REPORT

Mirny (Kazakhstan) 1GW Wind Farm Project

Biodiversity Management Plan - Construction

Submitted to:

Atkas Energy LLP

Submitted by:

WSP ITALIA S.r.l.

Via Antonio Banfo 43, 10155, Torino Italia

+39 02 87 25 90 00

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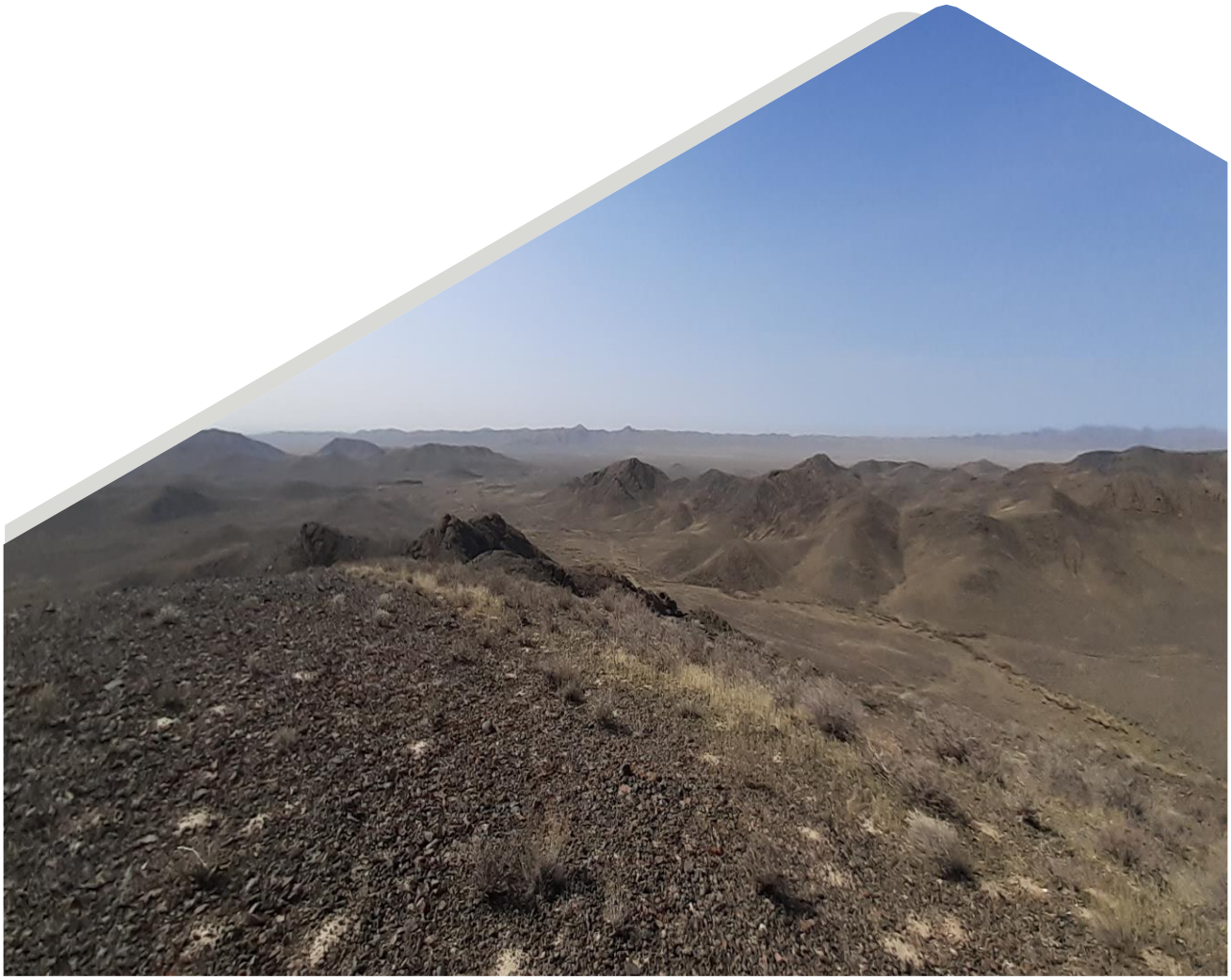

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Prepared by

Federico Breda – Project Director

Barbara Scorza – Total Energies Program Manager

Rhys Bullman – Biodiversity Technical Director – Lead Component

Jon Seller – Biodiversity Technical Director

Silvia La Gala – Biodiversity specialist

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1.0 INTRODUCTION

Atkas Energy LLP (“Atkas”, “the Client” or “the Company”) 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 construction and development 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 roads.

The Project will be located in Mirny, in the Jambyl region in the South-Central part of Kazakhstan.

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

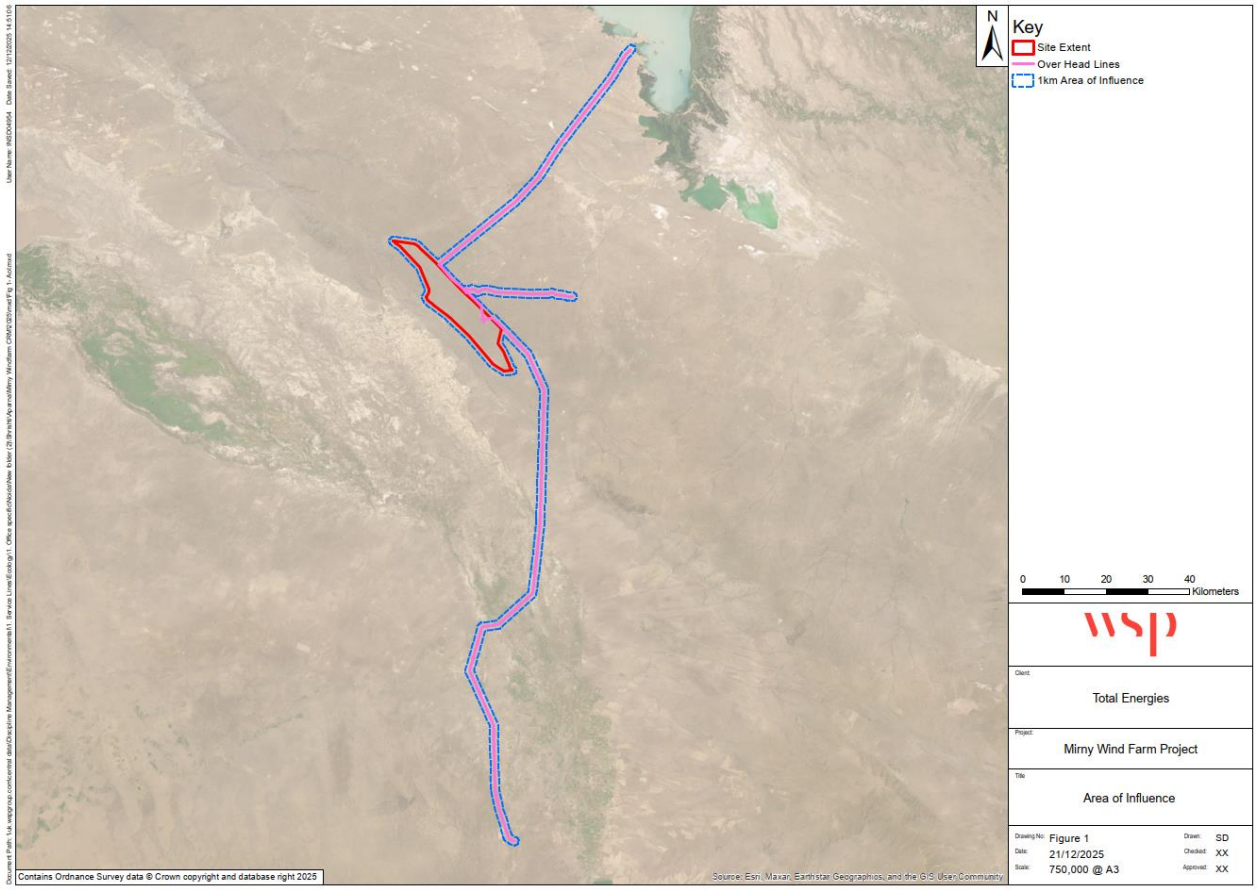

Figure 1: Project location showing Site, OHTL and Area of Influence AoI

The Project is considered the largest wind energy initiative 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_2/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 of 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.

1.1 Purpose and scope of this document

This document is the **Biodiversity Management Plan ("BMP")** for the Project that identifies and presents the framework and the strategy for managing Project impacts and risks in relation to biodiversity aspects. It sets the principles according to which biodiversity management will be performed for the Project and presents a plan of activities to be carried out throughout the Project's construction phase. The plan has been developed in accordance with the requirements as specified in Section 3.0.

The main objective of this document is to integrate biodiversity aspects within the overall Project management framework throughout the Project construction. This document also provides guidelines to the Engineering Procurement and Construction ("EPC") Contractor and also sub-contractors to address biodiversity related aspects according to the standards above-mentioned.

The scope of this Plan includes:

- The definition of Project standards for managing biodiversity-related aspects during the construction phase;
- The definition of responsibilities, commitments, operating procedures and instructions for the implementation of this Plan;
- The identification of adequate mitigation measures applicable to the Project for addressing biodiversity management. A mitigation hierarchy will be adopted to anticipate and avoid, or where avoidance is not possible, minimize and restore impacts on the environment;
- The establishment of a monitoring program to assess the effects of residual impacts on the environment;
- The identification of actions to measure the performance of monitoring measures;
- The establishment of a guideline for reporting the results of monitoring and periodic audits and provide for corrective actions as necessary, in order to achieve the planned performance objectives.
- This BMP applies to normal operating conditions during the construction activities and does not specifically address any emergency situations. These are addressed in the separate Emergency Preparedness & Response Plan (EPRP).

1.1.1 Relationship with Other Management Plans

The BMP is to be read in conjunction with the following management plans:

- Construction ESMS Framework Document;
- Waste and Hazardous Materials Management Plan;
- Water Management Plan;
- Air Emission Management Plan;
- Resource Efficiency Management Plan;
- Soil Management Plan; and
- Emergency, Preparedness & Response Management Plan (EPRP).

1.2 Applicability

This Plan applies to the Project activities and provides minimum requirements and guidance for Contractors and Sub-Contractors involved in the construction activities of the Project, including the construction camp.

A future iteration of this BMP will establish management measures for minmising operational impacts on ecological receptors.

1.3 Effective Starting Date

No construction activities shall commence until approval of this Plan is granted. This Plan is a “living” document and will be updated at any relevant changes to Project state during the construction phase, and beyond.

The Plan will be reviewed annually, as a minimum.

2.0 ROLES AND RESPONSIBILITIES

Aktas is the Project owner, is owned by TotalEnergies, Samruk Kazyna and KazMunayGas and is established in Kazakhstan, Astana. Aktas will be subcontracting the construction management to the Construction Management Company TERSK, local Affiliate of Total Energies Renewable. An EPC Contractor and supporting contractors will be appointed to execute the required site work- 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.

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 for implementation of this plan, are described further below in the below Table 1. The role and responsibilities presented in this ESMS FD reflect the leading positions in E&S management within TERSK. Additional roles and supporting staff are foreseen to ensure effective implementation of the ESMS.

The EPC, other contractors and subcontractors will have in turn to develop and implement dedicated organizational E&S structures able to deliver the Project in conformance with the Project ESMS requirements. These structures will include clear interdependencies between contractors 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.

Table 1: Project-specific roles and responsibilities in implementation of the ESMPs during the construction phase.

Role	Responsibilities
Aktas General Director (GD)	▪ 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. ▪ 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. ▪ 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.

Role	Responsibilities
	▪ 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).
TERSK Project Director (PD)	▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ 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.
TERSK Health, Safety and Environment (HSE) Manager	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: ▪ 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. ▪ 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 obectives. ▪ 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

Role	Responsibilities
	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. ▪ 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. ▪ 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.
TERSK Site HSE Manager	▪ 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. ▪ 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. ▪ 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.
TERSK Human Resources Manager	The HR manager focuses on the day-to-day management of personnel, ensuring smooth operations and addressing site-specific HR needs. Key responsibilities include: ▪ Training and Development: Ensures training and development opportunities are provided to site personnel, enhancing their skills and ensuring they can perform their roles effectively. ▪ Reporting: periodically Reports on HR aspects to Aktas Energy GD.
TERSK Environmental and Social (E&S) 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: ▪ 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. ▪ 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. ▪ 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. ▪ 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. ▪ Emergency Response Planning: Ensure emergency response plans are maintained to address potential incidents, such as environmental spills or safety accidents. This

Role	Responsibilities
	includes coordinating with the PEC, local authorities and emergency services to ensure a swift and effective response.
Biodiversity Advisor	▪ 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. ▪ 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. ▪ 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. ▪ 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.
EPC Contractor and other sub-contractors	▪ Adhere to the policy and procedures and international guidelines and principles communicated by Aktas and TERSK. ▪ 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. ▪ Ensure the implementation of the ESMPs received from TERSK or that ESMPs are developed in conformity with TERSK's ESMPs. ▪ 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. ▪ Identify the need for specialized subcontractors to carry out specific tasks on site in compliance with the Management Plans' provisions. ▪ Ensure that the international E&S requirements applicable are included - as conditions - in contracts with subcontractors and suppliers. ▪ Coordinate and conduct external and internal audits for monitoring of the implementation of the Management Plans. ▪ Ensure that the non-conformities raised on the Management Plans are addressed and solved as soon as possible. ▪ Ensure the planning, preparation and provision of the trainings in order to enable the full implementation of each Management Plan.

Role	Responsibilities
	▪ Audit regularly the Construction Site to monitor and eventually enforce the implementation of the provisions of the Management Plans at the Construction Site. ▪ Check the E&S performance of all subcontractors in relation to each specific Management Plan implementation. ▪ Maintain a program of audits and inspections at the Construction Site; ▪ Verify the compliance with the contractual arrangements and with the Project standards and requirements. ▪ Ensure that all workers attend the HSE trainings for implementing the Management Plans. ▪ Provide the monitoring reports to TERSK on a monthly basis or at other agreed intervals.
Construction Site Workers	▪ Comply with HSE requirements; ▪ Acquire awareness on and implement the requirements of the Management Plans; ▪ Implement the specific Management Plans requirements over the life of the Project; ▪ Report on any activities which demonstrate deviations from- or noncompliance with-the specific Management Plans requirements; ▪ Give evidence that the relevant mitigation measures identified in the Management Plans are being properly considered, implemented and monitored during the activities.

3.0 BACKGROUND POLICIES AND STANDARDS

This section includes all those policies, standards and requirements of reference for this MP that are applicable to the Project during the construction phase, as outlined under Chapter 03 of the Environmental and Social Baseline Study. References are organised in:

- The applicable national laws and regulations, including those laws implementing host country obligations under international law and treaties;
- The Client Energy, Environmental and Social Standards;
- The applicable international standards.

The Project is expected to achieve whichever is more stringent amongst these.

3.1 National Laws and Regulations

Applicable national laws and regulations, including those laws implementing host country obligations under international law and treaties, are the following:

- The Environmental Code, i.e., Ecological Code (2007, as amended in 2020 and dated January 2, 2021);
- The Labor Code (2015, as amended in 2020);
- The Land Code (2003, as amended in 2020);
- The Water Code (2003, as amended in 2021).

3.2 International Laws and Regulations

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

- International Finance Cooperation (IFC) Performance Standards (2012);
- World Bank Group General HSE Guidelines (2007), Wind farm HSE Guideline and Electric Power
- Transmission & Distribution HSE Guidelines (2007);
- Equator Principles EP4 (2020);
- European Bank for Reconstruction and Development (EBRD) E&S Policy and relevant Performance Requirements;
- 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;
- International Labor Organization (ILO) conventions signed and ratified by the countries (No. 29, No. 105, No. 138, No. 182, No. 111, No. 87, No. 98 and No. 100);
- United Nations Guiding Principles on Business and Human Rights;
- 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.) and the international treaties to which Kazakhstan is signatory.

Additionally, the following wind sector guidelines and protocols have been considered:

- 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.

3.3 ESMP specific international requirements

The Project is required to meet the following requirements of international lending financing institutions:

IFC Performance Standards (PS) and EBRD Performance Requirements (PR), specifically:

- IFC PS6 - Biodiversity Conservation and Sustainable Management of Living Natural;
- EBRD PR 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources.

4.0 MITIGATION MEASURES/ACTIONS AND MONITORING ACTIONS

The potential impacts on biodiversity during the construction phase are associated with vegetation clearance; earthworks; removal of soil; loss of habitats and species; and indirect impacts on habitats and species.

The following table (Table 2) details the environmental management and mitigation measures/actions identified for water-related aspects during the construction phase. For each measure/action identified, the table shows:

- Item: the identification code of the mitigation measure/actions (ID);
- Measure/Actions: description of the mitigation measure/ actions;
- Timeline and frequency: frequency/timing of the measure/action implementation;
- KPI (Key Performance Indicator): quantitative compliance indicator or qualitative acceptance criteria that to be used to confirm the actual effectiveness of the mitigation measure/actions;
- Target: final qualitative or quantitative objective to comply with;
- Verification Method: indicate whether the measure is verified through an internal audit or through a specific monitoring action; and
- Responsibility: responsible party in the organization for implementing the measures/actions and monitoring.

Mitigation measures have been defined and are presented in the table according to the “mitigation hierarchy” giving priority and preference to avoidance measures, while minimization and rehabilitation/restoration measures should be used only if avoidance is not possible and impacts offsets only as the last resort. Moreover, the mitigations included in the table have been designed to be adaptive in response to the results of monitoring actions described to the right of the table and in the additional dedicated Section 4.1. The monitoring is aimed at verifying whether the residual impacts are under control and mitigation measures/actions are effective.

In case monitoring will demonstrate non-conformities or unexpected residual impacts, the TERSK staff will evaluate the situation and, if needed, propose changes and integrations to the mitigation and monitoring measures included in the present MP. The proposed changes will be evaluated and approved by TERSK under Atkas supervision. TERSK will also ensure that the new or modified action/measures and monitoring activities are timely and adequately implemented.

Table 2: Mitigation measures/actions and monitoring actions for construction phase.

Mitigation measure						Monitoring measure		
Item	**Mitigation Measures/Actions**	**Timeline and frequency**	**KPI**	**Target**	**Responsibility**	**Verification method**	**Frequency**	**Responsibility**
BIO01	In the absence of a formal Management Plan for the Zhusandala (the Project Site is entirely within this reserve) and Andasay State Reserved Zones, liaise with the Forestry and Wildlife Committee of the Ministry of Ecology, Geology and Natural Resources, so to ensure that the Project aligns with any government-recognised management plans for the area. Additionally collaborate with the Reserve authority to investigate the feasibility of establishing supplementary programmes aimed at promoting and enhancing the conservation and effective management of the area. Further details will be provided in the next revision of the Biodiversity Management Plan and in the Biodiversity Action Plan, as soon as specific information becomes available. Support package to the Andasay State Reserve to enhance management for the goitered gazelle (PBF) as an offset to any indirect impacts to life-cycle in the Project area. Achieve a No Net Loss for the area of direct habitat loss in the Zhusandala Reserve by carrying out habitat improvements elsewhere in the reserve. Approximately 110 Ha of tulip habitat will be lost within the reserve area.	During planning and before construction phase	Extent to which the Contractor engages with relevant authorities and integrates their recommendations into project planning and biodiversity management, in the absence of a formal management plan. Number of formal consultations held per year. Percentage of authority recommendations integrated into project plans. Progress on supplementary conservation programme feasibility. Quantification and recording of natural habitats lost.	100% of the following actions must be completed: Maintain regular liaison with the Forestry and Wildlife Committee of the Ministry of Ecology, Geology and Natural Resources. Collaborate with the Zhusandala and Andasay Reserve Authority[ies] to explore supplementary conservation programmes. Document all consultations (e.g., minutes of meetings, correspondence). Integrate recommendations into the Biodiversity Management Plan (BMP) and Biodiversity Action Plan (BAP). Ensure alignment with any government-recognised or emerging management frameworks. ≥ 2 ≥ 90% Feasibility study completed within 12 months No Net Loss of Natural Habitat. 10% Net Gain for the loss of 110 Ha of tulip habitat to be achieved by phased habitat enhancement and translocation of saved material elsewhere in reserve.	EPC Contractor and Subcontractors	Review updated Biodiversity Management Plan (BMP) and Biodiversity Action Plan (BAP) to confirm integration of authority recommendations. Verify feasibility study report	Quarterly Annually verify completion of feasibility study	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
BIO02	Avoid work during nesting/breeding periods. Forbid any vegetation clearance during the nesting/maternity period of birds and bats (March - late July/early August). During the same period ground disturbance activities will also be limited to avoid disturbing ground-nesting species. Pre-clearance inspection surveys must be undertaken by a suitably experienced ecologist. These surveys will identify any potential nests in the vegetation-removal area and then establish suitable “no-go” buffers around these nests, to prevent the nest being destroyed or disturbed. Buffers will be species specific and determined in consultation with ACBK, based on the species identified. As an example, appropriate disturbance distance buffers in the breeding period for Golden Eagle *Aquila chrysaetos* is 750-1000m, for Marsh Harrier *Circus aeruginosus* is 300-500m (Disturbance Distances in selected Scottish Bird Species – NatureScot Guidance | NatureScot). For blasting works, the same approach will be applied, considering that for every doubling of distance, the sound level (single point source) reduces by 6 decibels (dB). Further specific instructions will be integrated in the next revision of the Biodiversity Management Plan.	During planning phase and construction phase	Number of pre-clearance surveys conducted before vegetation removal during nesting season Number of vegetation clearance or ground disturbance activities conducted during the nesting/breeding season (March–August)	100% of vegetation clearance activities preceded by ecological surveys and buffer zone implementation. Zero clearance or ground disturbance activities during the nesting/breeding season (March–late July/early August) 100% of non-conformities present justification and appropriate approved mitigation measures	EPC Contractor and Subcontractors	Verify the Planning of the clearance / cutting activities for each location and compliance with expert indications and periods to be avoided. Verification of records for cutting trees including location and period Verification of non-conformities including justification and mitigation/ correction /compensation.	Once before construction and site preparation At each site vegetation clearance event, during the entire construction phase. Quarterly during the entire construction phase.	TERSK ES Manager TERSK HSE Manager TERSK Biodiversity Advisor
BIO03	Iterations of turbine layouts have been designed to, as far as is possible, avoid locations of relatively high ecological value. During the habitat surveys in April/May 2023 and April 2025, five main types of habitats were identified across Project area: • Xerophytic rocky low mountains; • Outcrops of flat granite slabs; • Saxual valley forests; • Sagebrush and sagebrush deserts on gently undulating plains; and • Gently sloping solonchak depressions on the plains. Avoidance/minimization of impacts within Critical and Natural Habitats Natural Habitats and Critical Habitats will be protected from unintentional disturbance	Before the start of construction and during all period of construction phase.	Number of pre-clearance checks conducted before habitat-disturbing activities Total area and location of Critical/Natural Habitat effectively demarcated and protected from construction disturbance Percentage of temporary facilities placed in Modified Habitats Number of awareness sessions conducted for site personnel on biodiversity protection Percentage of non-essential access roads decommissioned post-construction	100% of such activities preceded by ecological checks. 100% of identified Critical and Natural Habitat areas demarcated and protected prior to construction activities ≥ 100% of temporary facilities located outside Critical/Natural Habitats. If less, justification provided for all deviations. At least 1 session per month during active construction phases. 100% of non-essential roads closed and rehabilitated.	EPC Contractor and Subcontractors	Check that all identified Critical and Natural Habitat areas are demarcated with visible markers or fencing and signage. Verify placement of temporary facilities in Modified Habitats. Confirm closure and rehabilitation of non-essential access roads. Review records of awareness sessions (attendance sheets, training materials)..	Pre-construction survey and daily check during construction Quarterly audits during the entire construction phase.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
	during construction. Temporary demarcation will be provided by highly visible wooden sticks (50 cm high) planted into the ground and/or flagging tape, while a more permanent fencing, such as solid timber hoardings, will be provided in areas of sensitivity or subject to higher risk of disturbance. In this case appropriate signage will be installed to make the area recognizable by operators and to comply with H&S regulations and plans. Awareness among employees and contractors working on site about the protected species/habitats potentially present in the area will be improved, to ensure constant monitoring and promote actions to be taken if wildlife is encountered. In particular: • Facilities, especially temporary facilities, will be placed in Modified Habitats, as far as is possible. • All non-essential access roads will be closed after construction. • Public access to the remaining access/service roads will be limited. • Pre-clearance checks to identify sensitive receptors will be carried out (see next two measures). Specific instructions will be integrated into an updated section of this Biodiversity Management Plan. The CEMP will include procedures for pollution prevention guidelines including dust suppression and traffic management to reduce indirect impacts on natural habitat areas. The next iteration of this BMP will include a fully developed No Net Loss/Net Gain Plan to establish how natural habitats will be protected and enhanced. Habitats will be restored and/or enhanced in other locations to offset any unavoidable losses from direct habitat loss from WTG pads, roads etc. Restoration will be undertaken in a phased manner with the intention of creating a matrix of habitats in differing successional states.							

Mitigation measure						Monitoring measure		
BIO04	Birds – Pre-clearances surveys (threatened species). A dedicated raptor monitoring survey will be conducted prior to construction or ground clearance works during the period February to July 2026. Surveys for Black-bellied Sandgrouse and other ground nesting birds will be undertaken from March to June 2026. Surveys for migratory birds will be completed in Spring and Autumn during the construction period. A pre-construction walk-over survey will be undertaken of all working areas to check for the presence of threatened species ground nesting birds which would be at risk from construction related impacts. Surveys will be completed by an appropriately qualified ecologist and surveys will be undertaken in the hours after sunrise (up to 10:00). The surveyors will aim to identify behaviour indicative of breeding activity (e.g. carrying food / nesting material / faecal sacs, presence of nests, eggs or chicks (both nidifugous and nidicolous). Where nests are found they will be recorded in full and their locations mapped, with the data transferred to Excel master sheets and Google Earth. Mapping will then be circulated to the project team along with details of a works exclusion zone. Exclusion zones will be dependent on the species of bird nesting along with its conservation status and be agreed with the qualified project ecologist team. Construction will be limited within an agreed buffer around active raptor nests. Unless otherwise determined a 500m buffer zone will be employed. If checks locate active nesting raptors within 500m of work areas works will be delayed in accordance with an encounter protocol that will be developed in the next iteration of this BMP.	Before starting site vegetation clearance	Percentage of construction areas surveyed for threatened ground-nesting birds prior to works during migration and breeding seasons Number of active nests identified and mapped during pre-clearance surveys Percentage of exclusion zones respected during construction	100% of construction areas surveyed before works during Spring and Autumn migration periods All identified nests mapped and documented with exclusion zones established. 100% compliance with buffer zones agreed with the project ecologist. All necessary adjustments made to avoid disturbance, with documentation.	EPC Contractor and Subcontractors	Check pre-clearance survey reports completed for all construction areas before works start. Verify that surveys were conducted within the specified season and time window. Review exclusion zone maps and documentation. Inspect construction records and site monitoring reports	Each time there is a vegetation clearance event, during the entire construction phase. Weekly During Construction monitor compliance with exclusion zones and buffer zones. Monthly Reporting of survey findings, nest mapping, and any adjustments or delays in environmental monitoring reports.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor
BIO05	Herpetofauna, small mammals (threatened species) - Pre-clearance surveys and minimization of impacts. Seven herptiles were recorded during 2023 surveys. The key finding is the relatively high abundance of the Steppe Tortoise *Testudo horsfieldi* with on average 10 sightings per day during the survey period. The species is IUCN VU and a PBF. In order to minimize mortality, an ecologist will perform a site recognition in the footprint area, to identify and relocate fauna species (not earlier than 7 days before site clearance). The survey will focus on fauna	Before starting site vegetation clearance (not earlier than 7 days before).	Percentage of site clearance areas surveyed and cleared by a qualified ecologist within 7 days prior to works Number of individuals of threatened herpetofauna and small mammals successfully relocated Percentage of Testudo horsfieldii nesting areas identified and protected	100% of site clearance areas surveyed and fauna relocated within 7 days prior to vegetation or ground clearance All observed individuals relocated to suitable habitats. 100% of known nesting areas protected from disturbance.	EPC Contractor and Subcontractors	Check pre-clearance survey reports signed by a qualified ecologist. Verify relocation records (species, number of individuals, GPS coordinates of translocation sites). Spot checks during site clearance Review fauna mortality logs and corrective actions.	Before any vegetationclearence, during the entire construction phase. Seasonal monitoring during nesting season (late May–early September). Monthly review of incident reports and compliance documentation.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Manager

Mitigation measure						Monitoring measure		
	species with limited mobility (e.g., reptiles such as Steppe Tortoise and amphibians) that cannot move ahead of construction as well as the presence of nests. If any of these species are observed, they will be collected by the ecologist and translocated to undisturbed and suitable local habitats identified. Further measures will be implemented for *Testudo horsfieldii*, with the aim of minimising the impact on hibernating individuals and avoiding/minimising the loss of species nests (nesting typically occurs from late May until early September.) These measures will take into account the environmental challenges posed by the project site. Instruction regarding collection and translocation techniques and suitable translocation sites will also be identified in future revisions of thisPlan. Adaptive management will be emlloyed to determine whether a translocation programme is necessary or whether barrier controls and dispersal into adjacent areas will be sufficient. Employ temporary barriers etc to prevent herptiles entering construction areas.		during nesting season (late May–early September) Number of incidents of fauna mortality due to construction activities Availability of documented translocation protocols and suitable habitat maps in the Biodiversity Management Plan	Zero incidents. 100% of protocols and maps available and approved before construction starts.				
BIO06	Minimize disturbance during hibernation periods (threatened species) Plan the start of any vegetation clearance and ground disturbance activities at the end of hibernation and before the breeding season to avoid disturbing ground-nesting species and species with limited mobility, such as reptiles and amphibians. Conduct a specific recognition survey in the construction area, to recognize the presence of any hibernated species to be sure that no individuals are present underground by searching for burrows, hibernacula and refugia. Specific instructions will be integrated in a the next revision of the BMP.	Before starting site vegetation clearance	Percentage of vegetation clearance and ground disturbance activities initiated outside hibernation periods Percentage of construction areas surveyed for hibernating species prior to ground disturbance Number of hibernating individuals identified and relocated (if applicable) Number of non-compliance incidents related to disturbance during hibernation	100% of vegetation clearance and ground disturbance activities initiated after hibernation and before breeding season 100% of relevant areas surveyed by a qualified ecologist. All individuals safely relocated or protected according to ecological guidance. Zero incidents.	EPC Contractor and Subcontractors	Verify survey completion and timing compliance. Verify relocation records. Spot checks during clearance activities Review logs for any non-compliance or fauna mortality incidents.	Before Each Clearance Activity Weekly checks during clearance and ground disturbance phases. Seasonal: Specific monitoring during transition from hibernation to breeding season. Monthly: Review incident reports and compliance documentation.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
BIO07	Flora site recognition (threatened species) - Pre-clearance surveys and minimization of impacts An expert ecologist will perform a site recognition in the footprint area to check the presence of flora and create an inventory of abundance of individuals belonging to floristic threatened species – especially (*Tulipa regelli*) (Critical Habitat trigger) and (*T. biflora*), directly impacted by the Project. From this a Rare Plants Management Plan will be developed in this BMP. Upon this reconnaissance, the following two measures will be applied: • In-situ conservation where possible (e.g. micro-site facilities). Sites will be fenced and established as no-go areas for contractors to avoid disturbing threatened species. • Viable plants may be translocated to the appropriate sites. The identification and flagging of individuals to be translocated will take place preferably during the flowering season of the species, while the translocation of individuals be performed during the dormant stage to minimize stresses to the plant. The data regarding date, location, source population, and number of individuals collected and translocated will be recorded. The Rare Plant Management Plan will be included in a new revision of this BMP as soon as detailed construction schedule will be available and species have been inventoried. Collection and translocation techniques and suitable translocation sites will also be identified within the plan. It will be necessary to find receptor sites that have abiotic conditions that closely mimic the donor locations. Furthermore, receptor sites should be confirmed to be free of any protected species in their existing state.	Before starting site vegetation clearance	Percentage of project footprint area surveyed for threatened flora species prior to construction Number of threatened flora individuals identified and either conserved in situ or translocated Percentage of translocated individuals with complete data records (date, location, source population, number) Survival rate of translocated flora species after 6 and 12 months Percentage of translocations performed during dormant stage	100% of construction footprint surveyed before any site preparation or vegetation clearance All identified individuals either protected in place or successfully translocated. 100% of translocated individuals documented in master sheets. ≥ 80% survival rate at each monitoring interval. ≥ 90% of translocations timed to minimize plant stress.q	EPC Contractor and Subcontractors	Check pre-clearance survey reports. Verify species identification records and translocation logs (including date, location, source population, and number of individuals). Verify the exact delimitation of the vegetation clearance area Verify survival rate checks at 6 and 12 months after translocation. Review logs for any non-compliance or mortality incidents.	Before vegetation clearence: Verify survey completion and translocation plan Post-Translocation: Survival checks at 6 months and 12 months intervals. Monthly review compliance documentation and update master sheets.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
BIO08	All fauna and flora species - Workers' biodiversity awareness raising • Establishing a proper code of conduct and awareness raising / training of personnel. • Biodiversity training will cover all relevant mitigation requirements in relation to biodiversity applicable to workers. • Sensitive species will be included in the site induction for all operational staff. During this induction, additional control measures will be discussed, including allowing animals to move around the site, not chasing after them in vehicles or approaching them on foot, and what to do if they observe breeding birds within their works areas. • Prohibit hunting of any wildlife at any time and under any condition by workers onsite. • Prohibit collection of any flora species at any time and under any condition by workers onsite. • Restrict activities to allocated areas only, including movement of workers and vehicles to allocated roads within the site and prohibit off-roading to minimize disturbances. Produce a faunal handling procedure for dealing with any transport injured animals (see also BIO28).	Before the start of construction and during all period of construction phase.	Percentage of site personnel who have completed biodiversity awareness training and signed the code of conduct Number of biodiversity-related incidents reported (e.g., off-roading, wildlife disturbance, flora collection) Percentage of observed compliance with movement restrictions (e.g., staying on designated roads) Number of wildlife sightings reported and handled according to protocol	100% of site personnel trained and committed to biodiversity protection before starting work Zero incidents per reporting period. ≥ 100% compliance based on site inspections. 100% of sightings reported and managed appropriately.	EPC Contractor and Subcontractors	Training attendance sheets and signed code of conduct forms for all site personnel. Induction records for new teams and subcontractors. Random site inspections Verify register of non-compliance and correction actions Review biodiversity-related incident logs	Before Work Starts: Verify that 100% of personnel have completed training and signed the code of conduct. At Induction for every new team or subcontractor group. Monthly: Review incident reports and compliance documentation. Quarterly: Perform site inspections for compliance with movement restrictions and biodiversity rules.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor
BIO09	Minimize disturbance during nesting/breeding periods. In case vegetation removal cannot be avoided during bird and bats breeding season, have nesting birds and bat roost presence verified by a qualified ecologist within 48 hours from vegetation clearance. If breeding birds are discovered, then works will be postponed in that area until the breeding cycle is complete (this may take up to three weeks). If permanent or temporary roost are observed in the areas to be cleared, the Project will take action to allow the bats to leave on their own at sundown but keep them from returning at sun set (e.g., remove or obstruct the roost, close the roost entrance). This will only be done if no dependent young are present. Specific instructions will be integrated in the next revision of the Biodiversity Management Plan.	Before starting site vegetation clearance (within 48 hours before).	Percentage of vegetation clearance activities during breeding season preceded by ecological verification within 48 hours Number of works postponed due to discovery of active nests or bat roosts Percentage of bat roosts managed Number of non-compliance incidents	100% of vegetation clearance activities during breeding season verified by a qualified ecologist All identified breeding sites lead to postponement until the breeding cycle is complete or mitigation is implemented. 100% of temporary/permanent roosts managed without harming bats or dependent young. Zero incidents.	EPC Contractor and Subcontractors	Check ecological verification reports Review postponement records. Verify mitigation actions for bat roosts Spot checks during clearance activities Review biodiversity incident logs for any disturbance of nesting birds or bats.	Before Each Clearance Activity During Construction weekly checks for compliance with nesting/breeding protection measures. Monthly review incident reports and compliance documentation.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor
BIO10	Flora seed collection (threatened species). Seed collection will be performed for endemic/rare/protected flora species, identified within the Project AoI (*Tulipa regelii, Tulipa biflora, Tulipa alberti, Tulipa borszczowii, Tulipa greigii*). The seed collection and conservation will	During construction phase- before the vegetation clearing and	Number of seed collections conducted for each identified endemic/rare/protected species Percentage of seed	Seed collection completed for 100% of identified populations of target species within the AoI 100% compliance with	EPC Contractor and Subcontractors	Check seed collection logs for each identified endemic/rare/protected species. Confirm donation records to the designated Seed Bank.	Before Each Collection Season: Conduct at least one training/briefing session for field teams. Post-Collection: Review coding and storage	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
	follow the best practice indicated by the Millenium Seed Bank. Seeds collected will be separately stored for each species and sub population using clearly identifiable codes and will be donated to the most appropriate Seed Bank in the area for storage and scientific research. Specific instructions will be integrated into the Rare Plant Management Plan section to be developed in this BiodiversityManagement Plan.	topsoil removal	collections conducted in accordance with Millennium Seed Bank standards Number of training sessions or briefings held for field teams on seed collection protocols	best practice protocols. At least one session before each collection season.		Attendance sheets and briefing records for field teams. Inspection of seed storage containers and labeling before transfer to Seed Bank.	records immediately after collection. Quarterly: monitoring of compliance with protocols and documentation. Verify donation and transfer records to Seed Bank.	
BIO11	Minimize mortality in deep excavations. Cover or fence all the deep excavations to prevent the access of wildlife and people while not working (including at night). Open trenches and other excavations will be checked daily (even more frequently during hot summer days) to identify any entrapped mammals. Rescue of any entrapped animals will be undertaken with extra care to minimize animal stress and the risk of injury. For trenches that will need to be left open for a considerable time, install slopes or other escape measures for small animals at places that are not fenced off. Maintain a log of records of any animal entrapments.	Continuously during construction phase.	Percentage of deep excavations properly covered, fenced, or equipped with escape measures during non-working hours Number of animals found and safely rescued from excavations Number fauna injured in trenches /deep excavations.	100% of deep excavations secured during non-working hours (including nighttime) All entrapped animals rescued with minimal stress and injury. Zero incidents.	EPC Contractor and Subcontractors	Check daily inspection logs confirming excavation checks and rescue actions. Spot inspections to confirm excavations are secured during non-working hours. Verify presence of escape ramps or slopes in long-term open trenches. Review logs for any wildlife mortality or non-compliance incidents.	Daily: Perform excavation checks (minimum twice per day during hot weather). Before Nightfall: Confirm all excavations are covered or fenced. Weekly: Review compliance with escape measures for long-term trenches. Monthly: Audit incident reports and rescue records.	TERSK Site HSE Manager TERSK ES Manager TERSK Biodiversity Advisor
BIO12	Minimize birds' collision, mortality and electrocution (construction risks) At all temporary infrastructure, install window decals or non-reflective window covering to reduce the potential for bird window strikes. In addition, bird-friendly glasses or bird bollards will be installed on glass to avoid reflective glass that birds confuse with habitat.	During planning phase during all the construction phase and the guarantee period.	Percentage of temporary infrastructure equipped with bird-friendly features (e.g., decals, non-reflective coverings, bird bollards) Number of bird collision incidents reported during construction	100% of temporary infrastructure with glass surfaces fitted with bird-friendly features before use Zero incidents.	EPC Contractor and Subcontractors	Check procurement and installation records for bird-friendly features (decals, non-reflective coverings, bird bollards). Inspect temporary infrastructure to confirm bird-safe features are installed before use. Review logs for any bird collision incidents and corrective actions taken.	Quarterly during the entire construction phase. Bi-weekly site walkthrough during the entire construction phaseore work starts.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Manager

Mitigation measure						Monitoring measure		
BIO13	Large Mammals (threatened species) – On going monitoring. Carry out ongoing monitoring to assess any impacts generated by the Project and thus identify specific measures additional to put in place for goitered gazelle (Gazella subgutturosa – VU) and argali (Ovis ammon karelini NT and included in the RDB of Kazakhstan) that were identified as having ranges which overlap with the Project Area. Specific instruction will be integrated in the next revision of the Biodiversity Management Plan. Already turbine layouts have been iterated to remove them from the identified argali habitat area as far as is possible. Concept mitigations already established are: • Prohibit the movement of vehicles and other equipment outside designated roads, and adhere to speed limits. Utilise a hard-stop disciplinary procedure for enforcement. Minimise night driving by restrictions to reduce nighttime vehicle movements to an absolute minimum. Enforce road speed limits and use physical speed calming measures especially near key areas (watering points, crossings, lambing/kidding areas and watchpoints). Use road/gate permit systems to reduce access to non-project related traffic to restrict poaching activity. • Minimize the number of service roads used for construction and then for maintenance of the wind farm complex. Close access to the road network within the wind farm, allowing their use only for wind farm maintenance. Potential use of video surveillance systems. • Control impulsive noise control measures. Impulsive noise generation to be restricted to day-time working hours only; Impulsive events should be pre-notified and kept to short durations. Avoid repeat	During all the construction phase and the guarantee period.	Frequency of ecological monitoring surveys conducted for large mammals within the Project Area Number of sightings or signs of goitered gazelle and argali recorded during surveys Number of adaptive mitigation measures implemented based on monitoring results such as the deployment of game fencing barriers at “hotspots” of animal/human interface. Percentage of project personnel trained on large mammal awareness and reporting protocols	At least one monitoring survey per season (Spring, Summer, Autumn) during construction and early operation phases Maintain or increase baseline presence (as per initial EIA data), indicating no significant displacement. All necessary measures identified through monitoring are implemented within 30 days. 100% of relevant staff trained within the first month of deployment.	EPC Contractor and Subcontractors	Check ecological monitoring survey reports Confirm training records for project personnel Spot checks during surveys to ensure proper methodology and coverage. Observation of mitigation measures applied in response to monitoring findings. Review any reports of mammal disturbance or mortality and corrective actions taken.	Seasonal: At least one monitoring survey per season (Spring, Summer, Autumn) during construction and early operation phases. Monthly: Review implementation of adaptive measures and staff training compliance. Continuous: Record sightings and signs during routine site inspections.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
	impulsive noise events near key areas (see above). • A Fauna Handling and Rescue Procedure will be prepared in case any fauna species are injured during the construction activities. All animal impacts/near-misses to be reported and logged. • Install fences to prevent animals accidentally entering waste storage areas and road-salt storage areas. Fences will be designed and use materials that are not harmful to wildlife. Organic wastes generated to be fully contained and litter wastes to be adequately secured. • Monitoring of the Argali (e.g. radiotracking) would be undertaken throughout the operation of the Project to inform any remedial measures that need to be put into place. Monitoring will include compliance monitoring on traffic management, waste management and excavations management. Furthermore, wildlife response monitoring shall be carried out replicating baseline surveys to assess for reduced or changed activity patterns that may need to trigger further mitigation responses. Incident monitoring will take place with mandatory reporting of vehicle strikes, entrapped animals and poaching reports. Post-construction monitoring shall take place for a period of 3 years using transects and camera traps to assess if there have been any significant changes to activity both post-construction and in early operational phase. • Use light sources with minimal ultraviolet radiation at the facility, and limit the duration of illumination (turn off for a period of about 2-3 hours in the evening after sunset). Utilise light							

	Mitigation measure					Monitoring measure		
	down directed light shading to reduce unnecessary light spill. • Biodiversity training will cover all relevant mitigation requirements in relation to biodiversity applicable to workers. • Cover or fence deep excavations or provide escape ramps where not possible to cover. Open trenches and other excavations will be checked daily. Any entrapped animals to be reported and logged. • Activities generating high noise levels to start outside the breeding and rearing periods where possible. Where appropriate, the installation of acoustic barriers could help minimize the impact of noise emission and vibrations. • Measures to minimize noise emissions from facilities and vehicles. • Strict anti-hunting and poaching controls.							
BIO13b	Bats - Five species of bat have been identified by static and mobile bat detector surveys. These are • Common pipistrelle and its sub-species Turkestan pipistrelle • Noctule • Parti-coloured bat • Bobrinski's serotine • European free-tailed bat Bobrinski's serotine is identified as a PBF. Construction mitigation measures to include: • Avoid vegetation clearance during bat maternity period (March - late July/early August). • Pre-clearance checks by a suitably experienced ecologist. • Activities generating high noise levels to start outside the breeding and rearing periods where possible. • Night work in proximity to natural habitats and sensitive areas will be avoided from 8pm	During all the construction phase and the guarantee period.	Bat Activity Indices logged on monitoring static bat detectors and mobile transect surveys. Number of adaptive mitigation measures implemented based on monitoring results. Percentage of project personnel trained on bat species awareness and reporting protocols.	No reduction in bat activity or species diversity in the construction footprint.	EPC Contractors and sub-contractors	Check ecological monitoring survey reports Confirm training records for project personnel Spot checks during surveys to ensure proper methodology and coverage. Observation of mitigation measures applied in response to monitoring findings. Review any reports of mammal disturbance or mortality and corrective actions taken	Seasonal: At least one monitoring survey per season (Spring, Summer, Autumn) during construction and early operation phases. Monthly: Review implementation of adaptive measures and staff training compliance. Continuous: Record sightings, signs and any roost discoveries during routine site inspections.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
	to 6 am, to reduce impacts to nocturnal fauna species. • Where appropriate, the installation of acoustic barriers could help minimize the impact of noise emissions and vibration. • Measures to minimize noise emissions from facilities and vehicles. • A lighting design to avoid emission of light on sensitive areas.							
BIO14	Restoration of temporarily degraded/disturbed habitats. Recover degraded and disturbed areas during the construction phase by planting native flora species. In addition, consider to plant threatened flora species to increase the value of habitats and promote the conservation of threatened flora species. This action will contribute towards the No Net Loss/Net Gain targets of the Project. All recovered areas must be maintained, and specific instruction integrated in a future revision of the BMP, as soon as specific information will be available with the goal of Implementing a monitoring plan, keeping track of the restoration activities, evaluating their effectiveness, and implementing a maintenance plan.	During construction phase as soon as the area is no longer in use	Percentage of temporarily disturbed areas restored with native and/or threatened flora species Survival rate of planted flora species after 6 and 12 months Number of threatened flora species successfully introduced Number of monitoring reports evaluating restoration effectiveness	100% of temporarily disturbed areas restored using native species, with consideration for threatened flora where feasible ≥ 80% survival rate at each monitoring interval. At least one threatened species introduced per restoration zone (where ecologically appropriate). One report per quarter during the first-year post-restoration.	EPC Contractor and Subcontractors	Check restoration plans and species lists for native and threatened flora. Review planting records and maintenance logs. Verify monitoring reports evaluating restoration effectiveness. Inspect restored areas for compliance with planting specifications. Review logs for any failures in restoration or maintenance.	Monitor restoration progress as areas become available for recovery. Post-Restoration: Survival checks at 6 months and 12 months after planting. Quarterly: monitoring reports during the first-year post-restoration.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
BIO15	A Critical and Natural Habitats map will be developed as part of the Biodiversity Action Plan (BAP). This will include calculating the associated permanent habitats loss of Critical and Natural Habitats for the entire Project AoI. Offsetting for the loss of Natural and Critical Habitats will be required to deliver No Net Loss (NNL) and Net Gain (NG). Full details of the measures to achieve no net loss will be provided in the final BAP.	During construction phase as soon as the area is no longer in use	Completion and integration of Critical and Natural Habitats map into the Biodiversity Action Plan (BAP) Area (in hectares) of permanent habitat loss calculated and documented Offset ratio applied to achieve No Net Loss (NNL) and Net Gain (NG) Number of offset sites identified and secured Monitoring frequency of offset areas post-implementation	Critical and Natural Habitats map completed and included in the final BAP before construction begins 100% of Project AoI assessed for habitat loss. NNL: 1:1 minimum offset for Natural Habitats NG: >1:1 offset for Critical Habitats, depending on conservation value All required offset areas identified and under management before habitat loss occurs. At least annual monitoring for 5 years post-offset implementation.	EPC Contractor and Subcontractors	Habitat Loss Assessment Verification: Review GIS-based Critical and Natural Habitats map integrated into the final BAP. Confirm that 100% of the Project Area of Influence (AoI) has been assessed. Validate calculations of permanent habitat loss through spatial analysis and field verification. Check documentation of offset ratios Confirm that offset sites are clearly mapped and described; legally secured (e.g., conservation easements, land purchase), and under active management before habitat loss occurs Field inspections Ensure monitoring protocols are defined in the BAP.	Offset Areas Monitoring: At least annually for 5 years post-implementation. Annual monitoring reports Mid-term review at Year 3 and final evaluation at Year 5 to assess progress toward No Net Loss and Net Gain.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Manager
BIO16	Restore the excavated areas as soon as feasible. Ensure that the excavated areas will be restored shortly after completion of construction activities using the most effective bio-engineering techniques (e.g., slope plantings, plant-root reinforced and anchored slopes). Specific instruction will be integrated in a section of a future revision of the Biodiversity Management Plan, as soon as specific information will be available.	During construction phase as soon as the area is no longer in use	Percentage of excavated areas restored using bio-engineering techniques (e.g., slope planting, root reinforcement) Percentage of excavated areas restored within the planned timeframe Number of non-compliance incidents related to delayed or improper restoration	≥ 90% of restored areas use bio-engineering methods. ≥ 95% compliance with restoration schedule. Zero incidents.	EPC Contractor and Subcontractors	Restoration Schedule Review Site Inspections Document with georeferenced photos and inspection checklists. Audit of Biodiversity Management Plan Confirm integration of restoration instructions in the BAP section.	Weekly inspections during restoration activities. Immediate verification after restoration initiation for each excavated area. Monthly compliance reports summarizing:	TERSK HSE Manager TERSK ES TERSK Environmental Engineer Biodiversity advisor
BIO17	Avoid generating water pits and ponds. Prevent any type of action that can lead to the generation of pits and ponds such as soil over consolidation and uncontrolled wastewater discharges. Proper runoffs and stream channelling design will prevent such risks. In case heavy rain leads to the generation of pits and ponds, promptly complete their removal by pumping the water by means of vacuum truck and disposing it of as per the Project specifications and requirements. Check such locations for breeding amphibians before draining (do not drain	Continuously during construction phase and immediately after heavy rains events	Number of water pits or ponds formed due to construction activities and not promptly managed Number of fauna mortality incidents due to drowning in pits or ponds	Zero unmanaged water pits or ponds remaining beyond 48 hours after formation Zero incidents.	EPC Contractor and Subcontractors	Register of non-conformities and correction or justifications.	Quarterly during the entire construction phase.	TERSK HSE Manager TERSK ES Manager TERSK Environmental Engineer TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
	until young leave the pond or relocate) and daily checks/provision of ramps where banks are steep to minimise fauna falling and drowning.							
BIO18	Severtsoy's Loach (Triplophysa sewerzowi), Ship Sturgeon (*Acipernser nudiventris*) and the fish species *Schizothorax pseudoaksaiensis* are all present in Lake Balkhash and the EAAA for Severtsoy's Loach and Ship Sturgeon respectively qualifies as Critical Habitat. Freshwater fauna natural movement. Where the Project crosses small seasonal streams and rivers, ensure the continuity of the water feature, so that the Project does not constitute a barrier to fish and freshwater species movement. They must be designed to avoid the interruption of waterways, modification of natural flow velocity, and formation of stagnant water.	During design phase, all the construction phase and guarantee period	Number of crossings assessed for flow velocity and fauna passage suitability Percentage of crossings monitored for ecological effectiveness	All crossings assessed prior to construction. 100% of crossings monitored at least quarterly.	EPC Contractor and Subcontractors	Verify adherence to the Project design specifications Visual inspections of the construction site and installed facility and verify the Ecological effectiveness of the mitigation measures	Pre-construction: Assessment of all crossings. Quarterly monitoring during the first year post-construction. Immediate checks after major rainfall or hydrological changes. Annual review after the first year if required	TERSK HSE Manager TERSK ES TERSK Biodiversity Advisor
BIO19	Freshwater habitats and species - Minimize the potential pollution and sedimentation of the surface water The potential pollution of minor surface water bodies (e.g., seasonal water channels and rivers) will be avoided by avoiding pollutant runoffs with potential adverse effects: • the solid and liquid storage of products and waste on the construction site will be properly managed. • The fine-grained material should be stockpiled, covered, and placed 30 m from the drains or from the areas where seasonal water channels generated. • Any type of uncontrolled wastewater, oils, fuels, or chemicals spreading and runoff will be avoided. Design and install a station for properly collecting and managing the wastewater deriving from the construction site activities. During construction works, any degradation of freshwater habitats will be also avoided, in terms of sedimentation due to the crossing works on the banks or in stream. A Water and Groundwater Management	During planning phase and construction phase	Number of uncontrolled discharges or runoff incidents into surface waters Frequency of water quality monitoring near sensitive freshwater habitats Number of freshwater habitat degradation incidents due to bank or in-stream works	Zero incidents. Monthly during construction, and after any incident or heavy rainfall. Zero incidents.	EPC Contractor and Subcontractors	Verify ecological water regime for the small rivers or streams. Verify record of construction sites specifications Verify record of all the hazardous materials used on the construction sites.	Quarterly during the entire construction phase. Bi-weekly site walkthrough during the entire construction phase and event based in case of run-off events during the entire construction phase.	TERSK HSE Manager TERSK ES Manager TERSK Environmental Engineer TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
	Plan will be prepared and approved before the start of construction activities, to include the management of construction stormwater and wastewater, to ensure the protection of surface water resources and that the work is done correctly, safely, and in compliance with all regulations at every stage.							
BIO20	Restoration of degraded freshwater. If any freshwater habitats are degraded by the construction activities, implement recovery actions for those habitats to maintain the form and function of these ecosystems. Specific instruction will be integrated in the next revision of the Biodiversity Management Plan, as soon as specific information will be available. The various restoration techniques include physical methods such as sewage interception, dredging, algae removal, and biological processes which include restoration of aquatic plants and/or bio-membrane techniques. All recovered areas must be maintained. Implement a monitoring plan, keep track of the restoration activities, evaluate their effectiveness, and should implement a maintenance plan. The plan must include control of water quality, freshwater biodiversity, and the maintenance of the ecological balance.	During construction phase, progressive rehabilitation will occur, as soon as freshwater areas for the restoration become available	Percentage of degraded freshwater habitats restored Water quality parameters (e.g., turbidity, pH, dissolved oxygen) within restored areas Presence and diversity of aquatic flora and fauna in restored habitats	100% of freshwater habitats degraded by construction activities restored using appropriate techniques Values within baseline or ecologically acceptable ranges post-restoration. Recovery of key indicator species within 12 months.	EPC Contractor and Subcontractors	Periodical control of the devices will be installed and maintained until new vegetation is sufficiently established Watercourse crossings will be regularly inspected until adequate stability has been achieved. After this, routine inspections will be made until the end of the maintenance period. Monitor freshwater ecosystem (chemical, physical and biological)	Every three weeks during the initial restoration phase. After this, routine inspections quarterly until the end of the maintenance period. After 12 months from the starting initial revegetation, a survey every year to verify the effectiveness of the maintenance operation	TERSK HSE Manager TERSK ES Manager TERSK Environmental Engineer Biodiversity Advisor
BIO21	Avoid rearing and breading periods. The Contractor will plan activities generating high noise levels to start outside the breeding and rearing periods (depending on the species). Specific instruction will be integrated in the next revision of the Biodiversity Management Plan.	During planning phase and construction phase	Percentage of high-noise construction activities scheduled outside the breeding and rearing periods of sensitive species List of activities planned to be developed with dates, characteristics and locations.	100% of high-noise activities planned and executed outside the breeding/rearing periods, unless verified by a qualified ecologist and mitigation measures are in place No works involving high noise level during	EPC Contractor and Subcontractors	Verify adherence to the Project planning. Verify non-compliance provide a proper justification approved by Biodiversity Specialist	Pre-construction Quarterly auditing during the entire construction phase.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
				rearing and breading period				
BIO22	Avoid night work. Night work in proximity to natural habitats and sensitive areas will be avoided from 8pm to 6 am, to reduce impacts to nocturnal fauna species, especially bats. Utilise light shielding and bulb frequencies that reduce the impact of Artificial Light at Night (ALAN) on wildlife receptors. A light impact plan will be formulated in the next iteration of the BMP – see BIO23 and BIO24 for more details.	During design phase and continuously during the construction phase	Percentage of construction activities near sensitive habitats conducted between 6:00 AM and 8:00 PM Number of non-compliance incidents involving night work near sensitive areas Percentage of staff informed about night work restrictions during site induction	100% of construction activities in proximity to natural habitats scheduled outside the 8:00 PM – 6:00 AM window Zero incidents 100% of relevant personnel trained	EPC Contractor and Subcontractors	Verify contractor logs and daily work plans. Conduct random checks during evening hours to ensure no work is occurring in restricted timeframes. Review attendance sheets and induction materials.	Bi-Weekly review of work schedules and site activities. Random evening inspections during active construction near sensitive habitats. Quarterly auditing during the entire construction phase.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor
BIO23	Avoid emission of light on sensitive areas The Contractor during the construction phase will: • avoid direct light to the adjacent natural areas. Direct lights solely onto work areas (i.e. use of spotlights instead of flood lights). For road and amenity lighting installations, light near and above the horizontal should normally be minimized to reduce glare and sky glow. • Avoid long wavelength light sources, higher than 700 nm, thus red lights. Red lights showed the strongest attraction of migrant birds. Avoid light with blue/violet (400 – 500nm) and ultra-violet wavelengths (< 400nm). Also, avoid using white LEDs that contain high short wave blue light components. Most wildlife species are sensitive to shortwave blue/violet light. This light also scatters more readily and contributes to skyglow.	During design phase and continuously during the construction phase	Percentage of lighting installations designed to avoid direct illumination of adjacent natural areas Percentage of light sources compliant with wildlife-sensitive wavelength specifications Number of non-compliance incidents related to light spill or inappropriate lighting types	100% of lighting installations use directional lighting (e.g., spotlights) focused only on work areas 100% of installed lights avoid red (>700 nm), blue/violet (400–500 nm), and UV (<400 nm) wavelengths; no use of high-blue-content white LEDs Zero incidents	EPC Contractor and Subcontractors	Verify records of the lighting and luminaires used and installed Check compliance through visual inspection and corrections/adaptations. Check light emissions are acceptable for fauna.	Before installation: Review lighting design and specifications for compliance. Bi-weekly site walkthrough during the entire construction phase.	TERSK HSE Manager TERSK ES Manager TERSK Environmental Engineer
BIO24	Implement lighting solutions on the project site to reduce potential fauna attraction. The Contractor, during the construction phase, will: • plan the lighting to ensure the level of light required for the safety of the workers and the safety of the equipment while minimizing the luminous level. • Minimize activities at night, particularly where the project is in proximity to sensitive ecosystems.	During design phase and continuously during the construction phase	Number of project construction facilities and construction sites with adherence to the Project design specifications or procedures regarding light. Number of construction sites including elements to minimize light emission	100% of the facilities follow Project design specifications 100% of the construction sites compliant with light emission management actions and procedures within and around project construction sites.	EPC Contractor and Subcontractors	Verify records of the lighting and luminaires used and installed Check compliance through visual inspection and corrections/adaptations. Check light emissions are acceptable for fauna	Before installation: Review lighting design and specifications for compliance. Bi-Weekly inspections during active construction near sensitive habitats. Quarterly auditing during	TERSK HSE Manager TERSK ES Manager TERSK Environmental Engineer

Mitigation measure						Monitoring measure		
	• When selecting luminaires ensure that suitable products are chosen and that their placement minimizes stray light and glare. Prefer dark-sky compliant full-shielded (i.e., full cut-off) light fixtures that direct light downwards below the horizontal plane and result in no up-light. • Keep glare to a minimum by ensuring that the main beam angle of all lights directed towards any potential observer is not more than 70°. Higher mounting heights allow lower main beam angles, which can assist in reducing glare. • When lighting vertical structures, direct light downwards wherever possible. If there is no alternative to up-lighting, then the use of shields, baffles and louvres will help reduce spill light around and over the structure to a minimum. • Use of full horizontal cut off luminaires installed at 0° uplift will, in addition to reducing sky glow, also help to minimize visual intrusion within the open landscape. • Use more warm-white light sources, as proposed by many organizations (The Dark and Quiet Skies consortium, the International Union for Conservation of Nature and United Nations Office for Outer Space Affairs). Use green “bird friendly” high-pressure sodium bulbs for lighting to reduce attraction to nocturnally migrating birds, particularly in locations were turning lights off is not possible. • Use amber spectrum bulbs (wavelength of 500 – 700nm), with minimal blue. Best is with light sources higher than 560nm. • Consider lumens (amount of light produced) rather than watts (amount of energy used) when selecting lighting and prefer low glare lighting fixtures to reduce excessive brightness and diffuse light. Low glare options can also require less energy. • Using non reflective surface treatments for project facilities. Reduce building contrast levels by using finishes with low reflectance levels and colors that match natural landscapes. Where possible, structures on the site will be dark in color to absorb light reflection. • Consider flashing lights instead of steady lights. Flashing lights are believed to be less attractive to birds than steady lights.						the entire construction phase.	

Mitigation measure						Monitoring measure		
BIO25	Avoid fauna from accessing waste storage. The Contractor will install fences to prevent animals accidentally entering waste storage areas. Fences will be designed and use materials that are not harmful to wildlife. Visual, physical and/or audio deterrents will be installed to keep fauna and avifauna away from waste storage.	During design phase and continuously during the construction phase	Percentage of waste storage areas equipped with wildlife-safe fencing and deterrent systems	100% of waste storage areas fenced	EPC Contractor and Subcontractors	Verify records of fencing and deterrents used and installed in waste storage locations. Visual inspection of the funcionality of fences and deterrents and corrections as applicable. Verify records of walk-around inspection for wildlife traces and corrections as applicable	Quarterly auditing during the entire construction phase. Bi-weekly site walkthrough during the entire construction phase.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor
BIO26	Avoidance of any contact with wildlife. The Contractor will prohibit the workers from engaging themselves in any type of fishing, hunting and arrangement of traps for animals and birds. Any fauna species encountered will not be interfered with or disturbed until it moves on by itself. This includes temporary stopping operations as needed.	During construction phase	Number of incidents involving unauthorized contact with wildlife (e.g., hunting, fishing, trapping, chasing, disturbing)	Zero incidents of wildlife contact or disturbance by workers throughout the construction phase	EPC Contractor and Subcontractors	Verify incident reporting system for wildlife encounters and inappropriate behavior Verify register of worker's training and awareness	Quarterly auditing during the entire construction phase	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor
BIO27	Employees and subcontractors' awareness raising. All employees and subcontractors will be trained and informed by the Contractor on the presence of conservation areas on site, on the biodiversity values, and how to behave in case of wildlife encounter. By partnering with agencies responsible for law control, the Contractor will strengthen law enforcement against illicit wildlife trade.	Pre-construction and during all period of construction phase	Percentage of employees and subcontractors who have completed biodiversity awareness training	100% of personnel trained before starting work on site	TERSK HR Manager TERSK Site HSE Manager EPC Contractor and Subcontractors	Periodic verification of induction and training records	Once at induction Quarterly audit during the entire construction phase.	TERSK HSE Manager TERSK ES Manager
BIO28	Minimize effects of road kills. A Fauna Handling and Rescue Procedure will be prepared and actioned by the Contractor in case any fauna species are injured during the construction activities. Species must be taken to the allocated to the vet for treatment. To reduce the likelihood that scavenging species be struck by vehicles, roadkill will be removed or relocated and reported as an environmental event. Moreover, all fauna deaths and real animal sightings in the project site and dumping areas will be reported. Project traffic routing will be reduced through areas of particular interest for endemic fauna species (birds, amphibians, mammals) wherever possible and during sensitive periods (nesting, reproduction).	Continuously during the construction phase	Percentage of fauna-related incidents (injuries, deaths, sightings) that are properly reported and managed according to the Fauna Handling and Rescue Procedure. Percentage of project traffic rerouted or restricted in areas of ecological sensitivity (e.g., nesting, breeding zones) during critical periods.	100% of fauna incidents must: Be reported as environmental events. Be documented with location, species, and time. Include appropriate action (e.g., rescue and transport to vet). Be removed or relocated promptly to avoid attracting scavengers. Be included in monthly environmental monitoring reports. 100% compliance with seasonal traffic restrictions and routing	EPC Contractor and Subcontractors	Keep records of the fauna deaths, fauna injuries and sightings along with the actions taken. Verify record of the sensitive areas and periods Verify record of vehicles routings to from and through sensitive areas in sensitive periods. Check implementation of the measures within and around project construction sites	Quarterly audit during the entire construction phase. Continuously during the entire construction phase	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
				plans in fauna-sensitive zones.				
BIO29	Clean equipment. The Contractor will apply rigorous and appropriate control procedures at the site access points, to prevent accidental introduction of invasive alien species. Furthermore, the wheels of the trucks must be cleaned before the trucks leave the dumping area sites.	Continuously during all the period of construction phase.	Percentage of vehicles and equipment cleaned according to site biosecurity protocols before leaving designated areas (e.g., dumping sites), with special attention to wheel cleaning.	100% of trucks and equipment must: Undergo wheel cleaning before leaving dumping areas. Be inspected at site access points for cleanliness. Follow biosecurity protocols to prevent the spread of invasive alien species. Cleaning procedures must be documented and verified daily.	EPC Contractor and Subcontractors	Verify daily records documenting wheel cleaning and equipment cleaning Verify that vehicles and equipment are inspected for cleanliness at site access points according to biosecurity protocols. Review completed checklists confirming adherence to invasive species prevention measures.	Bi-Weekly inspections during active operations at dumping areas. Every three months review of cleaning logs and compliance summaries, until the end of the construction phase.	TERSK HSE Manager TERSK ES Manager TERSK Environmental Engineer
BIO30	Management of established invasives. In case alien (invasive) species are detected, they reduce or eliminate the impacts of established species by eradication, containment, exclusion, or population reduction through physical or biological control, according to the Invasive Alien Species Management Plan (IASMP). This plan will design and implement effective management programs appropriate for each species and habitats, incorporating best practices.	Continuously during all the period of construction phase.	Percentage of detected invasive alien species (IAS) for which appropriate management actions (eradication, containment, exclusion, or population reduction) are initiated in accordance with the IASMP. Average number of days between detection and initiation of control measures Percentage reduction in IAS population or coverage after treatment	100% of detected IAS must be: Assessed and documented. Managed using species-specific and habitat-appropriate methods. Treated with physical or biological control measures as defined in the IASMP. Monitored for effectiveness and follow-up actions. ≤ 7 days ≥ 80% reduction within 6 months	EPC Contractor and Subcontractors	Verify the IAS Detection and Assessment Records Check work orders and treatment records Review monitoring reports for additional actions if initial treatment was insufficient.	Continuous: Detection and reporting of invasive species. Within 7 Days: Initiation of control measures after detection. Monthly: Review of IAS management actions and progress. Biannual: Effectiveness assessment (population reduction target).	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
BIO31	Monitoring of spreading of alien (invasive) species. The contractor will adopt a monitoring plan, to verify on an annual basis the presence of invasive species through field surveys and will evaluate the effectiveness of the actions undertaken by following the IASMP.	Continuously during all the period of construction phase. Every three months, until the end of the construction phase. In case of IAS presence, the ideal time to remove and dispose invasive plants is before they flower and produce seeds.	Number and location of events identified for presence of IAS and approximate number or area. Number of IAS species identified and locations Description of the control methods implemented in each IAS infested area.	All the IAS locations identified are registered The number or area of IAS locations identified does not increase during construction period The total number of IAS species by location does not increase during construction. 100% of non-compliance are investigated and corrections implemented.	EPC Contractor and Subcontractors	Periodical visual inspection of infested areas. Verify records of location and number of IAS identified as well as updates of status in each location Verify and rate of success of the control method implemented and correct if the results are not satisfactory.	Annually: Conduct and document field surveys within the defined monitoring period. Within 3 Months: Implement corrective actions after detection. Yearly Review: Evaluate trends and effectiveness of IAS management actions.	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor
BIO32	Post-management restoration. Sometimes, control of an invasive species is followed by rapid and adequate recovery of the native ecosystem or of the economic or societal value affected by the target species. But in other cases, native species may fail to recover, or unforeseen adverse consequences may occur, such as invasion by other introduced species. In such cases, further intervention may be required to assist in the recovery of native biodiversity or other values. This may include specific restoration projects for individual native species, or management of other invasive species. The Contractor will design and implement a post-management restoration project to ensure the success of the recovery of native biodiversity, ecosystem, ecosystem services and other values, following the IASMP.	From the end of construction period (1st year post construction), every year for 10 years in the same frequencies as per construction	Percentage of invasive species control sites where post-management restoration actions are designed and implemented to support recovery of native biodiversity, ecosystems, and ecosystem services, in accordance with the IASMP. Percentage of sites showing successful native recovery	100% of sites where invasive species have been managed must: Be assessed for ecological recovery within 3 months of control completion. Have restoration plans developed if natural recovery is insufficient. Implement restoration actions (e.g., replanting, habitat enhancement, native species support) within 6 months of assessment. Be monitored for effectiveness over time. ≥ 80% within 12 months	EPC Contractor and Subcontractors	Verify periodical visual inspection of infested areas. Overseeing of the reports. Calculate the rate of success of the control method implemented.	Annually after the end of construction phase	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor

Mitigation measure						Monitoring measure		
BIO33	Spatial Collision Risk Analysis and Seasonal Shutdown Planning To improve the precision and effectiveness of collision risk mitigation, a spatial analysis of turbine-specific risk will be conducted using data from the Collision Risk Modelling (CRM) program. This measure includes the following actions: - Turbines will be grouped by vantage points (VPs), and a Kernel Density Estimation (KDE) will be applied at the VP-cluster level to identify zones of elevated flight activity and collision risk. - Survey effort and visibility conditions across VPs will be standardized to ensure accurate calculation of areal bird densities. - Extension of the methodology already applied to non-directional species in CRM Stage A to additional species and flight types. - CRM will be run for each survey season to detect periods of increased turbine-specific risk. These results will inform the definition of targeted seasonal shutdown windows. This mitigation measure will support adaptive management and allow for prioritization of turbines and time periods where shutdown-on-demand or other mitigation actions are most needed. Results will be shared with relevant authorities and stakeholders as part of the ongoing commitment to evidence-based environmental protection.	Initial KDE and spatial risk analysis: To be completed within Q1 2026, following approval of the spatial modelling proposal. Seasonal CRM updates: Conducted biannually, aligned with spring and autumn migration periods (e.g., March–May and September–November). Review and update of shutdown windows: Annually, based on the latest CRM outputs and field observations.	Completion and application of spatial collision risk analysis to inform turbine-specific and seasonal mitigation actions.	By Q1 2026: Completion of Kernel Density Estimation (KDE) analysis across all VP clusters, with standardized survey inputs. By Q2 2026: Identification and documentation of turbines with elevated collision risk and definition of seasonal shutdown windows. Annually (starting 2026): Update of CRM analysis and shutdown strategy based on new survey data, with results integrated into the BMP and shared with relevant authorities. Performance Threshold: ≥90% of turbines identified as high-risk to have mitigation measures (e.g., shutdown-on-demand or seasonal shutdown) operational during peak risk periods.	EPC Contractor and Subcontractors	Review of KDE spatial analysis and VP clustering Seasonal CRM data analysis Anti-collision system log review Field data Validation	Once (initial), then every 3 years or upon major layout changes Seasonal CRM Assessment:Twice per year (Spring and Autumn migration seasons) MonthlyShutdown Compliance Monitoring: Monthly Annually, during peak migration periods	TERSK HSE Manager TERSK ES Manager TERSK Biodiversity Advisor
BIO34	The BMP will be disseminated to all staff responsible for managing the construction site and to all Sub-Contractors working on the Project Personnel at an appropriate level of seniority will be nominated to be responsible for good site practices and arrangements regarding biodiversity management	Before the start of the construction activities and during all the construction phase	Records of BMP dissemination activities	Plan disseminated and effectively implemented	TERSK HR Manager TERSK E&S Manager TERSK Site HSE Manager EPC Contractor and/or other subcontractors	Conduct periodical internal audits, to ensure that the plan is known at all levels of the organization and implemented Keep the records of the internal audits	Quarterly during the entire construction phase	TERSK PD TERSK HSE Manager

4.1 Additional Biodiversity Monitoring

Additional biodiversity monitoring during the construction phase refers to supplementary surveys and assessments focused on species (flora and fauna) and habitats. The biodiversity surveys conducted during the pre-construction phase are a critical foundation for the Project, as they establish the baseline necessary for implementing long-term biodiversity monitoring. This extended monitoring will continue beyond the construction phase to evaluate the effectiveness of mitigation and restoration measures. This additional monitoring, listed in Table 3, serves to validate the accuracy of predicted impacts and risks to biodiversity posed by the Project, as well as the anticipated effectiveness of biodiversity management actions.

Table 3: Biodiversity monitoring during the construction phase.

Monitoring measure						Verification of Implementation		
Item	Mitigation Measures/Actions	Timeline and frequency	KPI	Target	Responsibility	Verification method	Frequency	Responsibility
BM-01	Birds Bird surveys will be undertaken using transects and vantage point methods, including both daytime and few nighttime transects. A similar survey area and approach as used for the baseline studies undertaken for the ESIA will be used so that pre and construction survey results are comparable. Monitoring of bird species CH trigger and species of conservation concern already identified during the baseline studies, will be seasonally checked.	Two seasonal surveys during construction phase.	Diversity index (with reference to available baseline information). Presence of nesting site and/or feeding site.	Alignment to the pre-construction status. No signs of biodiversity loss.	TERSK Biodiversity Advisor EPC Contractor and Subcontractors	Records of birds' surveys.	Annually during the entire construction phase.	TERSK HSE Manager TERSK ES Manager
BM-02	Bats Bats surveys will be undertaken using passive acoustic surveys in appropriate habitats.	Two seasonal surveys during construction phase.	Diversity index Presence of roosting sites.	Alignment to the pre-construction status. No signs of biodiversity loss.	TERSK Biodiversity Advisor EPC Contractor and Subcontractors	Records of bats' surveys.	Annually during the entire construction phase.	TERSK HSE Manager TERSK ES Manager

Monitoring measure						Verification of Implementation		
BM-03	Ground nesting species and mammals survey Ground nesting species and mammals surveys will be undertaken using walking transect methods, including both daytime and nighttime transects for direct or indirect signs of presence and abundance. A similar survey area and approach as used for the baseline studies undertaken for the ESIA will be used so that pre- and construction surveys results are comparable.	Two seasonal surveys during construction phase.	Diversity index (with reference to available baseline information).	Alignment to the pre-construction status	TERSK Biodiversity Advisor EPC Contractor and Subcontractors	Records of ground nesting and mammals species	Annually during the entire construction phase.	TERSK HSE Manager TERSK ES Manager
BM-04	Amphibian and reptile Amphibian and reptile surveys will be undertaken using daytime transects and active searching, in suitable habitats. Evening transects to record vocalisations of amphibians. A similar survey area and approach as used for the baseline studies undertaken for the ESIA will be used so that pre- and construction surveys results are comparable.	Two seasonal surveys during construction phase.	Diversity index (with reference to available baseline information).	Alignment to the pre-construction status.	TERSK Biodiversity Advisor EPC Contractor and Subcontractors	Records of Amphibian and reptile' surveys.	Annually during the entire construction phase.	TERSK HSE Manager TERSK ES Manager
BM-05	Flora translocated Monitoring of flora (CH triggers and species of conservation concern) individuals translocated and replanted to suitable habitat	After translocation, two seasonal surveys during construction phase.	Site attributes, managements techniques, and species' traits.	Populations of flora translocated persistence and establishment success.	TERSK Biodiversity Advisor EPC Contractor and Subcontractors	Records of flora translocated persistence and establishment success rate.	Annually during the entire construction phase.	TERSK HSE Manager TERSK ES Manager

Monitoring measure						Verification of Implementation		
BM-06	Habitat and vegetation Habitat and vegetation surveys will be undertaken using transects and plot in both terrestrial and aquatic habitats within the Project AoI. Measures of quality and habitat condition collected during the baseline studies (undertaken for the ESIA) will be used as benchmark. Survey Point are indicated in the APPENDIX 00.	Two seasonal surveys during construction phase.	Quality or condition of terrestrial and aquatic habitats (with reference to available baseline information). Vegetational plot and transects (with reference to available baseline information).	Alignment to the pre-construction status. No signs of degradation and biodiversity loss.	TERSK Biodiversity Advisor EPC Contractor and Subcontractors	Records of habitat and vegetation surveys.	Annually during the entire construction phase.	TERSK HSE Manager TERSK ES Manager

5.0 TRAINING REQUIREMENTS

This Section provides the training requirements and guidance for Contractors and Sub-Contractors to ensure that their training activities are carried out in compliance with this MP.

5.1 HSES Induction

TERSK will be responsible of ensuring that all workers involved in the construction activities, including staff and workforce of EPC and Sub-Contractors, undergo proper training.

Attendance at a HSES safety induction should be mandatory and include all staff and workforce.

Any new employee, contractor worker, visitor or other individual visiting the site during the Project should receive the same induction information. The individual should be taken through the induction by an experienced person.

The HSES induction will be aimed at providing workers with basic information about Project-related HSES issues and policies/procedures in place, in order to ensure personal protection and prevention of any injury.

5.2 Specific Training

HSES training shall be provided to ensure that all workers involved in the construction activities, including staff and workforce, are oriented to the specific hazards of individual work assignments.

Specific training on biodiversity management shall be provided to workers involved in construction works. Training can include (but not limited to):

- Full knowledge of the biodiversity management measures
- Knowledge on protected and sensitive species/habitats present in the area;
- Knowledge on spill and leaks prevention and management;
- Knowledge of the biodiversity actions that will be taken for the compensation and restoration.
- Known wildlife hazards during working operations and how to prevent and control them.
- Precautions to prevent exposure to human-wildlife conflicts.
- Measures to minimize risks of biodiversity degradation. Degrading biodiversity is not acceptable.
- Correct use and application of PPE and clothing.
- Appropriate response to emergency conditions, incidents, and accidents.
- Safety signage; and
- Biodiversity awareness and respect.

5.3 Awareness

Site awareness shall be enhanced and shall include all workers.

6.0 REPORTING

This section provides instructions and requirements for the reporting on the implementation of mitigation measures/actions, monitoring activities and internal auditing.

6.1 Reporting for monitoring

Evidence and results of the monitoring activities (detailed in section 4.0) must be described in detail in appropriate monitoring reports to be prepared as frequent as indicated in the table. These reports must include the following minimum information/data (where relevant):

- Analytical certificates from the laboratory/ies (where applicable);
- Location of monitoring activities (geographical coordinates in WGS84 system and elevation);
- Map of surveyed areas;
- Timing of data collection (start date and end date);
- Description of the applied methodology; and
- KPI (Key Performance Indicator): regulatory limit value or qualitative acceptance criteria to comply with. KPIs are established to measure the effectiveness of the waste and hazardous materials management taking into consideration the local conditions and objectives. KPIs provide valuable feedback on implemented measures, helps to motivate managers and workers to undertake appropriate actions and are valuable for external communication purposes. KPIs related to waste and hazardous materials management are related in Table 2.
- Name and personal data of staff responsible for implementing the specific monitoring activities (including reference to this MP and reference to the appointment of third parties eventually contracted to perform part of the activity, e.g. external laboratories and consultants);
- Conclusions on compliance vs. KPI, and eventual observations;
- Implications and recommendations in respect to adaptive management; and
- Quality control procedures applied to ensure consistency and reliability of the analyses or results.

6.2 Reporting for auditing

The implementation of this MP must be audited according to the requirements included in the EPC Management System.

Evidence of the implementation of the mitigation measures/actions, of the timely deployment of monitoring activities (detailed in section 4.0) and of related results are described in the audit reports, which must include the following minimum information/data:

- List of the items audited (detailed in section 4.0);
- 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.

Signature Page

WSP ITALIA S.r.l.

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 +01'00'

Valeria Conti
Project Manager

Breda, Federico (gld_fbreda)
Digitally signed by Breda, Federico (gld_fbreda)
DN: cn=Breda, Federico (gld_fbreda), ou=WSPObjects, email=federico.breda@wsp.com
Date: 2025.12.29 18:24:36 +01'00'

Federico Breda
Project Director

Barbara Scorza
Barbara Scorza
Digitally signed by Barbara Scorza
DN: cn=Barbara Scorza, c=IT, o=WSP Italia SrL, email=barbara.scorza@wsp.com
Date: 2025.12.29 14:28:15 +01'00'

TOTAL ESIA Program Manager

C.F. e P.IVA 03674811009
Registro Imprese Torino
R.E.A. Torino n. TO-938498
Capitale sociale Euro 105.200,00 i.v.

wsp.com