



**REPORT**

**Mirny (Kazakhstan) 1GW Wind Farm Project**  
*Environmental and Social Management Framework*

Submitted to:

**Aktas Energy LLP**

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## Distribution List

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## **APPENDICES**

### **APPENDIX A**

Management of Change

### **APPENDIX B**

Organizational Structure

## List of Frequently Used Abbreviations

ADB	Asian Development Bank
AF	Associated Facility
AIIB	Asian Infrastructure Investment Bank
AoI	Area of Influence
BESS	Battery Energy Storage System
BMP	Biodiversity Management Plan
BoP	Balance of Plants
Bq/l	Becquerel per liter
CH	Cultural Heritage
CCRA	CLIMATE Change Risk Assessment
CHA	Critical Habitats Assessment
CHS	Community Health & Safety
CIA	Cumulative Impact Assessment
CLO	Community Liaison Officer
dB	Decibel
Db(A)	Decibel Ampere
E&S	Environmental and Social
EHS	Environment, Health & Safety (also “HSE”)
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EBRD	European Bank for Reconstruction and Development
EP	Equator Principle
EPC	Engineering, Procurement, and Construction
ESAP	Environmental and Social Action Plan
ESBS	Environmental and Social Baseline Study
ESDD	Environmental and Social Due Diligence
ESIA	Environmental & Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System

FD	(ESMS) Framework Document
FSWP	Field Survey Execution Work Plan
GW	Giga Watt
H&S	Health and Safety
HR	Human Resources
HRRA	Human Rights Risk Assessment
HV	High voltage power line
IFC	International Finance Corporation
ILO	International Labour Organization
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
KEGOC	Kazakhstan Electricity Grid Operating Company
km	Kilometres
kN	KiloNewton
kV	Kilovolt
kVA	Kilovolt Ampere
m	meters
MAC	Maximum Allowable Concentrations
MΩ	Megaohm
mm	millimeters
MV	Medium voltage
MW	Mega Watt
MWh	Mega Watt hour
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
OHL	Over Head Line
OHS	Occupational Health and Safety
PGA	Peak Ground Acceleration
PMC	Project Management Contractor
PR	Performance Requirement
PS	Performance Standard

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SEA	Strategic Environmental Assessment
SEP	Stakeholder Engagement Plan
SS	Substation
UN	United Nations
UNDP	United Nations Development Program
WHO	World Health Organisation
WPP	Wind Power Plant
WTG	Wind Turbine Generator
µg/l G	Microgram per liter

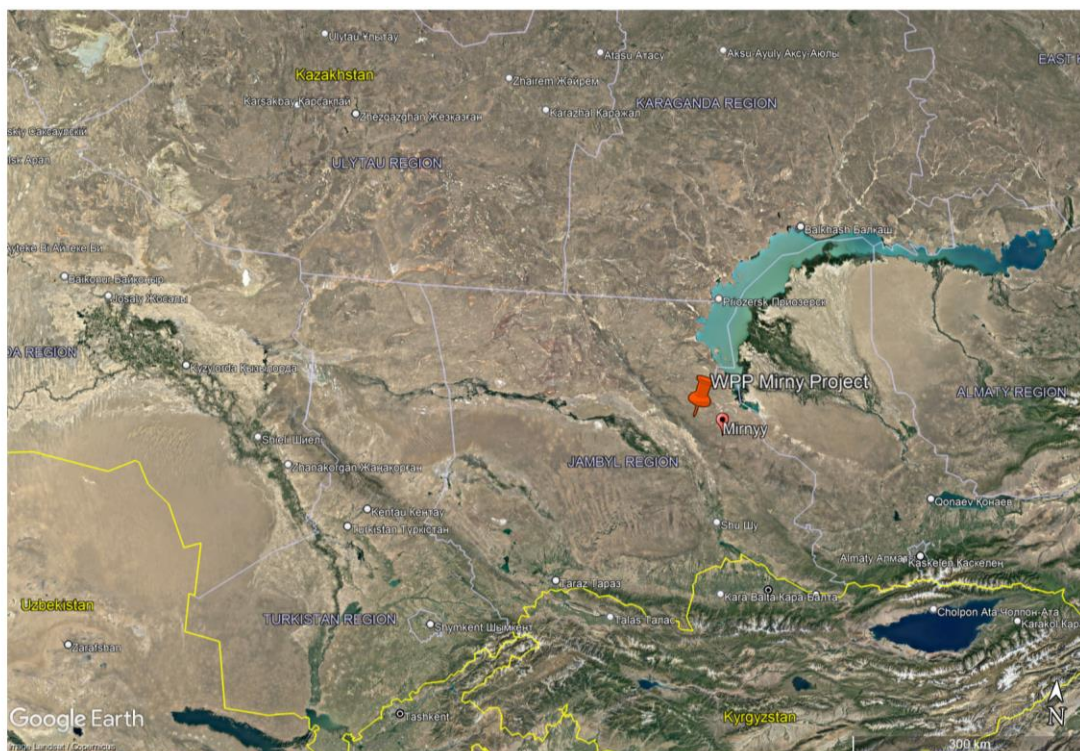


## 1.0 PURPOSE AND SCOPE

Aktas Energy LLP (“Aktas”, “the Client” or “the Company”), the subsidiary of TotalEnergies in Kazakhstan, has appointed WSP Italia S.r.l. (“WSP”) as Environmental & Social (“E&S”) consultant to prepare the Environmental and Social Baseline Study (“ESBS”) and the Environmental and Social Impact Assessment (“ESIA”) for the development, construction and operation of an onshore wind farm having 1 GW capacity in Mirny, Kazakhstan (“the Project”).

The Project consists in developing an onshore wind farm of 1 Gigawatt (“GW”) installed capacity (combined with Battery Energy Storage System (“BESS”) the related Overhead Transmission Lines (“OHL”) and the necessary additional access roads, located in Mirny, in the Jambyl region in the South-Central part of Kazakhstan.

The Project location is shown below in **Figure 1**.



**Figure 1: Project location on Google Earth.**

This document defines and presents the framework and the strategy for developing and implementing the Project Environmental and Social Management System (ESMS). The Project will be constructed and operated by Aktas through the Contractor TERSK, a company owned by TotalEnergies.

The ESMS will be developed in accordance with Aktas policies, with the commitments undertaken in the Environmental and Social Impact Assessment (ESIA), with Kazakhstan regulatory framework, with EBRD Sustainability Policy, with IFC Performance Standards (IFC PS) and IFC General and Sector Specific Environmental, Health and Safety (EHS) Guidelines, and with the Equator Principles IV. The term “ESMS” will be used to refer to the Environmental and Social Management System of the Project that will be established in compliance with the applicable standards and requirements and as described in this framework, while Framework Document (FD) refers to this document.

This FD complements the ESIA package, prepared by WSP in Q2 and revised in Q4 2025, to ensure a consistent approach towards the identification, control, management, and reduction of environmental and social (E&S) risks and impacts associated with the Project.

The ESMS described in this FD applies to the construction phase and, as far made possible by the available information, to the operation phase. This FD also outlines how TERSK will monitor the E&S performance of external contractors on behalf of Aktas; it also provides guidance to appropriately address and manage Environmental and Social risks and impacts generated by the Project in line with the mentioned standards. The management of risks through the implementation of this ESMS is a dynamic and continuous process that foresees engagement with local communities potentially affected by the Project and with other relevant stakeholders. For the purpose of this document, environmental aspects include water resources, waste management, noise and air quality, and biodiversity; social aspects include labor management, occupational health and safety, influx management, community health and safety, cultural heritage and stakeholder engagement.

This ESMS is intended to cover all project phase to the extent possible. Details related to the operation phase of the Project are available, however they are expected to be further developed based on the outcomes of the Project construction phase; this ESMS FD is therefore subject to revisions before start of operations to encompass and consider any new information relevant to the management of operational environmental and social impacts and risks.

The purpose of this FD is to present:

- The scope of the ESMS during the construction phase and, to a more limited extend, operations.
- The standards underpinning the Project ESMS during the construction and operation phases.
- Responsibilities and commitments for the implementation of the ESMS.
- The framework for the definition and implementation of the mitigation measures applicable to the Project.
- The framework for the definition, implementation and management of the monitoring activities.
- The framework for the review of the environmental and social performance and of the adequacy of the ESMS and, in particular, of the Environmental and Social Management Plans (ESMPs).

The ESMS applies to normal operating conditions during the construction and operation activities as well as to emergency situations for which a specific Emergency Preparedness and Response Plan (EPRP) has been developed.

The overall objective of the ESMS is to primarily identify measures of impact and risk avoidance and minimization, where feasible, as well as mitigation and monitoring for the construction and operation activities. More specifically, the ESMS:

- Identifies risks and impacts of the Project.
- Describes Roles and responsibilities for the implementation of this ESMS.
- Adopts and implements a mitigation hierarchy to anticipate and avoid, or where avoidance is not possible, minimize, mitigate or offset impacts on the environment and risks.
- Project-specific policies, management plans and procedures to integrate E&S aspects within the overall project management framework;

- Develops and implements policies, plans and procedures to integrate environmental and social aspects within the overall Project management framework throughout its lifecycle.
- Describes review, reporting and auditing procedures, including the definition of a periodic system of E&S audits to identify corrective actions, where necessary;
- Establishes a monitoring programme to assess the effects of residual impacts in the Project Area of Influence and monitor the ESMS performance.
- Provides for periodic ESMS audits and identifies corrective actions as needed, in order to achieve the expected ES performance objectives.
- Includes a Process for stakeholders' engagement and reporting on E&S performances.

This document also establishes a framework under which the management contractor and the construction contractors should develop their own mitigation and management plans with standalone mitigations and monitoring approach to implement the requirements contained within this document as a minimum.

It is anticipated that TERSK will have full control on Project construction and operations, however, there will be contractors retained for carrying out different activities during the Project life.

## 1.1 Acting Parties

Aktas Energy LLP is the Project owner (PO) and is owned by TotalEnergies. The PO is established in Kazakhstan, Astana, and manages the Project with a dedicated team and the support of the TotalEnergies Key Expert.

The PO will be subcontracting the construction management and the implementation of the ESMS to a dedicated Construction Management Company, TERSK, a TotalEnergies Renewables affiliate in KZT 100% owned by TotalEnergies Renewable, sponsor of the project. TERSK is not an external third party for the Sponsor but one of the sponsor. TERSK will supervise the activities of the Project Engineering, Procurement & Construction Contractor ("the EPC Contractor") that has still not been appointed (at the time of this ESIA preparation, Aktas Energy LLP (or "the Company") is in the process of selecting the EPC contractor). The EPC will be free to adopt the ESMS prepared by Aktas and adopted by TERSK, including among other elements the ESMP, or to develop its own ESMS mirroring the Project's ESMS.

Operation management structures will be developed in due course prior operation starts and this ESMS will be updated accordingly.

## 1.2 Project overview

The Project is considered one of the largest wind energy initiatives ever undertaken in Kazakhstan and will contribute to the country's green energy transition and is a strong ally for achieving the 2030 target. It is expected that the development of the Project will avoid the emission of approximately 3.5 million tons of CO<sub>2</sub>/year.

The electricity to be generated by the Project will be entirely sold to the Financial Settlement Center of Renewable Energy, a public entity owned by the Government of Kazakhstan, for the supply to the national grid. The Project will provide electricity to 1 million people.

In addition, the Project aims to support regional sustainable growth and contribute to local employment. Diverse educational programs involving the local population, such as workshops on renewable energy will be conducted in cooperation with the local municipalities, and a center of expertise on storage will be created.

The Project will be located in the Moyynkum district of the Jambyl region, in south-eastern Kazakhstan, which has low population density due to the sandy deserts and the lack of water resources. The closest village to the

Project is called Mirny, a remote settlement built for workers employed in the past in uranium mining, an activity that is currently no longer carried out. When the local uranium mining ended, the population plummeted from several thousand to just a few hundred, as of today.

Based on the design information, the main components of the Project include:

- 150 Wind Turbine Generators (“WTGs”) for a total of 1 GW installed capacity and related foundations;
- Trenches for laying medium voltage (“MV”) cables of 35 kilovolt (“kV”) connecting the WTGs;
- BESS of 300/600 Megawatt-hour (“MWh”) that will be operated by Kazakhstan Electricity Grid Operating Company (“KEGOC”);
- Step-up substations, one to the North Mirny SS and one to the South Mirny SS of 500 kV/35 kV;
- Three OHL with a total capacity of 500 kV, running between North Mirny SS and Yukgres SS, between South Mirny SS and Shu SS, and between North Mirny SS and South Mirny SS and one OHL of 35kV connecting to existing Kiyakhty SS, to have permanent grid connection for construction and O&M permanent compound facilities;
- Onsite roads and offsite access roads;
- Reactive power compensating devices; and
- An accommodation Camp.

The following figures show the Project layout and components (i.e., WTGs, substations, BESS, construction camp/compound, OHL, roads).

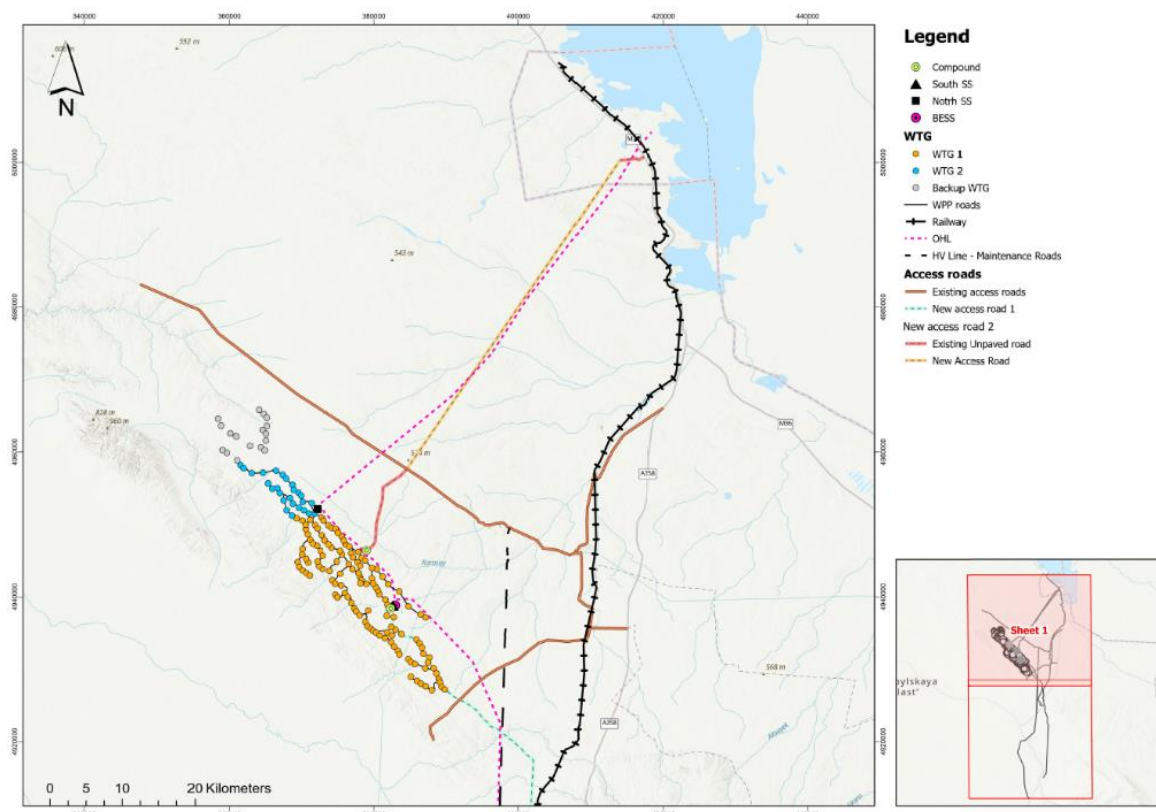


Figure 2: Project layout and components (Sheet 1)



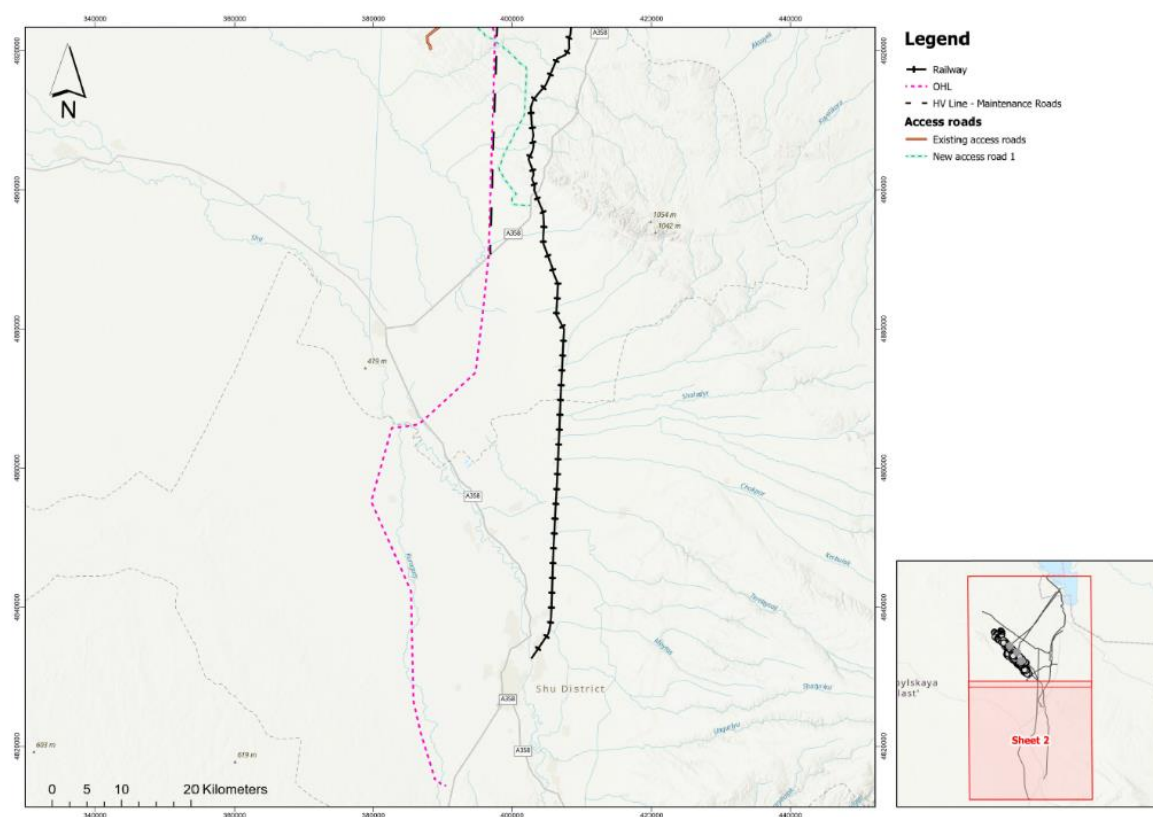


Figure 3: Project layout and components (Sheet 2)

## 2.0 LEGAL AND OTHER REQUIREMENTS

The ESIA and this ESMS FD have been developed to comply with all national laws as well as GIIP and relevant international standards and requirements applicable to the Project. Specifically, the ESMS presented in this FD is prepared according to Aktas standards and policies, to guideline and good Industrial Practice in the Wind Sector, to several lender E&S standards, and to applicable local, national, and international E&S legislation and guidelines adopted by the Republic of Kazakhstan.

### 2.1 National Laws and Regulations

Applicable national laws and regulations, including those laws implementing host country obligations under international law and treaties, are detailed in Table 1.

**Table 1: National laws and regulations relevant to the Project.**

Law	Description and Relevance to Project Activities
<b>The Environmental Code, i.e., Ecological Code (2007, as amended in 2020 and dated January 2, 2021)</b>	<p>The Code governs the relations on protection, restoration, and conservation of the environment, use and reproduction of natural resources when conducting the economic and other activities related to the use of natural resources and environmental impact within the Republic of Kazakhstan. Participants in the relationship are individuals and legal entities and state bodies of the country.</p> <p>The environmental foundations of sustainable development are ensuring a favorable environment for human life and health; protecting the environment and preserving biodiversity; defending national interests in the use of natural resources and the impact on the environment; meeting the needs of generations, and much more. The Code provides for respect for the right of citizens to access environmental information, full public participation, and transparency of issues and measures taken to address environmental issues. The Code focuses on the Republic's global partnership to preserve, protect, and restore the health and integrity of the Earth's ecosystem, as well as to promote the development of international law relating to liability for environmental damage.</p>
<b>The Labor Code (2015, as amended in 2020)</b>	<p>The Code is the principal legal framework governing labor relations and employment practices in Republic of Kazakhstan. It establishes the rights and obligations of both employers and employees, providing guidelines for employment contracts, working hours, wages, and benefits. The code addresses various aspects of labor, including the termination of employment contracts, labor rights, health and safety regulations, and protection against discrimination. It also regulates collective bargaining, the rights of trade unions, and the employment of foreign nationals in Republic of Kazakhstan. Additionally, the code contains provisions for social protection, including social security and insurance programs.</p>
<b>The Land Code (2003, as amended in 2020)</b>	<p>In accordance with this Code, land in the Republic of Kazakhstan is in state ownership. Land plots may also be privately owned on the grounds, conditions and within the limits established by this Code. The land legislation of the Republic of Kazakhstan is based on the following principles: integrity, inviolability, protection, environmental safety, and rational use; targeted use of land, payment, and priority of agricultural land; state support for the use and protection of land; conservation of land as a natural resource, the basis of life and activity of the people of the Republic of Kazakhstan, etc.</p> <p>The tasks of land legislation are: establishing the grounds for the emergence and termination of land use rights and ownership of land; regulating land relations, ensuring <u>rational use</u> and protection of land, reproduction of soil fertility; creating conditions for the equal development of all forms of management; protection of land rights of individuals and legal entities and the state, etc. <sup>1</sup></p>

Law	Description and Relevance to Project Activities
<b>The Water Code (2003, as amended in 2021)</b>	<p>The water legislation of the Republic of Kazakhstan aims to ensure an ecologically safe and economically optimal level of water use, resource protection, and wastewater management. These objectives are directed towards preserving and enhancing the living conditions of the population and maintaining a healthy environment.</p> <p>To achieve these goals, the legislation focuses on implementing state policies related to water use and protection, regulating water relations, and establishing a legal framework for sustainable water practices. It also sets out principles for water resource management, guides the study and exploration of water resources, oversees the development of land reclamation, and ensures the protection of the population and economic facilities from water-related emergencies.</p>

## 2.2 Environmental and Social Standards of International Financial Institutions

The relevant international standards that have been taken into account are:

- European Bank for Reconstruction and Development (EBRD) E&S Policy and relevant Performance Requirements (2019);
- International Finance Cooperation (IFC) Performance Standards (2012);
- World Bank Group General EHS Guidelines (2007), Wind farm EHS Guideline and Electric Power Transmission & Distribution EHS Guidelines (2007);
- Equator Principles EP4 (2020);
- European Investment Bank (EIB) E&S Standards;
- Asian Development Banks (ADB) Safeguard Policies;
- The Asian Infrastructure Investment Bank (AIIB) E&S Policy;
- International Union for Conservation of Nature (IUCN) guidance on wind projects;
- Other relevant standards and guidelines relevant to the assignment (The Convention on Wetlands, BirdLife International, Eurobats recommendations and best practice guidelines, Good Practice Handbook on the Design of Post-Construction Monitoring of Bird and Bat Fatalities Wind Energy Facilities, Scottish Natural Heritage Guidance Note, etc.);
- International Labor Organization (ILO) conventions signed and ratified by the countries; and
- United Nations Guiding Principles on Business and Human Rights.

The following Table lists the international treaties to which Kazakhstan is signatory.

**Table 2: Relevant International Treaties to which Kazakhstan is signatory.**

No	Name conventions, agreements	Document of accession of the Republic of Kazakhstan / ratification
1	Convention on Biological Diversity. Rio de Janeiro, May 22, 1992	RK Law on ratification of 19.08.1994, No 918
2	The UN Convention to Combat Desertification	RK Law on ratification of 07.07.1997 No 149-1

3	United Nations Framework Convention on Climate Change (UNFCCC), Rio - de - Janeiro, June 16, 1992	RK Law on ratification of 04.05.1995 № 2260
4	Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran, November 4 of 2003)	RK Law on the Ratification of 13 December 2005 No 97-III.
5	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. Basel, 20-22 March 1989	RK Law on ratification of 10.02.2003, No 389-II
6	Stockholm Convention on Persistent Organic Pollutants. Stockholm, May 22, 2001	RK Law on ratification of 07.06.2007. No 259
7	Convention on the Transboundary Effects of Industrial Accidents	RK Law on ratification of 23.10.2000 No 91-II
8	Convention on Long-range Transboundary Air Pollution. Geneva, 13 November 1979	RK Law on ratification of 23.10.2000, No 89-II
9	Convention on Environmental Impact Assessment in a Transboundary Context Espoo (Finland), 25 February 1991	RK Law on ratification of 21.10.2000, No 86 -II
10	Convention on the Protection and Use of Transboundary Watercourses and International Lakes, Helsinki 17.03.1992	RK Law on ratification of 23.10.2000 No 94-II
11	Vienna Convention for the Protection of the Ozone Layer. Vienna, March 22, 1985	Act of accession of Kazakhstan to the Vienna Convention on 30.10.1997 No 177-I
12	Montreal Protocol on Substances that Deplete the ozone layer. Montreal, September 16, 1987	Law of the Republic of Kazakhstan on joining from 30.10.1997g. No 176
13	Montreal Protocol on Substances that Deplete the Ozone Layer and the London Amendment thereto (May 2002)	Law of the Republic of Kazakhstan on joining from May 7, 2001, No 191-II
14	Convention of the World Meteorological Organization, October 11, 1947	Resolution of accession to the Convention signed 18.12.1992r. No 1791-XII
15	Convention on public participation in decision-making in the field of environmental medium (Aarhus)	RK Law on ratification of 23.10.2000 No 92-II
16	The Rotterdam Convention on the Prior Informed Consent Certain Hazardous Chemicals and Pesticides in International Trade	RK Law on ratification of 20.03.2007 No 239
17	Convention for the Protection of Cultural and Natural Heritage	RK Law on ratification of 29.07.1994
18	<p>The Ramsar Convention on Wetlands - Wetlands of International Importance especially as Waterfowl Habitat.</p> <p>The Convention on Wetlands, known as the Ramsar Convention<sup>2</sup>, is an intergovernmental environmental treaty established in 1971 by UNESCO, which came into force in 1975. It provides for national action and international cooperation regarding the conservation of wetlands, and wise sustainable use of their resources. Ramsar identifies wetlands of international importance, especially those providing waterfowl habitat. A Ramsar site is a wetland site designated to be of international importance under the Ramsar Convention</p>	RK joined on 13.12.2005, No 94-III
19	Convention on International Trade in Endangered Species of Wild Fauna and Flora, which are under Endangered	RK Law on ratification of 06.04.1999, No 372-1

<sup>2</sup> <https://www.ramsar.org/>



<b>20</b>	<p>Convention on the Conservation of Migratory Species of Animals (Bonn Convention, 1979).</p> <p>As an environmental treaty of the United Nations, the Convention of Migratory Species (CMS), signed on 1979 in Bonn, provides a global platform for the conservation and sustainable use of migratory animals and their habitats. CMS brings together the States which migratory animals pass through, the Range States, and lays the legal foundation for internationally coordinated conservation measures throughout a migratory range.</p> <p>As the only global convention specializing in the conservation of migratory species, their habitats and migration routes, CMS complements and co-operates with a number of other international organizations, NGOs and partners in the media as well as in the corporate sector. In this respect, CMS acts as a framework Convention.</p> <p>UN CMS has created an Energy Task Force, which aims to develop best practice including for renewables sector<sup>3</sup>.</p>	RK Law on ratification of 13.12.2005, No 96
<b>21</b>	"On ratification of the Amendment to the Montreal Protocol on Substances that Deplete Ozone Layer, adopted in Montreal on 1517 September 1997 "	RK Law on ratification of April 6, 2011, No 426-IV
<b>22</b>	"On ratification of the Amendment to the Montreal Protocol on Substances that Deplete Ozone Layer, adopted in Copenhagen on 23-25 November 1992 "	RK Law on ratification of 23. 04. 2014 No 198-V
<b>23</b>	Convention on Civil Liability for Oil Pollution Damage	RK Law on ratification of 05.06.1994 No 244
<b>24</b>	Convention for the Prevention of Pollution from Ships	RK Law on ratification of 4.05.1994 г. No 244
<b>25</b>	Convention on the Prohibition of Military or Any Other Hostile Use of impact on the environment	RK Law on ratification of 20.02.1995, No 301-X-III
<b>26</b>	Kyoto Protocol to the UN Framework Convention on Climate Change	RK Law on ratification of March 26, 2009, No 144-IV
<b>27</b>	The Cartagena Protocol on Biosafety to the Convention on Biological Diversity	RK Law on ratification of June 17, 2008, No 43-IV
<b>28</b>	Protocol Concerning Regional Preparedness, Response, and Cooperation Incidents oil pollution, the Framework Convention for the Protection of the Marine Environment Caspian Sea	Signed in 19.05. 2018, No 718
<b>29</b>	Protocol for the Protection of the Caspian Sea against pollution from land-based sources and Land-based Activities in the Framework Convention for the Protection of the Marine Environment Caspian Sea	Signed in 1.11. 2021 № 71-VII
<b>30</b>	On ratification of the Protocol on Pollutant Release and Transfer Registers to the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters.	Law of the Republic of Kazakhstan dated December 12, 2019, No. 279-VI

Moreover, Kazakhstan has ratified several fundamental labour standards established by the International Labour Organization (ILO). Kazakhstan has ratified the following ILO conventions:

- Convention No. 29 on Forced Labour and Convention No. 105 on the Abolition of Forced Labour;

<sup>3</sup> <https://www.cms.int/en/taskforce/energy-task-force>.

- Convention No. 138 on Minimum Age and Convention No. 182 on the Worst Forms of Child Labour;
- Convention No. 111 on Discrimination (Employment and Occupation);
- Convention No. 87 on Freedom of Association and Protection of the Right to Organize;
- Convention No. 98 on the Right to Organize and Collective Bargaining;
- Convention No. 100 on Equal Remuneration.

## 2.3 Wind Sector Relevant Guidelines and Protocols

This document considered the following sector-specific guidelines and protocols:

- Bird Life International;
- EUROBATS recommendations and best practice guidelines;
- Good Practice Handbook on the Design of Post-Construction Monitoring of Bird and Bat Fatalities Wind Energy Facilities;
- Industry Guidance Document – Decommissioning of Onshore Wind Turbines;
- Scottish Natural Heritage Guidance Notes;
- IUCN – Mitigating biodiversity impacts associated with solar and wind energy development;

An exhaustive list of all national and international regulations, policies, requirements, guidelines, and standards applicable to the Project is included in the ESBS report Chapter03 – Legal Requirements.

## 3.0 ESMS FRAMEWORK

The Project ESMS FD is structured to present the pillars of the ESMS that Aktas has or will establish for the Project; the FD follows the and uses language from the IFC PSs, but is considered also applicable to demonstrate compliance with EBRD PRs for an ESMS. The structure of the FD consists of the following:

- Environmental, Social, Health and Safety (ESHS) Policies.
- The process of identification of Risks and Impacts (ESIA) and Management of Change.
- Environmental and Social Management Plans (ESMPs).
- Organisational Capacity and Competency.
- Engagement with Stakeholders.
- Emergency Preparedness and Response.
- Monitoring, Review and Performance reporting.

These elements are further discussed in the following sub-sections.

### 3.1 Environmental and Social Policies

Aktas is committed to develop an overarching HSSE Policy to define the key Environmental and Social objectives and principles that will guide all Project's activities. The policy will be consistent with the Project standards and regulations.

TERSK will ensure that the employees and workers involved in this Project, at all levels of its organization, are

familiar with the policies and procedures. The Policy requirements will also be extended to all contractors through a contractually binding agreement.

At a minimum, the overarching HSSE Policy will include the following specific policies:

- Project Environmental and Social (ES) Policy.
- Project Community Relations (CR) Policy,
- Human Resources (HR) Policy, and
- Human Rights Policy.

The core components of these policies are listed in Table 1 and will need to be considered, reviewed, and formally adopted by TERSK Management Team. The Project-specific policies will be adopted prior to the financial close of the Project.

**Table 3: Objectives of Project ES Policies**

Project Policy	Objectives
Project Environment and Social (ES) Policy	<ul style="list-style-type: none"> <li>▪ Align the Project E&amp;S performance to national regulations and IFC ES Performance Standards.</li> <li>▪ Implement an ESMS to manage the E&amp;S risks associated with the Project.</li> <li>▪ Assign the ultimate responsibilities for the Project E&amp;S performance to TERSK Project Director and HSE Manager.</li> </ul>
Project Community Relations (CR) Policy	<ul style="list-style-type: none"> <li>▪ Align stakeholder engagement and community relations for the Project with national regulations and IFC ES Performance Standards.</li> <li>▪ Be proactive in community engagement, including information disclosure and operation of a community grievance mechanism.</li> <li>▪ Ensure that CR activities are carried out in a culturally appropriate manner and include vulnerable and disadvantaged groups.</li> <li>▪ Assign the ultimate responsibility for CR performance to TERSK Project Director and HSE Manager.</li> <li>▪ Ensure that relevant CR trainings will be provided to all employees and subcontractors.</li> </ul>
Human Resources Policy	<ul style="list-style-type: none"> <li>▪ Align its Human Resources management for the Project with national regulations and IFC ES Performance Standards.</li> <li>▪ Promote safe working conditions, equal opportunities in its recruitment and training, and also prioritise local employment where the skills are available.</li> <li>▪ Establish and maintain an employee grievance mechanism for the Project.</li> <li>▪ Assign the ultimate responsibilities for the Project E&amp;S performance to TERSK Project Director and HSE Manager.</li> </ul>

Project Policy	Objectives
	<ul style="list-style-type: none"> <li>▪ As part of the ESMS, implement OHS procedures and provide relevant training to employees and subcontractors.</li> <li>▪ Monitor OHS performance, including ensuring subcontractors achieve the required standards.</li> </ul>
Human Rights Policy	<ul style="list-style-type: none"> <li>▪ Include provisions for the protection and monitoring of working conditions.</li> <li>▪ Include provisions forbidding child labour and forced labour involved in the Project at any level.</li> <li>▪ Include provisions on non-discrimination and the protection and monitoring of GBVH conduct.</li> <li>▪ Include provisions on avoidance of retrenchment.</li> </ul>

## 3.2 Identification of Project Risks and Impacts and ESIA Process

### 3.2.1 Identification and assessment of environmental and social risks

Environmental and Social aspects and impacts associated with the Project have been identified and evaluated as part of an ESIA process. The ESIA has resulted in the identification of a range of risks and potential impacts for which control measures have been developed to mitigate residual impacts.

The identification and prioritisation of control measures drives the development of a set of Environmental and Social Management Plans (ESMPs), aimed at ensuring that E&S impacts are avoided or minimised.

A set of Construction Environmental and Social Management Plans (C-ESMPs, from now on referred to as ESMPs, for simplicity) has been drafted and will be shared with all contractors prior construction starts. Additionally, a set of Operation Environmental and Social Management Plans (O-ESMPs) and a Decommissioning Management Plan will also be drafted once construction will be more advanced and the operational phase will be closer.

All mitigation measures for both construction and operation can be found under the Impact Assessment of the Project (Chapters 4, 5 and 6 of the ESIA Report). Additionally, for the construction phase, the detailed mitigation measures have been included under the dedicated ESMP. While for operation and decommissioning a dedicated Commitment Register has been developed, which include all mitigation measures for the mentioned phases of the Project.

Although the ESIA process has fully addressed impacts and risks on the basis of current Project information, changes might occur during the Project implementation due to external circumstances unpredictable at the time of the ESIA preparation. A Management of Change Procedure will be prepared as part of the ESMS process to deal with Project changes that may have E&S effects. Accordingly, the ESMP might need to be revised as a consequence of changes, to ensure additional potential impacts are captured and mitigated, as necessary, through reviews, periodical updates.

### 3.2.2 Overview of the ESIA process

E&S aspects and impacts associated to the Project have been identified and evaluated as part of the ESIA process. The ESIA has identified a range of risks and potential impacts and corresponding control measures to mitigate residual impacts to align the Project with national and international standards. The ESIA process has included the following steps:

- Review of available Project information and E&S documentation and early consultations (summer 2023).
- Scoping Visit (October 2023);
- Scoping Report (February 2024);
- Biodiversity Surveys (ongoing since Spring 2023);
- Supplementary baseline survey and consultations (July 2024);
- Baseline Reports (last biodiversity baseline reports delivered in September 2025);
- Delivery of the draft Impacts Assessment report (April 2025); and
- Revision and Finalisation of the ESIA report and other ESMS documentation (September- October 2025) following the review of the E&S documentation by the Lender's E&S Advisor (Ramboll; May to June 2025), their site visit together with Aktas and WSP (July 2025) and the issuance of the Advisor's report (August 2025).

### 3.3 Management of change procedure

A Management of Change (MoC) procedure is needed to address future risks and impacts that may result from Project permanent and/or temporary changes such as changes in the technical design, changes introduced as a consequence of modifications in the regulatory framework, and the like. The purpose of the MoC procedure is to screen any proposed changes in the Project or major deviations from the original design and help understanding if there are new / additional / different impacts than those identified in the ESIA process and ensure their effective management of risks and impacts within the Project area of influence.

Aktas has developed tools and procedures for identification of future risks and impacts that may result from Project changes and be different or additional to those that have already been identified and addressed in the ESIA process. Such risks and impacts will be screened, and their level of significance will be assessed in categories of high, medium and low. In cases different or additional risks arise, the ESMPs will have to be revised to include additional or different mitigations, as needed. If any changes is proposed by the EPC, they will communicate the proposed changes to TERSK and cooperate to address them. TERSK will revise the ESMP accordingly and require that any resulting actions are reflected in the contractors and subcontractors' ESMPs. TERSK will also monitor that all critical documentation remains up to date, as new mitigation measures are implemented.

A standalone Management of Change (MoC) procedure has been prepared and is attached to this ESMS FD (See Appendix A). The MoC procedure screens and deals with changes in Project technical aspects and design, regulatory changes, and the like, tracking the necessary information to effectively manage the consequences of the change on environmental and social components of the Project's area of influence with minimal impact on the Project activities/operations. The key objectives that have guided the preparation of the MoC are as follows:

- Manage permanent, temporary and urgent/emergency changes to procedures or process equipment.

- Provide for screening tools and procedures for a thorough evaluation of the proposed changes and of their consequences in terms of risks and impacts on the area of influence of the Project.
- Provide for procedures for assessing impacts and risks generated by the change and for evaluating if these are different or additional to risks and impacts already identified and addressed in the ESIA process. In case of differences, the MoC provides for the identification of additional or enhanced mitigations to be included in the ESMPs in response to the change.
- Provide for procedures for revising the ESMPs and other relevant procedures and tools part of the ESMS in response to the change and, for more relevant changes, provide for procedures for submission to relevant stakeholders (including lenders among others) for their review of the revised ESMS elements and approval.
- Communicate the proposed change and its consequences and new or different management requirements to personnel whose job tasks may be affected by the change and who may require training prior to implementing the change.
- Monitor that all critical documentation remains up to date with changes as they are implemented.

The MoC procedures applies to all Project activities. The process for dealing with changes recognises three levels of change:

- Class III, High Significance, where a significant change, that is outside the ESIA scope/study area or a key aspect of it, is considered likely to have significant adverse impacts which are not mitigated by the ESMP. An addendum to the ESIA, and formal submission and approval process, may then be required. Changes in the Project Standards will also fall within this category. Class III changes will also require that significant upgrades are included in the ESMP and in the overall ESMS and these are disclosed to stakeholders.
- Class II: Moderate Significance, where the change is deemed to be material to the ESIA findings, but is within the boundaries of the defined Project inside the scope/study area covered by the ESIA. This may require minor changes to the ESMP and additional surveys or environmental and social assessments to be included in the ESIA; and
- Class I: Low Significance, where the change is largely deemed to be immaterial to the ESIA findings and does not affect the Project's ability to meet environmental and social performance requirements through the existing ESMP and ESMS. This change may require limited or no additional environmental or social study or surveys.

For Class II and III changes requiring an update to the ESMPs, relevant stakeholders (e.g., regulatory authorities, Project lenders, etc.) will need to be notified. All workers / employees or other parties who have a role in implementing measures to manage the effects of any changes will have to be trained to understand the change implications and their ability to respond.

## 4.0 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLANS

Aktas has developed a set of management plans constituting the Project construction ESMP and procedures consistent with their policies and commitments, addressing the environmental and social impacts and risks that are identified in the ESIA. The ESMP aims, where feasible, at avoidance and prevention of environmental and social impacts and risks; where avoidance will prove not to be feasible, the ESMP outlines minimisation and mitigation measures to appropriately manage the impacts and risks of the Project and considers impact offset measures as the last resort.

The ESMP will be disseminated by TERSK across the Project organization, including, among others, Contractors, Subcontractors and primary suppliers over which TERSK has control or influence.

Each management plan part of the ESMP clearly describes the general objectives (or purpose) of mitigations. The ESMP also identifies Key Performance Indicators (KPIs) and performance targets that can be of qualitative or quantitative nature; these will be then monitored during construction for evaluating the ESMP and, overall, the ESMS implementation performance in addressing Project's impacts and risks. For each KPI the management plans set, if applicable and feasible, specific targets (for quantitative indicators) or acceptance criteria (for qualitative indicators) derived from the Project Standards defined in the ESIA that will be tracked over defined periods of time.

Contracts will include legally binding clauses requiring contractors to comply with the Project applicable standards and the requirements of the ESMP. The latter will be cascaded down to contractors and adopted by all of them. Contractors will be free to implement these plans or develop their own implementation plans, procedures and work instructions aligned with the ESMP if they deem it necessary and more practical to ensure that the ESMS requirements are met. In such cases, the Contractors' ESMPs will be subject to prior review and approval by TERSK. The ESMP will need to be implemented by all contractors that operate during Project construction and will operate and maintain the Project and relevant facilities.

The main Environmental and Social aspects addressed by the ESMP have been identified in the ESIA and are summarized as follows:

- Cumulative impacts with other existing or reasonably planned and future projects.
- Air emission (in particular dust).
- Noise emissions.
- Wastewater discharge.
- Waste production.
- Hazardous materials management.
- Soil management.
- Water/Energy resources management.
- Blasting and explosive management.
- Employment and labour issues.
- Traffic related risks and impacts.
- Influx of people related risks and impacts.
- Community health and safety issues.
- Employees health and safety management.
- Issues resulting from the process of land acquisition, physical and economic displacement.
- Issues related to the management of supply chain risks and impact.
- Cultural heritage.
- Biodiversity management.

As a consequence, the Construction ESMP that will be implemented for fulfilling the commitments undertaken by the Project includes the management plans presented in the following Table 4. The management plans for

operations will be specified in due course, even though a list of the operation ESMPs that are proposed to be developed as per the expected operation context are presented in Table 2<sup>4</sup>. This section provides indications to avoid, minimize and compensate the impacts identified in the ESIA.

The set of Project-specific C-ESMPs developed is listed in the following table.

**Table 4: List of required ESMP for construction**

Plan name	Responsibility
Waste & Hazardous Materials Management Plan	<p>Aktas to develop the plans.</p> <p>EPC contractor to ensure that the plans are reflected in their procedures, under the supervision of TERSK.</p>
Water Management Plan	
Air emissions Management Plan	
Resource Efficiency Management Plan	
Soil Management Plan	
Emergency Preparedness and Response Plan (EPRP)	
Blasting Management Plan	
Biodiversity Action Plan (BAP)	
Biodiversity Management Plan (BMP)	
Cultural Heritage Management Plan and Chance Finding Procedure	
Influx Management Plan	
Labor Management Plan	
Community Health and Safety & Security Management Plan	
Occupational Health and Safety Management Plan	
Traffic Management Plan	
Supply-chain Management Plan	
Land Acquisition Resettlement Framework	
Livelihood Restoration Plan	

As said, the full set of construction ESMPs is already in place. For the operational phase, the operational ESMPs will be prepared six months before the start of operations, while the Decommissioning Plan will be developed six months before the start of decommissioning activities.

The structure of each Management Plan is presented in the following section.

#### 4.1.1 Structure of the ESMP individual Management Plans

Each Management Plan has been structured to include the following aspects:

- Project overview: a general introduction of the Project;
- Purpose and scope of the Plan: a general description of the scope that the plan intends to implement;
- Relationship of each plan to other Management Plans;
- Roles and responsibilities: identify key roles, assign responsibilities, and report communication lines to ensure the plan is implemented correctly;

<sup>4</sup> This list will be updated in case the list of management plans changes over the course of the construction phase



- **Background Policies and Standards:** the reference policies, legislation, standards, and requirements relevant to the specific topic covered by the plan and specified in the "Legal and other requirements" section of this ESMS Framework. References include:
  - National standards and regulations,
  - International standards (e.g., IFC requirements),
  - ESIA, and
  - Other source documents (e.g., permits released by National Authorities).
- **Mitigation measures/actions and monitoring actions:** the list of mitigation actions and measures to be implemented to manage the environmental and social impacts generated on the specific component. Responsibilities and timeframe are assigned for each action to ensure implementation.
- **Audit and review:** the monitoring (intended as measurements or internal audit/inspection, see the next subsection for details) program with details on measurement methodologies, KPIs, targets/acceptance criteria. In addition, the section includes an audit and review scheme for ensuring the correct implementation of the ESMP within the broader framework of the ESMS.
- **Training requirements:** the training requirements and a guidance for Contractors and Sub-Contractors to ensure that their training activities are carried out in compliance with the specific Management Plan;
- **Reporting for auditing and for monitoring:** instructions and requirements for the reporting on the implementation of mitigation measures/actions, monitoring activities and internal auditing, specifically, as a guideline for reporting the results of the monitoring activities and performance in ESMP implementation.

#### **4.1.2 ESMPs Audit, Monitoring, Review and Performance Reporting**

Once mitigation measures are identified and detailed under each ESMP, a detailed monitoring process is established which specifies the timeline, frequency, KPIs, targets, verification methods, and responsible parties for implementation and oversight of each measure. Monitoring ensures residual impacts are controlled and mitigation measures are effective. If monitoring reveals non-conformities or unforeseen impacts, the responsible party for monitoring will assess the situation and, if necessary, suggest adjustments to mitigation and monitoring activities. Any changes will be evaluated and approved by TERSK under Aktas supervision, ensuring timely and proper execution.

Monitoring reports will detail evidence and results from monitoring activities. Each report will reference the relevant ESMP and include the scope, purpose, methodology, dates, locations (with coordinates and elevation), maps if applicable, and staff information. Reports will also note any external parties involved, present applicable KPIs, assess compliance, and record observations or deviations with explanations. Recommendations for improvements and adjustments to the ESMP, as well as quality control measures ensuring reliable results, will be included.

The implementation of each ESMP will be audited providing evidence of the implementation of the mitigation measures/actions, of the timely deployment of monitoring activities and of related results. The Audit Report will include as minimum the list of the items audited, information whether the items have been implemented within the indicated timeline and frequency, achievement (or not) of the KPIs and description of non-compliances eventually identified.

## 5.0 IMPLEMENTATION OF THE ESMS: ORGANISATIONAL STRUCTURE AND COMPETENCY

The organizational structure presented in the following paragraphs has been developed for the management of construction activities. Organization structure for the operation phase will be defined six months prior operation activities start.

The efficient establishment and implementation of an ESMS require that all Project parties involved (in the ESMS implementation (TERSK, the EPC Contractor, other contractors and subcontractors) define a dedicated organizational structure with clearly identified lines of authority and responsibilities for managing E&S aspects of the Project as relevant to their scope of work.

An organization chart for the construction phase has been developed to represent TERSK organization adopted for Project the construction phase and ESMS implementation. This is presented in Appendix B to this document. An organization chart for the operation phase will also be developed in due course.

Overall, TERSK will have a role of regular supervision of the EPC and contractors on E&S matters, implementing a strict and daily supervision, control, audit and monitoring on the EPC contractor and subcontractors to ensure their E&S performance is in line with the ESMS and with lender applicable standards.

The main roles and responsibilities of TERSK are described further below in this section. Lower-level staff will be also allocated as part of the overall organisational structures of TERSK. In addition to these roles, they may engage other technical specialists as necessary, to support the effective implementation of the ESMS.

The key person in the Project construction organogram from an E&S perspective is TERSK E&S Manager to whom the Deputy E&S Manager, the Environmental engineer and the Biodiversity Advisor report. The E&S manager will in turn report to the HSE Manager, the head of the E&S organisational structure, the Site HSE Manager will do the same.

The role and responsibilities presented in this ESMS FD reflect the leading positions in E&S management within TERSK. While additional roles and supporting staff are foreseen to ensure effective implementation of the ESMS, they are not individually represented in the organogram for simplicity.

The EPC, other contractors and subcontractors will have in turn to develop and implement dedicated organizational E&S structures that mirror TERK's, so to be able to deliver the Project in conformance with the Project ESMS requirements. These structures will include clear interdependencies between contractor and subcontractors E&S management roles. Moreover, the contractors and subcontractors will be required to have sufficient resources on an ongoing basis to achieve effective implementation of the requirements established in the ESMS.

The following sections present Aktas and TERSK roles and responsibilities for the implementation of the ESMS.

### 5.1 AKTAS Roles and Responsibilities

#### 5.1.1 General Director

The General Director's (GD) primary responsibilities include:

1. Overall Project Oversight: Aktas GR main responsibility is ensuring the timely delivery of the Project in line with the applicable E&S standards and regulations. For doing so the GD will regularly interact with TERSK PD and HSE Manager and will receive reports from them.
2. High level Coordination: The GD ensures that TERSK activities aligning with the goals and objectives set by Aktas. This includes periodic coordination with TERSK leadership to review performance.

3. **Quality Assurance:** in coordination with TERSK PD, the GD ensures that construction adhere to the highest quality standards, periodically consulting with TERSK on Project performance.
4. **Leadership review meetings;** the GM calls for and chairs periodic meetings with the TERSK PD and HSE Manager to review Project E&S performance, discuss recurrent non conformances and define corrective actions. While Aktas GD does not have any actual role in implementing the ESMS on site or in supervising contractors and subcontractors performance, the GD is the ultimate responsible in front of the lenders of to ensure that the Project E&S performance complies with all relevant environmental regulations and that social safeguards are in place to protect the interests of all interest parties (eg. Local communities and workers).

The GD may delegate parts or all these responsibilities to the Deputy GM.

## **5.2 TERSK roles and responsibilities**

### **5.2.1 Project Director (PD)**

The PD's primary responsibilities include:

1. **Overall Project Oversight:** The PD is responsible for the overall management and execution of the Project, ensuring that all phases are completed on time, within budget, and in accordance with the specified quality standards. A fundamental element of Project Oversight will be ensuring that the Project construction is delivered in compliance with the applicable E&S standards and all other relevant applicable regulations. In doing so, the PD will act in coordination with the HSE Manager and the E&S Manager.
2. **Strategic Planning and Coordination:** The PD leads the development of the Project's strategic plan, aligning it with the goals and objectives set by Aktas. This includes coordinating with Aktas, consultants, the EPC contractor and subcontractors to ensure cohesive and efficient operations.
3. **Stakeholder Management:** The PD will oversee and coordinate with the E&S Manager to engage with institutional stakeholders and Lenders. The PD acts as the principal point of contact for all institutional key stakeholders, Lenders, local authorities and community representatives.
4. **Risk Management:** With extensive experience, the PD identifies potential risks and implements mitigation strategies to address them proactively. This includes overseeing environmental and social risk assessments to ensure compliance with Lender E&S standards and minimize the Project's impact on local communities and the environment.
5. **Quality Assurance:** The PD ensures that all construction activities adhere to the highest quality standards, implementing robust quality control procedures and conducting regular inspections to maintain the integrity of the Project.
6. **Environmental and Social Compliance:** Given the Project's adherence to Lender E&S standards, the PD places a strong emphasis on environmental sustainability and social responsibility. He is the highest person in the organization to ensure that the Project complies with all relevant environmental regulations and that social safeguards are in place to protect the interests of local communities.
7. **Team Leadership and Development:** The PD mentors and guides the Project team, fostering a culture of excellence and continuous improvement. He leverages his extensive experience to develop the skills and capabilities of team members, ensuring a high-performing Project team.

8. Reporting and Documentation: The PD oversees the preparation of detailed Project reports and documentation to be delivered to Aktas, providing regular updates to Aktas leadership and ensuring transparency in all Project activities.

### **5.2.2 HSE Manager (reporting to the PD)**

The HSE Manager is a key on-site person responsible for managing the day-to-day operations of the Project. As the primary point of contact on the construction site, the HSE Manager's responsibilities include:

1. Site Management: The HSE Manager oversees all on-site E&S activities, ensuring that construction progresses according to the Project commitments and the ESMS requirements. This includes ensuring, in coordination with the Project Director and the Project E&S Manager, that all Project activities comply with the applicable Lender E&S standards and other applicable regulations, which cover environmental and social sustainability, labor and working conditions, community health, safety, and security.
2. Coordination and Communication: The HSE Manager oversees and coordinates with various teams and their managers including TERSK's and EPC's OHS and E&S staff, to ensure seamless communication and collaboration on E&S matters. He ensures that all team members are aligned with the Project E&S goals and objectives..
3. Health, Safety, and Environment (HSE): The HSE Manager prioritizes the safety and well-being of all personnel on-site. He enforces strict adherence to HSE regulations, conducts safety drills, and ensures that all safety protocols are followed to prevent accidents and injuries. In addition, the HSE Manager ensures all TERSK's, EPC's and subcontractors' employees take reasonable care of their own and others' health and safety, follow site rules and training, use protective equipment properly, report hazards, and cooperate with employers to maintain a safe working environment.
4. Progress Monitoring: With the support of the E&S manager the HSE Manager monitors the progress and E&S performance of the Project, tracking milestones and ensuring that timelines are met. He prepares progress reports for the PD and other stakeholders, providing updates on the status of the Project and any issues that may arise.
5. Problem-Solving: The HSE Manager addresses any on-site E&S challenges or issues promptly, implementing effective solutions to minimize disruptions to the works and ensuring that construction continues smoothly.
6. Resource Management: The HSE Manager manages the allocation and utilization of E&S staff. He ensures that E&S staff are used efficiently and that the Project remains within budget.
7. Documentation and Reporting: The HSE Manager maintains comprehensive records of all on-site E&S performance, including daily logs, inspection reports, and incident reports and regularly transmits them to Aktas. He ensures that all documentation is accurate and up to date, facilitating transparency and accountability.

#### **5.2.2.1 Interaction Between PD and HSE Manager**

The interaction between the Project Director (PD) and the HSE Manager is essential for the seamless execution of the Project construction. While the PD provides strategic oversight and guidance, the HSE Manager manages the day-to-day ESMS implementation on-site. Their roles are complementary, ensuring that there is no overlap or confusion.

The PD, with his extensive experience, sets the strategic direction and makes high-level decisions and engages stakeholders. He visits the site periodically to review progress, address any critical issues, and provide strategic

input. The PD relies on the HSE Manager to provide detailed and accurate reports on the Project's status, enabling informed decision-making.

The HSE Manager, implements the ESMS or ensures it is implemented by the EPC and subcontractors, oversees daily construction activities, and ensures adherence to timelines and quality standards. He communicates regularly with the PD, providing updates on progress, challenges, and any deviations from the plan. This regular communication ensures that the PD is fully informed and can offer timely guidance and support.

Together, the PD and HSE Manager form a cohesive leadership team that balances strategic E&S performance oversight with operational efficiency, driving the Project toward successful completion while maintaining high standards of quality, safety, and sustainability.

### **5.2.3 Site HSE Manager (Reporting to the HSE Manager)**

1. **Quality and Safety:** The Site HSE Manager ensures that works are performed to the highest standards of safety. This includes enforcing safety protocols, conducting inspections, and addressing any non-compliance issues.
2. **Health and Safety Management:** ensures that health and safety plans are implemented to protect all personnel on the construction site. This includes conducting or supervising risk assessments, safety drills, and training sessions to promote a safe working environment.
3. **Training and Awareness:** Conducts regular training sessions for all Project personnel on health, safety, and environmental best practices. An appropriately equipped classroom in the site offices will be used for these sessions.
4. **Safety Compliance:** Ensures that all site activities (maintenance, laboratory etc.) comply with health and safety regulations. This includes conducting safety training, and regularly inspecting the workshops, site installations and field operations to prevent accidents. Enforces safety protocols and conducts regular safety inspections to prevent accidents and ensure compliance with safety regulations.
5. **Oversight of security personnel:** The Site HSE Manager oversees the activities of security personnel to ensure all security operations such as access control, surveillance monitoring, and patrols are aligned with the Project security requirements. Ensures that guards are trained and follow up on any security related incidents.

### **5.2.4 Human Resources Manager (Reporting to the HR Director<sup>5</sup>)**

The HR manager focuses on the day-to-day management of personnel, ensuring smooth operations and addressing site-specific HR needs. Key responsibilities include:

1. **Local Employment:** Prioritizes the employment of local labor whenever possible. While there is a preference for hiring locally, it is recognized that specialized personnel may not always be available in the Project area of influence or beyond.
2. **Recruitment and Hiring:** Oversees the recruitment process of the EPC and other subcontractors, ensuring that all hires meet the necessary qualifications and experience required for their roles and are completed in line with the applicable E&S standards and regulations.
3. **Contract Management:** Oversees the administration of employment contracts, ensuring that all terms and conditions comply with local laws and Project requirements.

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<sup>5</sup> The HR Director is not presented here as he/she has no E&S responsibilities.

4. **Training and Development:** Ensures training and development opportunities are provided to site personnel, enhancing their skills and ensuring they can perform their roles effectively.
5. **Discipline and Compliance:** Ensures that disciplinary measures are enforced as needed, in accordance with local regulations and company policies. Ensures that all disciplinary actions are fair, transparent, and documented.
6. **Reporting:** periodically Reports on HR aspects to Aktas Energy GD.

### **5.2.5 Human Resources Coordinator (Reporting to the HR Director)**

1. **Labor and working conditions:** Ensures adherence to labor standards as per the Lender E&S standards and the National regulations by monitoring contractor compliance with fair labor practices, safe working conditions, and non-discrimination policies. This includes overseeing the treatment and working conditions of direct and contracted personnel.
2. **Employee Relations:** Handles employee relations on-site, addressing any issues or grievances that arise and ensuring a positive working environment. Specifically, the HR team implements the grievance mechanism for workers, taking care of the timely recording of grievances and the definition of suitable responses and follow up on their implementation.

#### **Local Employment Priority:**

A key aspect of the HR strategy is the priority given to employing local labor along the road's route. This approach supports the local economy and fosters community relations. While the Project aims to hire locally whenever possible, it is acknowledged that there may be a shortage of specialized personnel in the Project area. In such cases, the Project will seek to balance local employment with the need for skilled workers to ensure the Project's success.

### **5.2.6 E&S Manager (Reporting to the HSE Manager)**

The E&S Manager leads a multidisciplinary team dedicated to ensure the highest health, safety, environmental, and social standards are maintained across the Project site. Key responsibilities include:

1. **Compliance with Lender E&S standards:** Ensures, in coordination with the Project Director and the HSE Manager, that all Project activities carried out by the EPC, other contractors and subcontractors comply with the Lender applicable E&S standards, which cover environmental and social sustainability, labor and working conditions, community health, safety, and security.
2. **Environmental Management:** Oversees the implementation of the ESMS by the EPC, contractors and subcontractors staff. This involves monitoring environmental parameters and ensuring compliance with relevant environmental regulations and standards.
3. **Biodiversity Management:** Places special emphasis on protecting local biodiversity, particularly birds and bats and other sensitive species. The E&S Manager collaborates with the HSE Manager, biodiversity advisor, and local experts to ensure that conservation strategies are effectively applied, preventing harm to local wildlife and habitats.
4. **Social Impact Management supervision:** supervises the implementation of social impact management measures, with particular attention to the local communities, herders and individual dwellers. The E&S Manager engages with community leaders, and ensures the implementation of measures to mitigate any adverse effects of the construction activities. To do so, the E&S Manager works together with and supervises the activities of the Social specialists and of the Community Liaison Officers that are part of the E&S team.
5. **Community Engagement:** Facilitates ongoing dialogue with local communities to address their concerns and ensure their participation in the Project in accordance with the Stakeholder Engagement Plan. This includes organizing community meetings and providing updates on Project progress in cooperation with



the Social staff; and incorporating community feedback into Project execution with the support of the HSE Manager.

6. **Training and Awareness:** Plans and supervises implementation of regular training sessions for all Project personnel on E&S aspects and best practices. This includes raising awareness about the importance of environment and biodiversity conservation and the social aspects of the Project. An appropriately equipped classroom in the site offices will be used for these sessions.
7. **Monitoring and Reporting:** Continuously monitors health, safety, and environmental performance, ensuring this is documented. This includes preparing detailed reports for the PD, HSE Manager, for lenders, and other stakeholders, ensuring transparency and accountability.
8. **Emergency Response Planning:** Ensure emergency response plans are maintained to address potential incidents, such as environmental spills or safety accidents. This includes coordinating with the PEC, local authorities and emergency services to ensure a swift and effective response.

### **5.2.7 Deputy E&S Manager (Reporting to the E&S Manager)**

1. **Compliance with Lender E&S standards:** Ensures that all social and land acquisition-related activities falling within Project scope comply with the applicable Lender E&S standards, particularly those addressing land acquisition and involuntary resettlement, community health and safety and cultural heritage. The Deputy will ensure compliance overseeing the implementation of all relevant management plans, with the accountability of the Project PD and HSE Manager and in coordination with relevant stakeholders as needed.
2. **Land Acquisition Management:** Implement transparent and equitable land acquisition processes, ensuring compliance with National regulations, PS5 and PR5. This involves overseeing compensation mechanisms for land and assets, resettlement planning, and a fair resolution of land-related disputes.
3. **Cultural Heritage Preservation:** With the support of external specialists contracted by TERSK, the Deputy ensures Cultural heritage is preserved through implementation of the relevant management plans and mitigation measures. Collaborates with local authorities to identify, document, and protect cultural heritage sites within the Aol in line with the PS8 and PR8. Ensures that the preservation of cultural heritage is integrated into Project planning and involves consultation with affected communities.
4. **Stakeholder Engagement:** Ensures meaningful engagement with Stakeholders by implementing the Stakeholder engagement Plan (SEP). This includes conducting with the support of the CLO consultations with affected communities, vulnerable groups, and indigenous populations to ensure their feedback/preoccupations are incorporated into Project activities.
5. **Grievance Mechanism Implementation:** Manages the operation of the Grievance Mechanism for affected communities. Ensures that it is accessible, transparent, and responsive, with specific provisions for addressing grievances from vulnerable groups, including women and indigenous peoples.
6. **Community Health Safety and security:** Oversees the implementation of measures to protect community Health, safety and security from Project related risks. Works closely with the Site HSE Manager to mitigate impacts such as noise, dust, and traffic safety concerns arising from construction activities.
7. **Training and awareness:** Supports the E&S Manager in planning and conducts regular training sessions for all Project personnel on Social Safeguards, Stakeholder engagement and Cultural sensitivity. Uses dedicated resources to raise awareness about the social aspects of the Project among local communities and workers.
8. **Monitoring and reporting:** Continuously monitors the effectiveness of social mitigation measures and prepares detailed reports for the Environmental and Social Manager, the HSE Manager and relevant Stakeholders. This ensures transparency and accountability in the Project's social management and includes reporting to the local HR team on casual observations about labour and working conditions to obtain improvements for direct workers and workers engaged by the EPC, contractors and subcontractors.

9. Collaboration with NGOs: Works with local NGOs to address gender inclusion, vulnerable populations, and indigenous peoples' concerns. Integrates their feedback into tailored interventions and the external grievance mechanism to ensure the Project's social sustainability.

#### **5.2.8 Environmental Engineer (Reporting to the E&S Manager)**

1. Compliance with Lender E&S standards: Ensures that all activities related to physical environmental components are conducted in compliance with PR3, PS3, other applicable lenders standards on resource efficiency and pollution prevention and other relevant standards.
2. Waste Management: Oversees the implementation of waste management strategies, ensuring proper segregation, collection, treatment, and disposal of waste in compliance with local regulations and international best practices. Collaborates with contractors and sub-contractors to define strategies for minimizing waste generation and promoting recycling and reuse.
3. Wastewater Management: oversees the implementation of wastewater management, including the treatment and disposal of effluents. Ensures that wastewater discharges comply with applicable environmental standards and minimize impacts on surrounding water bodies and ecosystems.
4. Water and Energy sources Management: Oversees the sustainable use of water and energy resources throughout the Project lifecycle. The Environmental Engineer develops conservation strategies and monitors usage to optimize resources efficiency and reduce environmental footprints.
5. Soil Management: Ensures the implementation of Soil Management measures to prevent erosion, contamination, and degradation. Ensures the rehabilitation of disturbed land areas and promote sustainable land-use practices.
6. Air Quality Management: Monitors and mitigates impacts on air quality from Project activities, including emissions from construction equipment and dust generation. Implements measures to ensure compliance with air quality standards and protect the health of workers and local communities.
7. Noise Management: Oversees the implementation of noise control to minimize disturbances to local communities and wildlife. Ensures compliance with permissible noise levels and conducts regular noise monitoring at Project sites.
8. Climate change Mitigation: Ensures climate change adaptation and mitigation measures are included in Project planning and execution. Promotes practices that reduce greenhouse gas emissions and enhance resilience to climate risks.
9. Training and awareness: Supports the E&S Manager in planning and conducts regular training sessions for Project personnel on environmental best practices with focus on waste management, resource conservation, and pollution prevention. The Environmental Engineer uses dedicated resources to ensure effective knowledge transfer.
10. Monitoring and reporting: Continuously monitors the implementation of the management plans related to physical components. The Environmental Engineer also prepares detailed reports for the Environmental and Social Manager and the HSE Manager and relevant stakeholders, ensuring transparency and accountability.
11. Community Health and Safety: Collaborates with the CLO and Deputy E&S Manager to oversee the management of community health and safety aspects associated with physical components, such as air pollution, noise, and water contamination. Engages with local communities to mitigate concerns and provide updates on management measures.

#### **5.2.9 Biodiversity Advisor (Reporting to the E&S Manager)**

4. Biodiversity Management: Ensures the implementation of all mitigation measures identified in the Biodiversity Management Plans that are included in the ESMS for construction. Upon request of the PD or the HSE Manager the specialist may directly coordinate and engage with relevant authorities and stakeholders to discuss matters relevant to biodiversity management, or support the PD and HSE Manager in doing so.



5. **Biodiversity Monitoring:** Ensures the implementation of biodiversity measures and monitoring, in compliance with PS6 and PR6, which cover biodiversity conservation and sustainable management of living natural resources. The advisor places special emphasis on protecting local biodiversity, particularly birds, bats and other sensitive species, and promotes sustainable management of living natural resources. The Biodiversity advisor collaborates with the E&S Manager, and with the HSE Manager to ensure that conservation strategies are effectively applied, preventing harm to habitats, local wildlife, and living natural resources. The Biodiversity specialist will rely on some specific external consultants for support on very specific biodiversity topics, such as an ornithologist.
6. **Training and Awareness:** Supports the E&S Manager in planning and conducts regular training sessions for all Project personnel on health, safety, and environmental best practices. An appropriately equipped classroom in the site offices will be used for these sessions. This includes raising awareness about the importance of promote and conserve biodiversity.
7. **Biodiversity Reporting:** Reports to the E&S Manager on performance to demonstrate that deviations from- or noncompliance with- the ESMS requirements are addressed and corrective measures are implemented, giving evidence that the relevant mitigation measures are being properly considered, implemented and monitored during the construction activities.

#### **5.2.10 Community Liaison Officer(s) and assistants (Reporting to the Deputy E&S Manager)**

1. **Stakeholder Engagement and Communication:** The CLO serves as the primary point of contact between the Project team and the local communities. Their responsibilities include informing communities about the Project's goals, activities and timeline, gathering feedback, concerns, and suggestions from community members, and referring them to the Project management team. The CLO also organizes and facilitates community meetings, awareness sessions, and consultations to ensure transparent and effective communication.
2. **Conflict resolution:** The CLO addresses and mediates conflicts or grievances arising between the Project and local communities. They ensure that all grievances are handled promptly, fairly, and in a culturally sensitive manner, contributing to harmonious relations between stakeholders.
3. **Social Impact monitoring:** The CLO monitors the social impacts of the Project on local communities, ensuring compliance with social safeguards and mitigation measures. The CLO regularly reports on any adverse impacts or challenges encountered to the Project management team for appropriate action.
4. **Support for Employment and local participation:** The CLO facilitates the recruitment of local labor, ensuring the hiring process is fair and inclusive, particularly for women and vulnerable populations. They promote local participation in the Project's activities, such as subcontracting opportunities, fostering equitable benefits from the Project for the surrounding communities.
5. **Support to Project Activities:** The CLO assists in obtaining necessary permissions or access from community leaders and stakeholders for Project activities. Works closely with the Project team to identify and implement culturally sensitive approaches to construction and operations, ensuring smooth integration of the Project's activities with local custom and practices.

##### **5.2.10.1 Interaction and Coordination Among the Team Members**

The coordination between the Environmental Engineer, Deputy E&S, Site HSE Manager and Biodiversity advisor on one side, and the HSE and E&S Managers on the other is critical to ensure compliance with applicable standards and the effective implementation of the ESMS on-site. While the former group oversee construction activities and the execution of works at the construction site to ensure they are delivered in compliance with the applicable E&S standards, they will maintain regular communication with the HSE and E&S Managers to align operational practices with the Project's sustainability, safety, and compliance objectives. The Environmental Engineer, Deputy E&S, Site HSE Manager and Biodiversity advisor are also expected to report any E&S or HS-related incidents, risks, or non-conformities to the E&S Manager promptly. They also facilitate

the implementation of corrective actions and support awareness-raising among workers on E&S and HS matters.

## **5.2.11 Training, Awareness and Competence**

### **5.2.11.1 Construction phase**

TERSK will provide a general ESHS training to all their employees upon appointment and managers and to contractors and subcontractors staff, ensuring that:

- Personnel is aware of the importance of implementing the ESMS and fulfilling requirements therein and that failure in fulfilling these requirements may lead to significant impacts on the environment, communities and Project workers.
- Personnel within the organizational structure with direct responsibility for the Project's ES performances have the knowledge, skills, and experience necessary to perform their work, including current knowledge of the applicable laws, regulations, IFC Performance Standards and Guidelines, EBRD ES Requirements, and EP IV.
- Personnel possess the knowledge, skills, and experience to implement the specific measures and actions required under the ESMS and the methods to perform such actions in a competent and efficient manner.

More specifically, all construction staff (including subcontractors) will be required to attend an in-house training course on general E&S awareness to get a general understanding of the E&S risks associated with the Project, of national and Lenders' requirements on E&S compliance, labour rights and working conditions including grievance mechanism and their practical implementation.

Key aspects that TERSK will consider in delivering the training and ensure trainings' effectiveness are:

- Training topics will cover technical topics (e.g., use of PPEs, waste and chemical management, safe use of equipment, safety at roads, OHS, etc.) with a focus on those ESMS procedures and ESMPs requirements that differ from national standards and practices;
- Use of practical examples, case studies and lessons learned from other projects, safety posters, toolbox talks, and other safety tools/programs, etc.;
- Cover topics such as the employee code of conduct, gender-based violence and harassment, use the grievance mechanism, engagement with communities, reporting of incidents, etc.;
- Use a train-the-trainer approach (e.g., the HSE Manager trains the HSE Supervisors who will train staff at the different construction sites);
- Maintain training evaluation sheets for all staff to monitor attendance and effectiveness of the training delivered; and
- Provide refresh trainings when project tasks change or when workers are moved to different tasks.

TERSK will keep track of the course content, attendees, and course evaluations. All records, including the course evaluation and attendance sheets, will be kept by the HSE Manager and used to build statistics and made available during any audit conducted as part of the audit program.

In addition to the general training, topic-specific training requirements are included in each individual management plan part of the ESMP. Contractors will be required to implement trainings requirements, that will be cascaded down to them by TERSK. TERSK will ensure that Contractors and Subcontractors develop Training

programs for their personnel. The programs will identify topic-specific training needs, training planning and training execution; they will include specific instruction for developing and maintaining an updated ESHS training program. The training programmes will include several levels of competency and training as a function of individual personnel ES responsibility and involvement. Training programmes will be subject to approval by TERSK to monitor that the training programmes are adequate, all relevant personnel are trained, and a sufficient level of competency is achieved.

As contractors have not yet been fully identified, there is limited information currently available on the content of training programs. The ESMP includes training and awareness procedures that provide an initial approach to training programs and to their content, to be further articulated by Contractors and subcontractors based on their scope of work and approved by TERSK.

The environmental and social training programmes for the construction phase will be finalized before the commencement of the construction of the Project and will be reviewed periodically as the construction phases change (site clearance, excavation and foundations, works at height and scaffolding, welding, etc.) to ensure they are meeting the Project requirements and international best practice, with updates made accordingly.

#### **5.2.11.2 Operational Phase**

Training provisions for the operational phase are not yet available. Aktas will define them in due course at the end of the construction phase.

### **5.3 EPC Contractor and other Sub-contractors**

1. Adhere to the policy and procedures and international guidelines and principles communicated by Aktas and TERSK.
2. Ensure that all project operations conform to the designated Management Plans, achieved through direct implementation or the development of organization-specific plans that embed their standards.
3. Ensure the implementation of the ESMPs received from TERSK or that ESMPs are developed in conformity with TERSK's ESMPs.
4. Ensure that adequate human and material resources are in place, and assign appropriate personnel to oversee and monitor the implementation of tasks outlined in the Management Plans.
5. Identify the need for specialized subcontractors to carry out specific tasks on site in compliance with the Management Plans' provisions.
6. Ensure that the international E&S requirements applicable are included - as conditions - in contracts with subcontractors and suppliers.
7. Coordinate and conduct external and internal audits for monitoring of the implementation of the Management Plans.
8. Ensure that the non-conformities raised on the Management Plans are addressed and solved as soon as possible.
9. Ensure the planning, preparation and provision of the trainings in order to enable the full implementation of each Management Plan.
10. Audit regularly the Construction Site to monitor and eventually enforce the implementation of the provisions of the Management Plans at the Construction Site.
11. Check the E&S performance of all subcontractors in relation to each specific Management Plan implementation.
12. Maintain a program of audits and inspections at the Construction Site;
13. Verify the compliance with the contractual arrangements and with the Project standards and requirements.
14. Ensure that all workers attend the EHS trainings for implementing the Management Plans.
15. Provide the monitoring reports to TERSK on a monthly basis or at other agreed intervals.

## 6.0 STAKEHOLDER ENGAGEMENT

### 6.1 Engagement Activities to Date and Disclosure of Information

Aktas has engaged with Project's stakeholders since the beginning of the ESIA process. Detailed information on stakeholder engagement activities performed and planned are presented in the SEP, which includes stakeholder engagement activities already implemented or planned by Aktas for implementation by TERSK in the future.

- More specifically, Aktas carried out:
  - Consultation meetings during the development of the scoping between January and November 2023. Institutional stakeholders and local communities' representatives in Astana and Mirny were engaged. These activities aimed at informing the stakeholders about the Project, obtaining information on the sites and its surroundings, identifying potential impacts and collecting the expectations and concerns of the stakeholders regarding the Project.
  - Further consultations during the development of the full ESIA, between February 2024 and January 2025. These included seventeen meetings in total, including official and informal meetings, surveys and official and informal interviews. The primary purpose of this engagement phase was to gather primary data for the socio-economic baseline; it also involved engagement with stakeholders and provided stakeholders an opportunity to provide feedback or ask any questions regarding the proposed Project. Stakeholder engagement during this phase included meetings with key government stakeholders at National and Local level, community-based organisations and local community members.

### 6.2 Stakeholder Engagement Plan and Future Engagements

The applicable E&S Standards require that effective stakeholder engagement is designed and implemented to avoid and minimize the social risks and to ensure that the Project has and maintains a long-term social license to operate. Aktas has prepared a SEP in accordance with international standards as well as with the requirements of national law. The first revision of the SEP was prepared during the ESIA scoping phase and completed in June 2024. The SEP has in the meantime been revised to account for new engagement activities and for their outcomes; an updated version was delivered in April 2025 together with the first version of the full ESIA report. A further SEP revision has been completed in September 2025 following Lender's review and issuance of the ESDD report.

The SEP outlines a systematic approach to stakeholder engagement to support TERSK in developing and maintaining strong and constructive relationships with the stakeholders and in addressing their concerns about the Project. The SEP implementation falls under TERSK responsibility until completion of the construction phase. The SEP will be updated in due time to account for the operational phase.

In particular, the SEP for the Construction phase includes:

- Provisions for the disclosure to the Affected Communities of relevant information on:
  - The purpose, nature and scale of the Project.
  - The duration of proposed Project activities.
  - Any risk to and potential impacts on such communities and relevant mitigation measures.
  - The envisaged Stakeholder engagement process.

- The Grievance Mechanism.
- Provisions for a Stakeholders' Consultation and Participation process that is culturally appropriate for the potentially Affected Communities, their decision-making process and the needs of disadvantaged or vulnerable groups.
- Documents how feedback from Stakeholders' Consultation and Participation (including views of potentially Affected Communities on matters that may affect them directly) will be included into Aktas decision-making process and used to improve impact mitigation measures.
- The provision of periodic reports to the Affected Communities, that describe progress with the implementation of the ESMS on issues that may involve ongoing risk to or impacts on such Communities, and on issues that the Consultation process or grievance mechanism have identified as of their specific concern.
- An internal Grievance Mechanism for all TERSK internal employees.
- External Grievance Mechanism, a procedure providing a framework for receiving, recording, and facilitating resolution of Affected Communities' concerns and grievances about the Project's environmental and social performance.

The SEP is considered a living document and will be regularly monitored, reviewed and updated by TERSK throughout all stages of the Project construction and later during operations. This will ensure that:

- It remains fit for purpose at each phase of the Project.
- It addresses the outcomes of Stakeholder consultation activities.
- It addresses the grievances received from Stakeholders.

Contractors and subcontractors will not be required to develop their own SEP as this activity falls under the responsibility of Aktas; they will however be required to collaborate with TERSK on an "as needed" basis to:

- Provide the necessary information for answering to Stakeholder requests.
- Provide the necessary support to address Stakeholders' grievances.

Regarding future stakeholder engagements, TERSK will undertake the following tasks:

- Provide information for local community about the schedule and scope of works, via website, local mass media, information boards, public meetings with local communities and one-to-one meetings with representative stakeholders.
- Disclosure of relevant ESMS documentation in Kazakh and in English.
- Gathering of stakeholders' concerns and inclusion into construction contracts of measures to mitigate local social impacts and to collaborate in stakeholder engagement activities when necessary.
- Publication of the grievance mechanism for submitting comments and complaints, on the website and on information boards.

### 6.3 Internal Grievance Mechanism

TERSK will implement an effective and easily accessible grievance mechanism for all Project staff, including that of contractors and their subcontractors to raise workplace concerns in line with the applicable requirements on Labor and Working Conditions.

TERSK will actively monitor social issues through a structured grievance process, with the objective of avoiding/mitigating social issues that could escalate if not addressed in a timely manner. Moreover, TERSK will monitor that all workers directly and indirectly employed are informed about the channels to submit grievances. Opinions and complaints will be able to be submitted by the employees both formally (written) and informally (spoken). Every inquiry will be registered in the Grievance Register. The Register will also be used to keep track of all activities performed to address the grievance up to its closure. The mechanism will also include a framework for receiving, recording, answering and facilitating resolution of workers' concerns and grievances with particular reference to labour and OHS issues.

The Grievance mechanism will be included in the SEP and the contractors and subcontractors will be required to adopt the internal "Grievance Mechanism" and implement it so to receiving, recording, answering and facilitating resolution of workers' concerns and grievances with particular reference to labour and OHS issues.

### 6.4 External Grievance Mechanism

An external grievance mechanism will be available in the SEP as well, dedicated to external stakeholders where opinions and complaints can be submitted by individuals or groups at all stages of the Project through e-mail, letter or through the website and other culturally suitable means.

In accordance with international good practice, TERSK will establish a specific mechanism that includes the following steps:

- receive and register the grievances;
- carry out a preliminary review and categorise the complaint;
- address the complaint; and
- close the complaint.

## 7.0 EMERGENCY RESPONSE

Aktas will prepare a Site Emergency Preparedness and Response Plan (EPRP) that is part of the Project ESMS. The EPRP responds to emergency situations associated with the Project, in a manner appropriate to prevent and mitigate any harm to people and/or the environment.

The EPRP includes detailed information on the following basic elements:

- Applicable legislation requirements and reference and contact details of local government agencies (e.g. police, emergency rescue, harbour authority).
- Identification of emergency situations and scenarios that may occur because of routinely activities or unplanned events, and communities and individuals that may be impacted.
- Definition of emergency response standard operating procedures (SOP).
- Roles and responsibilities for the implementation of the EPRP.
- The provision of equipment, tools and resources for emergency preparedness and response.
- Communication procedures, including that with potentially Affected Communities and local government agencies.

- Training plans to monitor that personnel are aware of the EPRP requirements and of all procedures adopted for effective response to emergency situations.
- Periodic emergency drills, involving workers and possibly affected communities to monitor preparedness to possible emergency situations.
- Measures to monitor business continuity and contingency.

The EPRP, as a minimum, will address the following emergency conditions:

- Worksite Accidents.
- Traffic accidents.
- Spills and leaks of fuel, oils or other hazardous materials.
- Fires and explosions.
- Damage to third-party assets.
- Spread of infectious diseases.
- Security-related risks such as thefts.
- Natural Hazards.

TERSK will carry out and document periodical emergency drills that also involve affected communities and local government agencies.

The EPRP will have to be periodically reviewed and revised, as necessary, to reflect possibly changing conditions during the construction and operation phases. A specific EPRP will have to be developed for the road management, before the start of the operation phase.

The EPRP will properly document emergency preparedness and response activities, resources, and responsibilities, and will provide, on request, appropriate information to potentially affected communities and relevant government agencies.

The EPRP, as any other plan, will be subject to periodic audit and inspections by TERSK according to the Audit and non-Conformities procedure outlined further below in this framework document.

## **8.0 ESMS MONITORING, REVIEW AND PERFORMANCE REPORTING**

The need to have in place a process to monitor and measure the effectiveness of the management program for the Project is a specific requirement of the applicable E&S Standards to ensure compliance with the requirements and mitigations included in the ESMS and documents part of it, such as the ESIA report and the ESMPs.

A Monitoring Programme has been prepared to monitor compliance with ESMS and regulatory requirements. Monitoring will be performed by qualified staff responsible for the ESMP implementation, and results will be described in reports that will determine the severity of non-compliances, as well as the recommended remedial actions. Monitoring measures and related reporting for significant Environmental and Social aspects are included in each individual management plan of the ESMP, consistently with the results of the ESIA. The ESMP provides the relevant elements to monitor and measure the Environmental and Social performance of the Project against national and international regulatory requirement and conformity with ESMS requirements.

The main objectives of the monitoring programme will be to:



- Confirm the appropriateness of the E&S baselines carried out in the ESIA and of the mitigations identified;
- Identify any new environmental and social impacts derived from the Project activities/works and relevant adequate mitigations;
- Follow up on status of actions and performances in managing and mitigating previously identified environmental and social impacts;
- Follow up on status of stakeholder engagement, including community grievances and how they were resolved; and
- Monitor overall OHS performances across the project, including of subcontractors.

The extent of monitoring is commensurate with the Project's ESHS risks and impacts and with relevant obligations/requirements. The scope, frequency, methodologies and responsibilities of such monitoring as well as of reporting needs, are indicated in the ESMP and depend upon the nature and scope of the monitoring activities identified, in accordance with applicable Project requirements (ESIA commitments and applicable E&S). Monitoring will also consider and be adjusted according to requirements and specific actions requested by relevant regulatory authorities.

Monitoring will be performed by qualified staff, and results will be consolidated in reports with the outcomes of E&S performances, construction and operation progresses and main achievements, progresses in the adoption of the ESMPs, incidents and accidents and HSE statistics, eventual non-compliances, as well as status of recommended remedial actions.

Along with the information resulting from monitoring that they will directly implement, TERSK will also collect and process the information related to monitoring activities carried out by contractors, as mandated by the Construction ESMP that will be cascaded down to contractors. TERSK will process and record this information through adequate tools (see also section on *Performance Records* below).

Monitoring also includes measures for OHS performance. The OHS management plan is also part of the ESMP and includes monitoring measures to verify the effectiveness of prevention and control strategies and of the Project OHS procedures. The contractor will be required to implement the occupational health and safety monitoring program included in the OHS MP.

## 8.1 Evaluation of Compliance

TERSK will evaluate compliance with the ESMS through internal auditing (refer to section "Audit and Non-Conformities" for further details). Compliance evaluation will specifically address:

- The regulatory requirements of the local legislation;
- The relevant permits obtained under the local legislation;
- Alignment with Project standards;
- Effectiveness of the commitments undertaken in the ESIA; and
- ESMS and ESMPs requirements.

Any requirements that is not or just partially met will generate a "Non-Compliance" that will be defined and treated as described in the following section.

## 8.2 Non-Conformities, Non-Compliances, Corrective Actions

The outcomes of project monitoring and auditing could result in the identification of issues of concern classified as follows:



- Non-Conformity (N-CF): non-fulfilling, lack or deviation from the requirements of the ESMS and of the ESMPs;
- Non-Compliance (N-CP): non-fulfilling, lack or deviation from the external rules and regulations requirements, such as IFC PS and local regulations; and
- Observation (OBS): a situation that does not represent a clear deviation from the requirements but that could eventually become inconsistent with Project's commitments or the applicable Lenders' standards and that requires specific actions to avoid escalating to a N-CP or a N-CF.

N-CFs, N-CPs and OBS can be identified during formal monitoring and audits, or by any personnel at any time during the Project implementation; anyone at site who has observed a specific condition that may be of ESHS concern will have to inform the site supervisor immediately. The site supervisor will be responsible to inform the HSE site Manager, Biodiversity advisor, Deputy E&S Manager or environmental engineer for evaluating whether the reported condition represents an actual N-CFs, N-CPs or OBS.

N-CFs, N-CPs and OBS are addressed through corrective actions to mitigate consequences and root causes in order to prevent recurrence. Based on the assessment, N-CFs, N-CPs and OBS are categorized in terms of the criticality, according to the definitions provided below.

Corrective actions will be commensurate to the effects of the N-CFs/N-CPs encountered and/or to prevent situations that could represent an ESHS risk. The subcontractors will be required to implement a similar system for addressing N-CFs/N-CPs in their construction and operation sites and work areas.

Non-Conformities, Non-Compliances and Observations are ranked as follows:

- Level 1: a clear deviation or non-fulfilment of the requirements, based on objective evidence. N-CFs/ N-CPs will be classified as level 1 if their resolution has to be managed in coordination with external bodies (i.e., authorities, Lenders, etc.), if they are expected to have serious ESHS impacts on Project activities or significant consequences on environmental and social components, and if they are expected to be reported by media. These N-CFs/N-CPs will have to be immediately communicated by TERSK HSE Manager to the Management of contractors and subcontractors that are concerned. The HSE Manager will identify appropriate Preventive Actions/Corrective Actions (PA/CAs) that contractors and subcontractors will have to review and approve or decide if further actions are needed. The N-CFs/ N-CPs and the PA/CAs implemented will be disclosed to stakeholders during the engagement activities. Level 1 deviations will also require immediate communications to the lenders.
- Level 2: a deviation or non-fulfilment of the requirements, based on objective evidence. N-CFs/N-CPs will be classified as level 2 if they are expected to have impacts on Project activities and their resolution could be managed internally. These N-CFs/N-CPs will have to be immediately communicated to contractors and subcontractors by TERSK HSE Manager, who will propose specific PA/CAs as needed; TERSK, will have to approve the PA/CAs or decide if further actions are needed. Level 2 deviations will need to be communicated to the lenders as part of periodic communications.
- Level 3: a partial deviation or non-fulfilment of the requirements, based on objective evidence. N-CFs/N-CPs will be classified as level 3 if they are expected to have limited ESHS impacts on EPC contractor operations and activities and if their resolution can be managed on site by the HSE Manager through

PA/CAs. Progresses will be communicated to TERSK & EPC contractor Management on a periodical basis as part of the management review process. No communication to the lenders will be required.

- Level 4 will be assigned to all observations (see above for the OBS definition).

Level 1 and Level 2 N-CFs/N-CPs will also be referred to as “major N-CFs/N-CPs”; while Level 3 N-CFs/N-CPs will be referred to as “minor N-CFs/N-CPs”.

Corrective Actions will be appropriate to the effects of the N-CFs/N-CPs encountered and Preventive Actions are appropriate to the effects of potential problems.

### 8.3 Performance Records

The monitoring activities will be accompanied by records to track the Project ESHS performances and conformity/compliance to the requirements set out in the national and international regulations as well as in the ESMPs. Relevant records will be maintained and archived by TERSK HSE Manager. TERSK will have also to keep records of all E&S reporting developed during the construction phase; while for operation, dedicated roles will be defined within the organizational structure prior the starting of operation activities. A list of the key documents will include:

- Reports of internal and/or external audits;
- Non-Conformities, Corrective/Preventive Actions forms;
- Minutes of management review meetings;
- Reports of monitoring (measurement) activities, including analytical certificates;
- Records of internal and external grievances and progresses on resolutions;
- Incident reports and results of investigations carried out;
- Communication with stakeholders;
- Records of the stakeholder engagement activities; and
- Any other relevant document providing evidence of the ESMS performances.

Contractors, will be required to implement a similar system for managing records related to its subcontractors whose results will be used to inform the overall Project ESHS reporting process.

### 8.4 Monitoring and reporting

TERSK will establish an effective monitoring program to track the project performance and ensure compliance with the relevant ESHS requirements. The program will be cascaded down to contractors and subcontractors for implementation.

#### 8.4.1 Internal Monitoring and Reporting

Contractors will be required to establish and implement an internal inspection and audit program on a periodical basis. The audit program will indicate the audit schedule, the frequency and the objectives as well as the responsible internal auditors. The internal inspection and audit system should aim at verifying:

- The correct implementation of the ESMS Framework and of the mitigations included in the ESMPs;
- The Project compliance with the national regulatory requirements (local legislation and relevant permits), the ESIA commitments and the Project standards; and
- The EPC contractor ability to meet its contractual obligations.

All workers should be trained to identify environmental and social issues beyond general awareness and have the tools to report and notify the site environmental and social management team.

Contractors, under TERSK supervision, are required to monitor the HSE compliance of its sub-contractors on a regular basis and following an inspection and audit system to be agreed with TERSK. This will include site inspections and recordings of the monitoring activities and of the planned or completed actions in relation to the non-conformities, if any identified.

#### **8.4.2 Periodical Reporting**

Contractors will be required to provide TERSK with a periodically ESHS report (frequency to be determined by the Lenders) with Project status and progress update and details from E&S perspective. TERSK will review such report and will interface with the MoT and the Lenders' E&S consultant, as needed. These are comprehensive reports on the E&S performance during construction and operation related to the Project and the implementation of the ESMPs based on the following information:

- Progress of the Project activities, main achievements and challenges encountered, if any;
- Statistics of workforce on site and labor performances (e.g., permits, trainings, emergencies and injuries) including subcontractors;
- HSE organization on site, including contractors;
- Progress in implementing the provisions of this ESMS Framework and ESMPs;
- Incidents and accidents, security/ESHS statistics and KPIs;
- Results of environmental monitoring activities;
- ESHS trainings and awareness initiatives carried out and records of attendees;
- Outstanding non-compliance reports and/or grievances with actions undertaken; and
- Results of stakeholder engagement activities and/or initiatives with communities.

#### **8.4.3 External Audit**

External audits may be performed by third parties (Lenders' advisors) to verify:

- The Project compliance with the local regulatory requirements (legislation and relevant permits), the ESIA commitments and the Project standards; and
- The correct implementation of the ESMS Framework, ESMPs and Policies by EPC contractor.

The Contractor Managements will provide full availability of its resources, as well as full access to sites and documentation for the required external audits.

#### **8.4.4 Management Review**

TERSK, will review the performance of the ESMS on a periodical basis (at least quarterly), to monitor its continuing suitability, adequacy, and effectiveness. The outcomes of the review will be shared with the contractors and the sub-contractors as needed to discuss lessons learned and identify needs for changes, corrective actions and opportunities for improvement. TERSK HSE Manager will be responsible for convening a Management Review meeting in case of:

- Major Non-Compliance (N-CP) and Non-Conformity (N-CF);
- Serious ESHS incidents, injuries/fatalities associated to the construction/operation (including traffic incidents);

- Significant changes to the Project or context that have triggered the use of the management of change procedure;
- Grievances that could lead to claims; and
- Significant changes to the regulatory framework.
- The input documentation/information for the management review should include at least:
  - Internal audit reports and records of N-CP and N-CF;
  - Injury and emergencies statistics;
  - Preventive/Corrective Actions progress;
  - Audit reports from third parties;
  - Monitoring reports; and
  - Grievances records.

## Signature Page

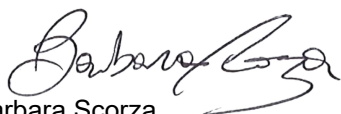
### WSP ITALIA SRL

Conti, Valeria  
(ITVC041644)

Digitally signed by Conti, Valeria  
(ITVC041644)  
DN: cn=Conti, Valeria  
(ITVC041644), ou=Active,  
email=Valeria.Conti@wsp.com  
Date: 2025.12.24 19:03:30 +0100

Valeria Conti  
*Project Manager*

Federico Breda  
*Project Director*

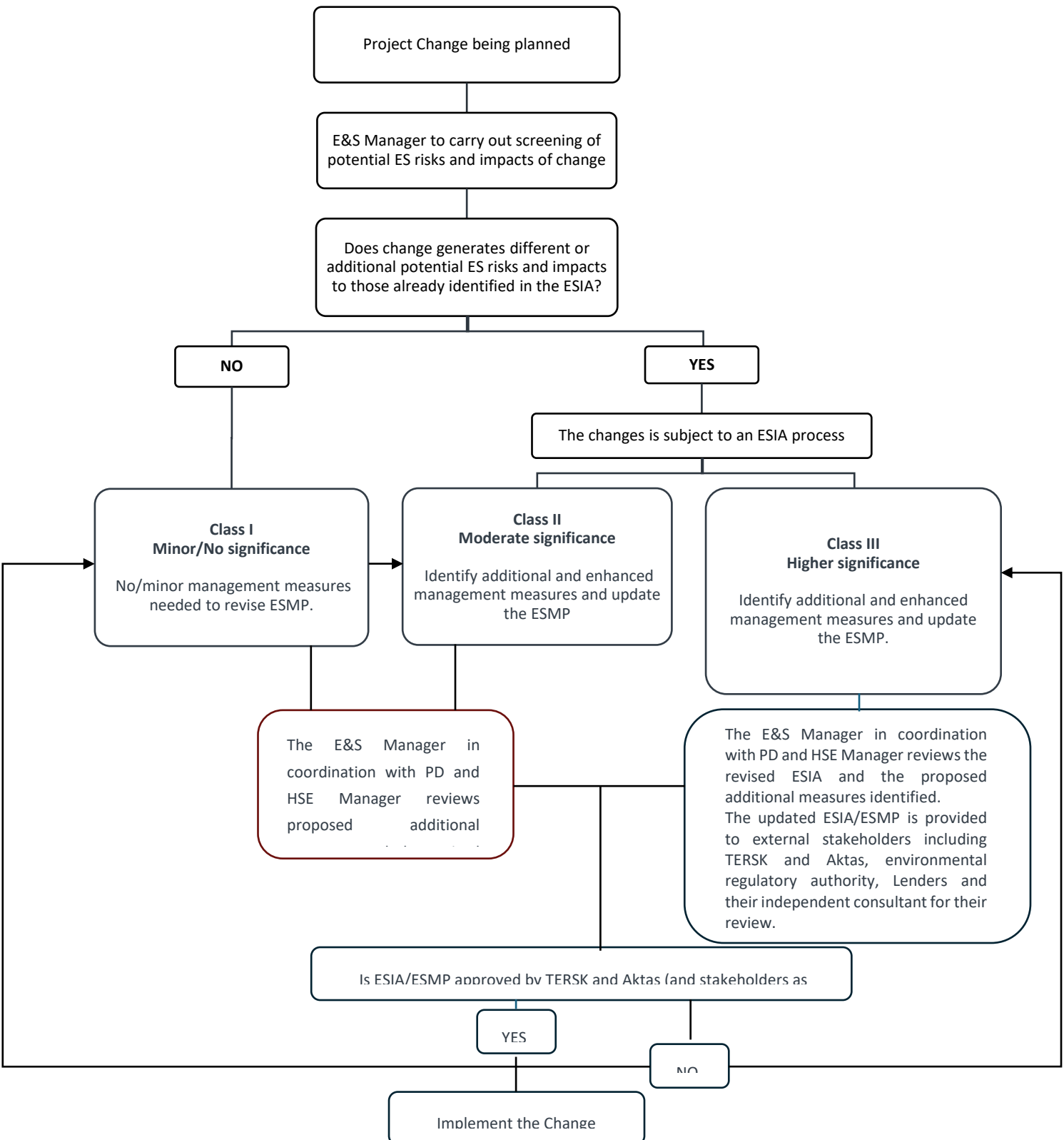


Barbara Scorza  
*TOTAL ESIA Program Manager*

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**APPENDIX A**

# Management of Change

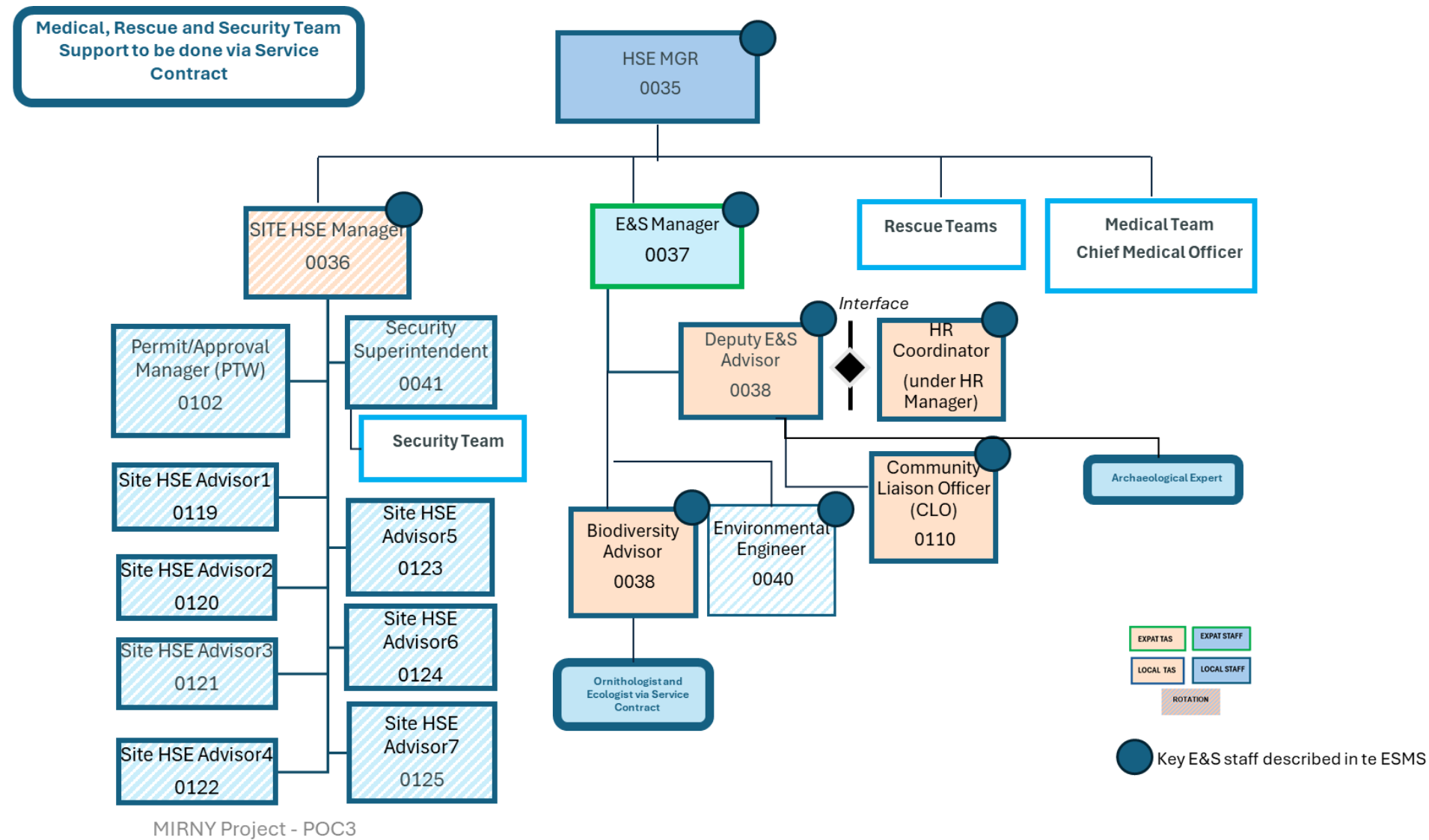




**APPENDIX B**

# Organizational Structure

9.0 PROJECT HSE TEAM - TERSK





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