

Darbaza Rail Project – Environmental and Social Action Plan – October 5, 2026

Item	Action	Completion Indicator	Timetable	Resources Internal/Ex ternal	Cost (USD)
PS1: Assessment and Management of Environmental and Social Risks and Impacts					
1	KTZ will revise its corporate ESMS, based on the findings of an external ESMS audit completed in February 2026, to align with IFC PSs, particularly in contractor management, construction supervision and oversight requirements outlined in the IFC Good Practice Note on Management of Contractors' Environmental and Social Performance; workers' accommodation requirements for contractors and sub-contractors in line with IFC and EBRD Good Practice Note on Workers' Accommodation; land acquisition and resettlement oversight; biodiversity risk management; quarry site closure and rehabilitation compliant with WBG EHS guidelines for Construction Materials Extraction and Good International Industry Practice (GIIP); as well as O&M phase EHS GIIP as specified in the World Bank Group EHS Guidelines for Railways, including but not limited to, operational rail safety management systems including OHS and EHS hazards and risks identification and management, emergency preparedness and response, and will include monitoring requirements with relevant parameters and indicators.	Corporate ESMS of KTZ approved by Lenders.	January 31, 2027, and in any event prior to First Disbursement.		
2	KTZ will finalize the supplemental ESIA and associated management plans in line with IFC PS requirements, AIIB ESSs and ADB SPSs.	Final supplemental ESIA and associated management plans approved by the Lenders.	November 30, 2026, and in any event prior to project review by the Boards of Lenders.		
3	KTZ, in line with its corporate ESMS, will develop and implement operational E&S management plans and procedures for the project, before commencement of the railway line, including assigned roles and responsibilities.	Operational E&S management plans and procedures approved by the Lenders.	February 28, 2027, and in any event prior to First Disbursement		

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	This will include, but not be limited to, an Emergency Preparedness and Response Plan (EPRP), a Spill Management Plan, a Waste Management Plan, Railway Safety Plan, Hazardous Materials Transportation Plan and a Security Management Plan, in line with IFC PS requirements.				
4	KTZ will complete as-built verification of irrigation and drainage crossing structures, and complete consultation with users at locations where concerns were raised to determine any livelihood losses during construction or physical damage to structures for the verified crop, production, income and other economic losses identified and develop a Verification report with a Corrective Action Plan to compensate for losses.	Verification report, including corrective action plan and respective budget as relevant prepared by KTZ.	February 28, 2027, and in any event prior to First Disbursement		
5	KTZ will complete the Ushagash LOTOK restoration and Atakent LOTOK relocation (C-AGR-06, C-AGR-07), and rectify any Project-related deficiency identified, where technically and operationally practicable. KTZ will implement the Corrective Action Plan and complete all actions requiring delivery of compensation and livelihood restoration measures as applicable for verified crop, production, income and other economic losses to the affected people.	External monitoring report confirming implementation of the Corrective Action Plan.	June 30, 2027, and in any event prior to Second Disbursement.		
6	KTZ will assign project-specific roles and responsibilities to the E&S expert, including implementing applicable IFC Performance Standards requirements and GIIP, and overseeing E&S deliverables to ensure the project's compliance with the IFC PSs, the WBG General EHS Guidelines, and the WBG EHS Guidelines for Railways.	CV and job description of E&S expert approved by Lenders and official assignment letter submitted to Lenders.	January 31, 2027, and in any event prior to signing.		

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PS2: Labor and Working Conditions					
7	KTZ will include work schedule adjustments for extreme heat and cold in its corporate operational OHS procedures and ensure that all workers are provided with and trained in the correct usage of PPE to address risks associated with extreme heat and cold.	Revised OHS procedures approved by Lenders.	January 31, 2027, and in any event within one month after signing.		
PS3: Resource Efficiency and Pollution Prevention					
8	KTZ will complete the construction and operation phase noise and vibration impact assessment to complement the findings of the supplementary ESIA, in line with Kazakh national standards and those set out in the IFC Noise Guidelines. Where exceedances are identified, the assessment will develop feasible mitigation options including, but not limited to, noise barriers, speed restrictions, rolling stock configuration and track maintenance assumptions.	Noise and Vibration Assessment Report approved by Lenders and its findings and recommended mitigation measures fully reflected in the final ESIA.	November 15, 2026, and in any event prior to project review by the Boards of Lenders.		
9	KTZ will develop an operational noise monitoring plan and community grievance program to monitor noise at sensitive receptors identified in the ESIA, confirm the effectiveness of the mitigation measures identified in item 8 based on operational phase monitoring, establish an adaptive management protocol as part of the plan, and include the plan within the corporate ESMS for the operations and maintenance phase. The need for such mitigation will be identified with reference to the WBG EHS General Guidelines thresholds for noise.	Operational noise monitoring plan and community grievance program approved by IFC	February 28, 2027, and in any event no later than commencement of operations.		
PS4: Community Health, Safety and Security					

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10	KTZ will prepare a time-bound action plan to implement the operational rail safety audit's recommendations and align the project with GIIP. Should the audit identify major safety risks to workers or third parties—such as rolling-stock collisions, collisions with people or property, or derailments—the plan may include temporary measures, reviewed by a railway specialist, beginning at the start of operations to reduce short-term risks	Transport and Railroad Traffic Safety Action Plan approved by Lenders.	January 31, 2026, and in any event no later than two months before commencement of operations.		
11	KTZ will commission an assessment of risks associated with the transportation of hazardous materials along the railway corridor. This assessment will consider hazards to human life, communities, community resources and biodiversity from incidents resulting in a loss of containment of hazardous cargos and will inform the development of contingency arrangements and response procedures.	Hazardous materials, transportation risk assessment and associated management procedures approved by Lenders	February 28, 2027, and in any event no later than two months before commencement of operations.		
PS5: Land Acquisition and Involuntary Resettlement					
	KTZ will appoint a senior team member to establish the Working Group and supervise the implementation of the LARP related processes. The establishment includes developing the scope of work with input from lenders. The Working Group should consist of representatives from regional and local akimats, KTZ and others as required.	Appointment of accountable person Working Group established and meeting fortnightly	November 15, 2026, and in any event prior to project review by the Boards of Lenders.		
12	KTZ will commission a competent resettlement consultant and a team of experts to update and finalize the LARP.	ToR and CV of resettlement consultant and team approved by Lenders and the contract of the consultant submitted to Lenders.	December 31, 2026, and in any event prior to project review by the Boards of Lenders.		

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13	KTZ will report on the progress of LARP update and verification, including status on the design update and associated impacts as relevant, verification of eligibility of vulnerable groups, donation cases and replacement land.	Monitoring report approved by the Lenders	February 28, 2027, and in any event prior to First Disbursement.		
14	KTZ will update and finalize the LARP, to incorporate: (i) any changes in land acquisition and resettlement impacts arising from detailed design finalization following additional surveys; (ii) verification and completion of information related to affected persons' eligibility, and entitlements; (iii) assessment and corrective actions, as required, for donation and replacement land cases; and (iv) a detailed and implementable Livelihood Restoration Program following meaningful consultations with affected people.	Final LARP approved by Lenders.	July 15, 2027, or in any event prior to a subsequent disbursement.		
15	KTZ will employ a competent social specialist who will be responsible for managing and coordinating the actions to be taken by the company and other entities within the scope of LARP. The specialist will also act as a Community Liaison Officer to liaise with GoK and local government offices, manage community grievances and undertake the necessary public consultation activities when needed during the implementation of LARP.	CV and job description of social specialist approved by Lenders and official assignment letter or contract submitted to Lenders.	December 31, 2026, and in any event before First Disbursement.		
16	KTZ will engage qualified resettlement consultant(s) to support KTZ and the relevant Akimats in the implementation of the LARP, including verification of impacts and entitlements, compensation delivery, livelihood restoration, stakeholder engagement, internal monitoring and reporting.	CV and job description approved by Lenders and consultancy contract submitted to Lenders.	December 31, 2026, and in any event before First Disbursement.		

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17	KTZ will hire an external consultant to monitor the implementation of the LARP and Irrigation and Corrective Action Plan under ESAP item #4 to provide reports on a quarterly basis to demonstrate that payment of compensation and provision of assistance; and livelihood restoration program are implemented, where applicable.	Terms of Reference, CVs and qualifications approved by Lenders and consultancy contract submitted to Lenders.	January 31, 2027		
18	KTZ, through the external monitoring consultant's report will demonstrate substantial progress on LARP implementation, particularly, it will verify (i) that the Akimats have budget allocated for the payment of compensation and assistance for LARP implementation	Monitoring report of external consultant approved by Lenders.	June 30, 2027, and in any event prior to Second Disbursement		
19	KTZ, through the external monitoring consultant's report will verify (i) payment of compensation and provision of assistance are completed; and (ii) livelihood restoration program is being implemented in accordance with the approved LARP.	Monitoring report of external consultant approved by Lenders.	December 31, 2027 Prior to final disbursement.		
20	At completion of the implementation of the LARP, the consultant will carry out a completion audit to verify the expected outcomes achieved as per the requirements of IFC PS5.	LARP completion audit report approved by Lenders	July 15, 2028		
21	KTZ will provide evidence of Government commitment and a clear, viable mechanism to allocate sufficient budget for full implementation of the LARP, including any additional impacts or corrective measures identified during implementation.	Satisfactory evidence of a viable mechanism for allocation of the required budget, identifying the responsible entities, shared with the Lenders.	January 31, 2027, and in any event prior to First Disbursement.		
PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources					

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22	(i) KTZ will prepare technical specifications and procurement documentation to procure and install Bird Flight Diverters (BFDs) meeting the technical and good international industry practice (GIIP) requirements specified by Lenders. (ii) Procure and install Bird Flight Diverters (BFDs). BFDs will be installed every 5 m on the entire length of the OHLs on the agreed high-risk sections of the OHLs (i.e. sections that overlap with the Chardara Reservoir KBA and a minimum of additional 1 km to the north and south of the alignments).	Technical specifications and manufacturer documentation demonstrating that the selected BFDs meet the requirements approved by the Lenders; Completion report confirming BFD installation on high-risk sections.	(i) November 30, 2026, or before the project review by the Boards of Lenders, whichever is earlier. (ii) April 30, 2027, and in any event before the commissioning certificate is issued.		
23	Develop a Post Construction Fatality Monitoring (PCFM) Program in line with Good International Industry Practice (GIIP) and Terms of References (TOR) provided by the Lenders. The PCFM Program will include fatality reporting protocols, Potential Biological Removal (PBR)-based fatality thresholds, and include specific adaptive management measures and offsets in case those thresholds are exceeded, in line with ESAP #24 (Operations-phase BMP). The PCFM program will take place for at least a three-year period with semi-annual reporting following a standardized template, but the actual timeframe of the PCFM program will depend on fatality results. The first strategic review of the PCFM results by the Lender will take place 6 months after the start of the operations phase and then continue on a semi-annual (2x/year) basis. KTZ will contract a specialized consultancy to design and develop PCFM with experience in lender funded projects and relating to design	TOR for specialized wind-wildlife consultancy provided by Lenders. Selection of consultancies agreed with Lenders. Draft version of PCFM program submitted to Lenders. Final version of PCFM Program approved by Lenders. Strategic review of PCFM results.	PCFM Program commenced by April 30, 2027, and in any event no later than the day on which the OHTL stringing is completed.		

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	and develop PCFM, collaborating with a local consultancy for its implementation.				
24	Develop an operation-phase Biodiversity Management Plan (BMP), including (i) monitoring and maintenance of BFDs in accordance with ESAP #22; (ii) implementation of PCFM Program in accordance with ESAP#23; and (iii) Habitat Restoration Programs. A qualified expert, who will be procured by KTZ, will develop the Habitat Restoration Program, which will, at the minimum, include: (i) recommendations for restoration measures and opportunities to maintain biodiversity on-site; and (ii) a clear demonstration of how NNL will be achieved. KTZ will coordinate with relevant stakeholders in developing and implementing the operations-phase BMP and Habitat Restoration Program, including The Association for the Conservation of Biodiversity of Kazakhstan (ACKB) and other local experts, notably for measures to be implemented in the Chardara Reservoir KBA. The BMP will be updated, as needed, to reflect monitoring results and adaptive mitigation. measures.	Final version of the operation-phase BMP approved by Lenders.	January 31, 2027, and in any event no later than two months before the start of operations.		
25	Finalize the Biodiversity Action Plan (BAP) and Biodiversity Monitoring and Evaluation Plan (BMEP). The BAP will include a loss/gain assessment and define habitat and species-specific actions to address residual impacts on Natural Habitat, Critical Habitat and priority biodiversity values. The BAP will be developed and implemented by qualified experts with international experience on offsets and ACAs to; (i) quantify residual impacts on Natural and Critical Habitat, (ii) define offset criteria and options, (iii) conduct an offset feasibility study and (iv) identify implementation and monitoring schedules within the scope of the BMEP. Monitoring and	BAP and BMEP approved by Lenders. BAP implemented, monitored, reported and updated, as applicable.	BAP and BMEP approved by the Lenders by February 28, 2027, and in any event prior to First Disbursement.		

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	Evaluation Program (BMEP). The BAP will make further provisions for continued engagement with stakeholders to inform development and implementation of offsets and ACAs for the Chardara Reservoir Key Biodiversity Area (KBA).				
26	Develop a Biodiversity Offset Management Plan (BOMP), which will detail specific actions required to implement and monitor each offset and ACA identified in the BAP. The BOMP will be developed and implemented by qualified international experts in coordination with stakeholders and, at the minimum, include (i) objectives and targets, (ii) additionality, equivalence, uncertainty and time-lag calculations, (iii) offset design and site selection, (iv) governance and responsibilities, (v) indicators and adaptive management thresholds, and (vi) implementation schedule and budget.	Final version of BOMP approved by Lenders.	By June 30, 2027, and in any event prior to subsequent disbursement.		
Stakeholder Engagement					
27	Finalize the Stakeholder Engagement Plan to ensure grievance mechanisms and engagement processes are communicated to communities and workers in accessible, culturally appropriate formats including signage, worker inductions, and public information materials.	Stakeholder Engagement Plan approved by Lenders.	By December 31, 2026, and in any event prior to First Disbursement.		