and (ii) Geological mapping and geodata integration.

36. There is a consensus that lack of knowledge about mineral resources potential hinders the development of a country’s resources and prevents the country from getting the best value out of its resource endowment. Better knowledge of geological potential would contribute to reduce the asymmetry of information that often leaves governments at a disadvantage when negotiating concessions with mining companies that typically have superior geological mapping datasets. In this context, this component entails completing the coverage of geological maps and acquisition of airborne geophysical data as well as facilitating access to the information through an improved Geo-data Information Management System (GIMS); the expected outcome of this component is to provide basic and reliable geological information necessary to facilitate the promotion of private investments in the mining sector, identify areas that may be reserved, and support the planning of the socio-economic development of the country. As a prerequisite of the airborne geophysical survey, a Data Management Policy will be prepared and approved to ensure that the data collected is properly stored and safeguarded.

The activities under Component B will therefore include:

37. **B1. Airborne Geophysical Survey.** A geological survey map of Sierra Leone does not exist. A well-functioning minerals sector relies on the availability of geodata. As exploration continues to focus on deeper, more complex bodies, the need to conduct a regional nationwide airborne geophysical survey for Sierra Leone cannot be over emphasized as it would assist in mapping out large areas quickly and detecting geological targets favorable for mineralization, i.e., directly detect or target the mineralized environment or associated rocks, fault zones, water bodies, and under cover sequences. The geology and mineral potential of the country cannot be properly understood without sub-surface investigative techniques including aeromagnetic surveys. Aeromagnetic maps allow visualization of the geological structure of the upper crust in the sub-surface, particularly the spatial geometry of lithological units and the presence of folds and faults which are useful in the search for structurally controlled mineralization such as gold, base metals and hydrocarbons. The process is also
good to measure responses originating from mapping surveys to provide essential geological framework and, in areas of poor outcrop, that may comprise the useful form of geological exploration. Target may be intended to detect or to define the geological or geophysical features of potential significance. Hence, the airborne geophysical campaign will cover the entire country with density of data sufficient to support the new geological map of Sierra Leone. The subcomponent will: (i) Undertake regional airborne geophysical coverage of the country (aeromagnetic and gamma-spectrometric campaign) covering the entire country at a density to be determined; (ii) Process, interpret and manage generated data; and (iii) Ensure supervision of airborne geophysics campaign for quality control of flights and data.

38. **B2. Geological Mapping and Geodata Integration.** Acquisition of the needed geo-data requires detailed and careful sequential planning including: (i) Develop a clear policy on confidentiality and use of geodata; (ii) Prepare a systematic inventory of all the available information, including reports for mining and oil and gas companies; (iii) Conduct a preliminary field evaluation in order to select the working scales, coverage, flight directions and altitudes, sampling density and other technical parameters as elements to be analyzed, analytical techniques, remote sensing sensors, and season of acquisition; (iv) Complement the current geochemistry mapping of the country; (v) Create partnerships and links with academic and technical institutions to enhance the Geological Survey research and development capacity; (vi) Use generated data to prepare and update geological mapping at adequate scale (no less than 1:100.000 and ideally at 1:50.000), covering the entire country; (vii) Improve existing GIMS system to store, manage, process, interpret and to integrate the information mentioned above; and (viii) Supervise geological mapping and geodata consolidation.

39. **Component C—ARTISANAL MINING.** This Component is aimed at developing measures to support and encourage formalization, regulation and improved standards of production, as per the industry’s accepted international best practices, of artisanal miners, including the following subcomponents: (i) Strengthening governance in artisanal mining; (ii) Strengthening health, safety and environmental management of the artisanal mining sector; and (iii) Green Gold pilot.

40. There are approximately 300,000 artisanal miners in Sierra Leone, a sector that is mostly unregulated, meaning that at least 50 percent of artisanal mining operations are illicit. The illicit status of the operations and the smuggling of the artisanal production continues to compromise the Government’s revenue for the sector. Alluvial diamond mining underpinned earlier local patronage systems and, as recently as 2006, accounted for around 80 percent of Sierra Leonean diamond exports. As commodity price trends vacillate and deposits are depleted, artisanal miners have shifted from alluvial diamonds to higher-value minerals such as gold. The industry is particularly significant because it provides employment for men, women and youth in circumstances where there are few other opportunities to earn cash and support local livelihoods. To address these issues this component aims to facilitate the implementation of improved artisanal mining operational and environmental standards. This component will scale up and build on the successful implementation of the Life after Diamonds (LaD)\(^3\) project that piloted community-driven capacity building, empowerment, and participatory decision-making in artisanal mining communities, aiming at enhancing social accountability, promoting closer cooperation on environmental and social challenges, increasing participation, and enhancing sustainable livelihoods of women and other vulnerable groups. As artisanal gold mining is relatively new to Sierra Leone

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\(^3\) Life after Diamonds (LaD) was funded by a grant from the Japanese Social Development Fund (JSDF), which closed in August 2016, and provided valuable experience in implementing community-based economic activities in artisanal mining communities.
there is a unique opportunity to formalize the sector and incentivize cleaner gold production, using proven clean technologies, through a “green gold” branding campaign.

The activities under Component C will therefore include:

41. **C1. Strengthening Governance in Artisanal Mining.** This subcomponent aims to: (i) Support, strengthen and build on existing governance reforms (including improving NMA’s capacity at all levels for supervising and monitoring the artisanal mining sector); (ii) Strengthen definition of “Artisanal Mining” and include the definition in legal reforms; (iii) Rationalize an integrated artisanal mining licensing system to eliminate discretionary payments; (iv) Improve community engagement including grievance redress mechanisms; (v) Formalize artisanal miners and ensure proper title registration in the cadastre system; (vi) Strengthen communications amongst Government, artisanal operators and communities to identify beneficial business structures, such as cooperatives and mineral buying centers; (vii) Support revenue collection and management at the local level; and (viii) Support implementation of the new Artisanal Mining Policy to be approved by Cabinet in November 2017.

42. **C2. Strengthening Health and Safety and Environmental Management.** To improve the current hazardous conditions facing artisanal miners, this subcomponent will provide support to GoSL and local government in the following key activities: (i) Support health and safety guidelines for artisanal mining; (ii) Assess and support Environmental Governance; (iii) Review the Environmental Protection Agency (EPA) and National Mining Agency (NMA) to improve organizational efficiency and relevance through the establishment of key performance indicators; (iv) Support education and training to artisanal miners about the health hazards of thousands of abandoned mining pits; and (v) Build capacity of artisanal miners on health and safety issues and train artisanal miners in improved mining methodologies for environmentally responsible mining techniques.

43. **C3. Green Gold Pilot.** The objective of this subcomponent is to support a green gold pilot project with potential to enhance economic opportunities while supporting gender inclusiveness. This will include the following set of activities: (i) Conduct study of gold value chain to confirm the viability of the project and identify the value chain flow and ultimately, the end market; (ii) Train miners on established procedures in line with “Fair Mining” enabling the gold to be characterized as “green” with mining conducted in an environmentally friendly way; (iii) Develop a branding strategy to create an effective market differentiator allowing for a higher market value; and (iv) Undertake marketing and promotion as an important step in the value chain to establish brand awareness for Sierra Leone and drive demand. This pilot opens an important avenue for increasing community prosperity and enhancing livelihoods.

44. **Component D—PROJECT MANAGEMENT.** Building on the lessons learned and capacity acquired during EITAP1, this component aims to support the Government of Sierra Leone to manage and coordinate the Project and build its procurement, financial management, safeguards management, monitoring and evaluation capacity through the provision of technical advisory services, training, acquisition of goods, and operating costs. The project also envisages an external support action to enhance and professionalize project management (certifications PMP, project server etc.), in addition to the traditional project administration and coordination roles.
45. **Component E—CONTINGENCY FOR DISASTER RISK RESPONSE.** This provision is being included to provide support to respond to an Eligible Emergency including: (a) designing and carrying out the relevant sector investments; and (b) providing supervision for carrying out said investments.

E. Implementation

Institutional and Implementation Arrangements

46. The MMMR will be the implementing agency for the project and will provide policy guidance, planning, coordination, technical assistance and capacity building through the MMMR Project Implementation Unit (PIU) including Consultants to implementing institutions and beneficiaries. The PIU will coordinate the project implementation, including the following institutions and departments:

- Ministry of Mines and Mineral Resources
- DFID, GIZ
- EITAP Project Implementation Unit
- National Minerals Agency
- Ministry of Finance and Economic Development
- National Revenue Authority
- Environment Protection Agency
- Ministry of Lands & Country Planning and Environment
- Local Authorities
- Mining Companies
- Private Sector Consultants and Suppliers
- Petroleum Directorate
- Strategic Policy Unit

However, the PIU retains primary responsibility for procurement and disbursement. All requests to the World Bank under the project will go through the office of the Project Coordinator.

47. The project will be implemented over a period of five years. The Ministry of Mines and Mineral Resources (MMMR) will be responsible for the overall project coordination and management. The MMMR has set up a Project Implementation Unit which is supervised by the Permanent Secretary of MMMR. The PIU has been operational since September 2012 and has built capacity and experience in project management, procurement and financial management. The PIU is comprised of a Project Coordinator, a Procurement Specialist and a Financial Management Specialist supported by a Procurement Assistant. The PIU has successfully implemented the first phase of the EITAP project to completion which closed in December 206. The MMMR will continue to provide the physical office space and supporting institutional frameworks for effective management of the PIU. The PIU will carry out the day-to-day project management including procurement, disbursement, financial management, and monitoring and evaluation for the project. The PIU would assist the MMMR in ensuring that the project activities are carried out in accordance with agreed project objectives and performance targets. When the Policy Directorate becomes operational, it will become a beneficiary under the technical assistance program for MMMR and will implement the mandate of MMMR as a policy formulator, while project management and coordination will remain to be handled by the MMMR’s PIU.
48. **Composition of the PIU:** The core PIU includes a Project Coordinator, Procurement Specialist, and Financial Management Specialist (pending operationalization of the Project Fiduciary Management Unit PFMU). These three positions have been filled with competent consultants with the requisite qualifications and experience to undertake the tasks of project management, procurement management and financial management respectively.

49. **Project Operations Manual:** the Project Operations Manual (POM) has been prepared by the PIU in accordance with good practices as set out in the EITAP project and will include detailed description of the logistics regarding project implementation (i) coordination between stakeholders and other donor-funded projects in the sector; (ii) appropriate level of delegation of authority to the PIU; (iii) document flows; (iv) procurement procedures; (v) financial management procedures and reporting; (vi) disbursement procedures; (vii) format and procedures for processing of Annual Work Plans and Budgets, and (viii) environmental and social management guidelines. The POM has been updated for the purposes of the second phase of the project. Further revisions and updated will be undertaken on as needed basis and will be subject to Bank’s prior review and approval.

50. **Annual Work Plans and Budgets:** The Government, prior to negotiations, has prepared the annual work plan and budget for the first year of project implementation. The plan includes an updated procurement plan, training plan for the forthcoming year, activities to be implemented under the Project during the year with a timeline, estimated operating budget, and other costs to be incurred during the year. The format for the Annual Work Plan has been developed and forms a part of the POM. The plans will be due by December 1 of each calendar year for the period covering January 1–December 31 of the following year during the project implementation. The Plans will be prepared by the PIU and will be approved by the MMMR before submission for approval by IDA. Changes to finalized Annual Plans and Budgets will require prior approval by IDA.

**Borrower’s Institutional Capacity for Safeguards Policies**

51. Sierra Leone has demonstrated its commitment to mitigating adverse social and environmental impacts in its implementation of a range of World Bank projects, including the EITAP1. Safeguards compliance under EITAP 1 was considered satisfactory throughout project implementation. Legal and institution capacity improvement efforts started under EITAP1 will continue under this project. The same motivated and capacitated staff will continue to work on EITAP2, with continuing support from the Ministry of Mines and Mineral Resources. In addition to enhancing the capacity of the implementing agency, a safeguards officer (an environmental specialist) shall be part of the core project management team to ensure that the specific provisions under the SESA updated from EITAP1 are taken into account as early as possible into the project implementation arrangements. A social specialist will be identified to contribute to project activities whenever relevant and needed. The SESA prepared under EITAP1 will be the first activity financed and finalized once Project becomes effective. The initial SESA, prepared for EITAP1 in 2009, needs updates given that the sector has changed and evolved.

**Note to Task Teams:** The following sections are system generated and can only be edited online in the Portal.
F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

This is a Technical Assistance project and no civil works are anticipated nevertheless, OP/BP 4.01 has been triggered. The updated SESA, prepared under the first EITAP project, has been drafted and will be finalized to feed into the policy work to be carried out under this project.

G. Environmental and Social Safeguards Specialists on the Team

Demba Balde, Social Safeguards Specialist
Gloria Malia Mahama, Social Safeguards Specialist
Anita Bimunka Takura Tingbani, Environmental Safeguards Specialist
Alidu Babatu Adam, Social Safeguards Specialist

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<tr>
<th>SAFEGUARD POLICIES THAT MIGHT APPLY</th>
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<td>Safeguard Policies</td>
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<tr>
<td>Environmental Assessment OP/BP 4.01</td>
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<td>Natural Habitats OP/BP 4.04</td>
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The proposed project does not trigger this policy as this is a technical assistance project. The SESA (updated from EITAP1) evaluates the legal framework and policies related to forest protection and mining, and provide recommendations for risk mitigation.

This Policy is not triggered because no use of pesticides is anticipated under the project.

This Policy is not triggered because no excavation or large movement of earth is expected under the project.

The proposed project does not trigger this policy as this is a technical assistance project and there are no Indigenous Peoples in the project area.

The proposed project does not trigger this policy as this is a technical assistance project and no land acquisition leading to involuntary resettlement is anticipated in this project.

This Policy is not triggered because there are no dams in the project area.

This Policy is not triggered because there are no international waterways in the project area.

This Policy is not triggered because there are no disputed areas in the project area.

**KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT**

**A. Summary of Key Safeguard Issues**

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

   This project is a technical assistance project and as such physical impacts of the project such as land acquisition or air pollution are not anticipated. Furthermore, no physical works are anticipated under the IDA Grant, but an updated SESA has been drafted and will be finalized as soon as Project becomes effective, to ensure that any potential adverse social and environmental impacts are mitigated in accordance with World Bank policies.

   The overall objective of the draft SESA update is to propose recommendations for the resolution of the critical environmental and social issues, as identified by key stakeholders, which must be confronted for mining sector reform to be sustainable and contribute to long-term development of affected communities and Sierra Leone as a whole.

   By taking the environmental and social priorities of stakeholders as its starting point, the updated SESA will ensure that: (i) the priorities of the stakeholders receive proper attention; (ii) actions are taken to eliminate or mitigate the
effects of policy changes on stakeholders, particularly the most vulnerable groups such as women, children and youth; and (iii) the reform of the mining sector is perceived as legitimate by the majority of the population, which is critical for its long-term sustainability.

Environmental and social effects of mining operations in Sierra Leone include:

- Water management: In most parts of the country drinking water is scarce and thus conflicts of interest between different uses (ag, livestock, domestic, mining, other industries) are increasingly common.
- Land degradation: There are very few reclamation processes in place. The problem is further aggravated by floods.
- Deforestation: The main source of energy for 80-90 percent of the population is biomass (wood fuel and charcoal); deforestation is a particularly serious problem in mining areas.
- Effect on biodiversity: Coastal areas are also under threat from extensive impacts of mining, thus affecting their biodiversity.
- Effect on wetlands: These rich ecosystems are destroyed through mining operations.
- Overpopulation in mining areas: Due to a lack of job opportunities in other sectors, mining becomes a magnet attracting many unemployed young people to mining areas. Migration to mining areas has resulted in unplanned settlements characterized by poor housing facilities, poor water quality and poor waste management and sanitation.
- Poor health conditions: Health conditions are poor in many mining communities because of poor sanitation compounded by open defecation resulting in infectious diseases. Due to the high density of housing, HIV is also prevalent.
- Air pollution: Air pollution is a major problem due to vehicular emissions and dust from haulage trucks.
- Noise pollution: Noise pollution sources in mining areas include traffic, road construction, plant operations and generators.
- Water management: Water from mining operations is not well managed in terms of collection, sorting, treatment and disposal.

There are obvious environmental and social risks in the Sierra Leone mining sector; however considerable improvements have taken place in the past decade, especially with the setting up of regulatory agencies NMA and EPA and the promulgation of laws and regulations. The situation is better with large scale mining, but the challenges of the artisanal sector are more substantial.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
A draft updated SESA from EITAP1 will be finalized as soon as Project becomes effective. As a technical assistance project, no potential indirect and/or long-term impacts due to anticipated future activities in the project area were identified.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
Not considered

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.
The NMA the implementing agency has overseen EITAP1 since 2011. The agency’s capacity was strengthened under EITAP1, and the NMA will continue in this role for EITAP2.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.
Under Component C, Artisanal Mining communities will be identified and training provided to build on and enhance their current cleaner gold-production techniques. The EPA and NMA will be the responsible agencies, and their capacity has already been built and proven under EITAP1. Implementation of this component will be closely coordinated with the NMA’s Community Directorate, which deals with Artisanal Mining community-related issues, and the EPA, which has the mandate to regulate environmental compliance. An updated SESA from EITAP1 has been drafted and will be finalized after Project becomes effective, to assess risks and propose mitigation measures. For the Green Gold Pilot, lessons learned from the Life after Diamonds project will be applied to the design of the project around alternative livelihoods, and risk mitigation measures will be implemented.

B. Disclosure Requirements

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<thead>
<tr>
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"In country" Disclosure

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?
No

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank for disclosure?
No

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?
No
All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?
Yes

Have costs related to safeguard policy measures been included in the project cost?
Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?
Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?
Yes

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**Note to Task Teams:** End of system generated content, document is editable from here.