











Environmental and Social Impact Assessment for the Kyzylorda Bypass, Kyzylorda-Zhezkazgan Road Project, Kazakhstan

ENVIRONMENTAL AND SOCIAL ACTION PLAN

Rev02

Consultancy Services Contract № 2021.002133

July 2021



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Prepared for:

European Bank for Reconstruction and Development

Prepared by:

ATMS Solutions Ltd.

Director: Dr. A. Ter-Torosyan

In cooperation with



July 2021

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Rev01	1st draft of Environmental and Social Action Plan	Dr. Artak Ter-Torosyan Dr. Suren Gyurjinyan	Dr. Maia Gachechiladze- Bozhesku	06.07.2021
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List of Abbreviations

ANMP - Air and Noise Monitoring Plan

BAP - Biodiversity Action Plan

CCMP - Construction Camp Management Plan

CESMP - Construction Environmental and Social Management Plan

CFP - Change Find Procedure

CSC - Construction Supervision Contractor

DD - Due Diligence

EBRD - European Bank for Reconstruction and Development

EHS - Environmental, Health and Safety

EHSS - Environmental, Health and Safety, Social

E&S - Environmental and Social

ESAP - Environmental and Social Action Plan

ESIA - Environmental and Social Impact AssessmentESMP - Environmental and Social Management Plan

HR - Human Resources

GBVH - Gender Based Violence and Harassment

LARF - Land Acquisition and Resettlement Framework

OHS - Occupational Health and Safety

OHSMP - Occupational Health and Safety Management Plan

PIU - Project Implementation Unit PPE - Personal Protective Equipment

PR - Performance Requirements

RoK - Republic of Kazakhstan

RP - Resettlement Plan

SEMP - Site-Specific Environmental and Social Management Plans

SEP - Stakeholder Engagement Plan
SMP - Security Management Plan

SQMP - Soil Quality Monitoring Plan

TLV - Threshold Limit Value

TMP - Traffic Management Plan

WAMP - Worker Accommodation Management Plan

WHP - World Health OrganizationWMP - Waste Management Plan

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Table 1. Environmental and Social Action Plan (ESAP)

No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirements (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status/ Comments
PR1	Assessment and Management of Environment	ental and Social Risks	and Impacts				
1.1	Implement actions related to the corporate management and operations of KazAvtoZhol NC JSC ("the Client") in Environmental, Health and Safety and Social ("EHSS") domains as set out in the 2021 ESAP for the 204 km section of Kyzylorda-Zhezkazgan Road Project.						
1.2	Implement and oblige the contractors to implement actions and measures set by the Environmental and Social Management Plan ("ESMP") for the Kyzylorda Bypass Construction Project ("Project").	Potential impacts on physical, biological and social environments, community and workers' health and safety, socio- economic benefits.	EBRD PR1 - Environmental and Social Assessment and Environmental and Social Management Plan.	For the construction stage - the construction contractor, For the design and operation stage - the Client.	Starting from the Project design stage throughout the construction and operation stages.	The Project's adverse impacts on physical, biological and social environments are minimized/mitigated, socio-economic benefits are enhanced.	The measures of ESMP related to the construction stage should be a part of the Project's construction contractor's agreement.
1.3	Follow the provisions of Permit No. KZ94VDD00159027 issued by the Department of Natural Resources and Environmental Management of Kyzylorda Region for the Project, including: - Compliance with the limits for air emissions, - Compliance with the nature use conditions, - Submission of quarterly reports on permitted and actual air emissions to the environment.	Increased adverse impact on environment and nature use. Risk of penalties by the State environmental inspection bodies.	EBRD PR1 - Project Monitoring and Reporting; EBRD PR3 - Resource Efficiency and Pollution Prevention and Control.	Internal resources - The Project Implementation Unit ("PIU").	During the construction stage.	The quarterly reports on permitted and actual air emissions to the environment are submitted and approved by the relevant state body.	
1.4	Prior to the commencement of construction activities: - Obtain the needed construction permits for the Project,	Increased adverse impact on water resources. Risk of penalties by the State	National legal requirements, EBRD PR1 and PR3.	External consultants The PIU	Prior to the commencement of construction works.	Approved construction permits and special water use permit. If any changes to the Project design are	The obtained permit for 49 m³/day groundwater is not enough to satisfy

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No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirements (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status/ Comments
	- Increase the approved 49 m³/day limit of groundwater use from the bore hole No.1 and obtain a special water use permit (or consider the possibility to drill additional bore holes). If required, the changes in the Project design must be made before the start of construction works and the respective E&S implications assessed and reported to EBRD.	environmental and urban development inspection bodies.				made, the respective E&S implications are assessed and agreed with EBRD	the Project needs. Additional water volumes are required.
1.5	Develop and implement a Construction Environmental and Social Management Plan ("CESMP") and Site-Specific Environmental and Social Management Plans ("SEMP") at least for the following facilities: - the construction camp, - the bitumen shop, - the asphalt plant, - the technical site.	Potential impacts on physical, biological and social environments.	EBRD PR1 - Third- Party Risk and best practices.	The Project construction contractor - preparation of the CESMP and SEMPs The PIU and Construction Supervision Contractor ("CSC") - approval of the CESMP and SEMPs.	Prior to the commencement of construction works.	The CESMP and SEMPs are approved by the PIU and CSC and implemented by the construction contractor.	
1.6	Conduct monthly audits of the Project construction contractor's (and its subcontractors') EHSS operations and performance.	Poor management of contractors' EHSS activities.	EBRD PR1 - Third- Party Risk, PR3 and PR4.	The PIU and CSC.	During the construction stage.	EHSS monthly audit reports and relevant corrective actions. Delivery of corrective actions tracked and documented.	
1.7	Conduct labour audits of the Project construction contractor (and its subcontractors) to assess its compliance to the applied requirements (national and EBRD). The scope of the labour audit shall at least include: - Human Resources ("HR") policies and employees' documentation,	Poor management of contractors' labour activities. Risk of overtime work without payment.	EBRD PR1 - Third- Party Risk, PR2 Wages, Benefits and Conditions of Work, and PR10. RoK Labour Code.	External consultants or the PIU / CSC 15000-20000 EUR (if External consultant is engaged)	Prior to the commencement of construction works and during the construction stage (during the peak of the	Labour audit reports and relevant corrective actions. Delivery of corrective actions tracked and documented.	

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No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirements (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status/ Comments
	 Child and forced labour, Non-discrimination and equal opportunity, including existing practices to prevent and address violence and harassment, <i>inter alia</i> gender-based-violence, Wages, benefits and conditions of work, including workers' accommodation, Grievance mechanisms. 	Risk of penalties by the State labour inspection body.			construction activity).	Workers of the contractors were provided with the relevant employment contracts. Payrolls and working hours were registered and maintained.	
1.8	Monitor the status of this ESAP, Project's Environmental and Social Management Plan ("ESMP") and Stakeholders Engagement Plan ("SEP") implementation. Prepare the Annual Environmental and Social Reports ("AESR") to be submitted to the EBRD.	Improved performance of contractors and PIU EHSS activities. Compliance with the EBRD PRs. Implemented ESMP and ESAP.	EBRD PR1 - Project Monitoring and Reporting, PR10 - Stakeholder Engagement.	External consultants 15000-20000 EUR The PIU.	Annually during the construction stage.	AESR reports are approved by the EBRD.	The results of the audits listed in items 1.6 and 1.7 also shall be outlined in AESR reports.
1.9	Develop a Construction Camp Management Plan ("CCMP") outlining the strategy and principles to be adopted and including a Code of Conduct. Consideration should be given to: - Assess the impacts of proposed arrangements for worker accommodation, either in local communities or in dedicated camps, - Evaluate accommodation options including consultation with local communities and other key stakeholders, - Develop a workers Code of Conduct to govern life in camps.	Ensure proper management of worker accommodation impacts owing to communities and population	EBRD PR1- Environmental and Social Management Plan, EBRD PR4- Community Health and Safety	External consultants 8000-10000 EUR The PIU.	Prior to the commencement of construction works.	The CCMP is approved by the EBRD.	
1.10	Develop and implement a contractors' workforce awareness raising and training program related to the EHSS issues (including COVID-19 pandemic, if relevant) throughout the construction phase.	Ensure qualification and competency of the workforce to be engaged in construction works.	EBRD PR1.	The Project's construction contractor and CSC/PIU (when required).	Prior to the commencement of construction works and regularly during the construction.	Awareness raising and training protocols.	

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No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirements (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status/ Comments
PR2	Labour and Working Conditions						
2.1	Ensure that all PR2 requirements are cascaded down into the Project's contractors and sub-contractors' scope of work through inclusion into tender documentation and agreements.	Proper management of contractors and sub-contractors.	EBRD PR2.	The PIU and Client.	At the tender dossier elaboration stage.	PR2 requirements are reflected in tendering documentation and contractors' agreements.	
2.2	Develop a Worker Accommodation Management Plan ("WAMP"), if required, considering capacity of the Project's construction camp. The WAMP at least shall include:	Ensure the quality and management of workers' accommodation	EBRD PR2 - Worker Accommodation.	The PIU and Client.	Prior to the commencement of construction works.	The WAMP is approved by the EBRD.	
	 Assessment of workers' accommodation needs through estimates of local workforce availability within the Project area, Availability of existing housing, Assessing impacts of workers accommodation on communities, drafting of the relevant mitigation measures Applicable standards and guidance for workers accommodation, Management of workers accommodation, including consultations and grievance mechanisms. 						
2.3	Contractually require all contractors and subcontractors to adopt and implement a Code of Conduct for non-discriminatory employment. The Code of Conduct shall cover the following topics: - Restrictions on making employment decisions on the basis of personal characteristics unrelated to inherent job requirements, - Ensuring equal opportunities and fair treatment in employment relationships,	Ensure prevention and addressing discriminatory employment practices of the Project's contractors/subcontractors.	EBRD PR2.	The Project's construction contractor and subcontractors.	Prior to the commencement of construction works.	Requirements to adopt and implement code of conducts for non- discriminatory employment are reflected in tendering documentation and contractors' agreements.	

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No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirements (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status/ Comments
	 Prevention and addressing any form of gender-based violence, Communication the Code of Conduct to the contractors/sub-contractors employees, including induction trainings, Establishing both formal and confidential discrimination grievance mechanisms, Mechanisms for reporting of Gender Based Violence and Harassment (GBVH) incidents to the Client and the EBRD. 						
PR3	Resource Efficiency and Pollution Preventi	on and Control					
3.1	Elaborate and implement a Waste Management Plan ("WMP") for the Project to include at least the following: - Application of waste management hierarchy approach (prevention, minimization, reuse, recycling, energy recovery, disposal), - Elaboration of waste safe handling procedures for the waste storage, transportation and disposal operations, - Requirements for the waste separate storage and transportation facilities/locations, - List of companies specialized in waste recycling, treatment, disposal domains, - Emergency actions.	Risk of penalties by the State environmental inspection bodies. Proper waste management. Soil contamination.	RoK Environmental Code. EBRD PR3 - Waste.	Internal resources - The Project's construction contractor.	Prior to the commencement of works.	WMP for the construction stage developed and implemented.	
3.2	Ensure the groundwater use for the Project needs pursuant to the conditions of the special water use permit (to be issued by the relevant state body) (see item 1.4).	Resource (water) efficiency and saving.	RoK Water Code. EBRD PR3 - Water.	External resources - The Client / PIU.	During the construction stage.	Groundwater use based on the set permitting conditions.	
3.3	Develop and implement a Spill Prevention and Management Plan ("SPMP") to include as a minimum the following:	Risk of soil contamination. Risk of penalties by the state	EBRD PR3 - Pollution Prevention and Control.	Budget of the construction contractor	Prior to the commencement of works.	The SPMP is approved by the CSC / PIU. Construction site is equipped with the spill	

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No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirements (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status/ Comments
	 Types and locations of spill-kits for oil products and chemicals, Types and locations of secondary containments and trays, Roles and responsibilities of workers engaged in transportation, storage, loading-unloading operations of hazardous materials, Practical drills with workers dealing with oil products and chemicals on the risks of leakages and on how to respond to them. 	environmental inspection body.		External consultants - 4000-5000 EUR The Project's construction contractor.		preventions tools and kits. Workers trained to deal with potential leakages.	
3.4	Prepare and implement a Soil Quality Monitoring Plan ("SQMP") for the Project. This SQMP shall at least include the following: - Identification of sensitive locations where the soil sampling shall be carried out, - Map of sensitive locations, - Applicable regulations and standards, - The elements (Pb, Zn, Cu, Cd, organic substances¹) to be determined in soil samples, - Content of the soil quality assessment report. The results of the May 2021 soil analysis documented in the Project's ESIA study can be used as baseline data.	Risk of soil contamination. Risk of penalties by the State environmental inspection body.	EBRD PR3 - Pollution Prevention and Control.	The SQMP preparation and implementation – the Project's construction contractor. Soil sampling and analyses – an accredited laboratory.	Monthly during the construction stage.	The SQMP is approved by the CSC / PIU. The soil quality assessment reports approved by the CSC / PIU.	As per the Environmental monitoring programme recommended by the Project's ESIA.
3.5	Prepare and implement an Air and Noise Monitoring Plan ("ANMP") for the Project. This ANMP shall at least include the following: - Identification of sensitive locations where the air quality and noise instrumental measurements shall be carried out,	Risk of air pollution. Risk of high noise level. Risk of penalties by the State	EBRD PR3 - Pollution Prevention and Control.	The ANMP preparation and implementation - the Project's construction contractor.	Monthly during the construction stage.	The ANMP is approved by the CSC / PIU. The air quality and noise level assessment reports approved by the CSC / PIU.	As per the Environmental monitoring programme recommended by the Project's ESIA.

¹Suggested by the Consultant

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No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirements (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status/ Comments
	 Map of air quality and noise sensitive locations, Applicable regulations and standards, The elements (dust (PM2.5 and PM10)², SO2, CO, NOx³) to be determined in air ground level, The main sources of air and noise emissions, Content of the air quality and noise assessment report. The results of the air quality and noise measurements conducted in May 2021 by the Consultant within the Project's ESIA study 	environmental inspection body.		Air quality and noise measurements - Accredited laboratory.			
3.6	can be used as baseline data. Undertake assessment of GHG and climate change vulnerability, as a minimum: - Estimate GHG emissions during construction and operation, - Include an options appraisal of measures to avoid or minimize GHG emissions during construction and operation, and - Include an assessment of the vulnerability of the Project to climate change (see item 3.7 below).	Reduce and minimize GHG emissions. Resilience to climate change impacts.	EU EIA Directive and EBRD PR3.	PIU, CSC and contractors and / or external consultants (expertise, as required).	Prior to and during construction (preconstruction and construction).	EIA Supplementary information. Management and mitigation measures to be incorporated into the ESMP to be developed. The project CO ₂ equivalent emissions should be calculated in accordance with the EBRD methodology and should be benchmarked against the thresholds for quantification and reporting. The GHG emissions should be calculated annually and reported in the AESR.	

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²Particulate Matters ³Suggested by the Consultant

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3.7	 Undertake a Climate Change Risk Assessment inclusive of: Detail the baseline climate and future baseline in line with the confirmed project lifespan, Identify Project receptors vulnerable to changes in climate variables and assess the potential effects and changes in climate variables on the receptors, Assess the significance of effects by considering the likelihood that they will occur and the consequence if they occur, and Identify mitigation measures that will be incorporated into the project to reduce effects (see below). 	Resilience to Climate Change impacts.	EU EIA Directive and EBRD PR3.	PIU, CSC and contractors and / or external consultants (expertise, as required).	Prior to and during construction (preconstruction and construction).	EIA Supplementary information. Design changes if required. Management and mitigation measures to be incorporated into the ESMP to be developed.	
	Incorporate in the final design the following recommendations to increase the climate resilience of the road design:						
	 Incorporate temporary / permanent snow (blizzard) barriers, Review and upgrade road surface materials to minimize frost penetration, e.g. using insulation in road prisms (used to monitor settlement and deformation of road surfaces), increasing road surface thickness and using high strength, self-compacting concrete, Use robust materials for road surface that are erosion resistant and resilient to freeze-thaw effects and salting - such as concrete (chemically stabilized base materials of stabilized cement), polymer-modified bitumen (more resistant to rutting), 						

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No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirements (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	
	 Prioritize the use of robust materials such as heat resistant/ultra-thin, fibre reinforced concrete/stable bitumen/polymer-modified bitumen to withstand heat in summer and become more resistant to rutting; and Ensure the use of robust pavement marking materials e.g. thermoplastic road markings, which are suitable for use in regions that are prone to high temperatures. 						
PR4	Health, Safety and Security						
4.1	Elaborate and implement a Traffic Management Plan ("TMP") to maintain operation of construction equipment and trucks without hampering flow of vehicles and safe pedestrian movement.	Risk of road accidents, traffic jams.	EBRD PR4 - Traffic and Road Safety.	The TMP preparation and implementation - Project's construction contractor. Approval - CSC / PIU and road police department.	Prior to the commencement of works.	The TMP is approved by the CSC / PIU and road police department.	
4.2	Develop and implement an Occupational Health and Safety Management Plan ("OHSMP") to include the relevant national requirements and principles of good international practice. The OHSMP shall be concentrated on: - Identification of key risks and hazards, - Allocation of OHS roles and responsibilities among the managers, engineers and technicians,	Raised OHS awareness of workers. Minimized risk of injuries, fatalities, fire cases and other incidents. Safer working environment and conditions.	EBRD PR4 - General and Specific Requirements for Health and Safety Management.	Preparation and implementation during the construction stage – the Project's construction contractor.	Prior to the commencement of works and during the construction stage.	The OHSMP is approved by the CSC / PIU. The information related to the construction contractor's OHS performance, inter alia, the occurred accidents are annually reported to EBRD through AESRs.	
	 Briefing, training and knowledge examination, OHS procedures and regulations, Medical examination, Emergency response, 	Safe work implementation.		Updating for operations and implementation during the operation stage (road	During the road maintenance works.	The OHS issues during the bypass maintenance works are managed in line with	It is suggested to the Client to update the construction contractor's OHSMP based on

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No.	Action	Environmental & Social Risks (Liability/Benefits)	Requirements (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria for Successful Implementation	Status/ Comments
	 Management of hazardous materials, chemicals and oil / fuel, Fire and electrical safety, Implementation of dangerous works, Personal Protective Equipment (PPE), Supervision of sub-contractors, Attestation / certification of workplaces, Accident investigation, etc. 			maintenance works) - the Client.		the Client's operations OHSMP.	the lessons learned from the bypass construction and its own practices.
	Ensure that the documented information (procedures and records) associated with the implementation and operation of the OHSMP are maintained.						
4.3	Upon appointment of the Project's construction contractor review its approach to the site security. Conduct due diligence investigation for all security personnel of the construction contractor to make sure they have appropriate licensing, experience and training. A Security Management Plan ("SMP") and a Code of Conduct for workers should be developed.	Risk of conflict between the security of the construction camp and farmers, attendees of the cemetery, etc.	EBRD PR4 - Security and best practices.	The PIU / CSC - to conduct due diligence, The Project's construction contractor - to elaborate SMP and Code of Conduct.	Prior to the commencement of construction works.	Security due diligence is conducted. A SMP and a Code of Conduct is developed.	
4.4	Conduct a GBVH assessment to Project affected persons and communities. Elaborate specific measures to prevent and address gender based violence, including provision of confidential channels for reporting GBV incidents. Ensure GBV prevention and addressing measures are cascaded down into the Project's contractors and sub-contractors' scope of work through inclusion into tender documentation and agreements.	Risks of GBV incidents in the Project adjacent communities.	EBRD PR4, Gender based violence.	External consultants 5000-7000 EUR The PIU The Project's contractor.	At the tender dossier elaboration stage.	GBV risks related to project affected persons and communities are assessed, the respective mitigation measures are elaborated GBV risks are properly cascaded down into the tender dossiers and contractors' agreements.	

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	Contractually require all contractors and subcontractors to disclose incidents of GBVH involving their employees.						
4.5	Elaborate and implement COVID-19 Prevention and Management Action Plan (if required) for the Project. Perfom risk assessment of workplaces to be engaged in and/or to be created during Project implementation in respect of COVID-19 exposure pursuant to the WHO guidance ⁴ .	Risk of COVID-19 pandemic.	EBRD PR4 - Exposure to Disease and best practices.	Internal resources - The Project's construction contractor. Internal resources - The Client.	Prior to the commencement of construction works and during the construction stage. During the bypass maintenance works.	COVID-19 Prevention and Management Action Plan is approved and in force.	The EBRD Briefing Note on COVID-19 workplace risk assessment can be used as an alternative option to conduct a risk assessment of the Project's workplaces.
PR5	Land Acquisition, Restrictions on Land Use	and Involuntary Rese	ettlement	l		l	
5.1	Elaborate and implement a Land Acquisition and Resettlement Plan ("LARP") as per the agreed Land Acquisition and Resettlement Framework ("LARF") and EBRD PR5.	Compliance with PR5.	RoK Land Legislation and EBRD PR5.	External consultants - The Client.	Prior to the commencement of construction works.	The LARP approved by the EBRD.	
PR6	Biodiversity Conservation and Sustainable	Management of Living	Natural Resources			'	
6.1	Develop a Site Recultivation and Vegetation Management Plan (consider the saxaul (<i>Haloxylon</i>) as a main plant to be used for the recovery of disturbed lands) following the provisions of the national regulations ⁵ and EBRD PR6.	Partly recovery of the aboriginal (site specific) vegetation.	EBRD PR6 and best practices.	External consultants 4000-8000 EUR The Client / PIU	Prior to the commencement of construction works.	The Site Recultivation and Vegetation Management Plan is developed and agreed with the relevant state body and EBRD.	
6.2	Develop a Biodiversity Action Plan ("BAP") which has to envisage capturing the tortoises (Agrionemys horsfieldi) and boas (Eryx tataricus) and relocating them to similar	Reduced impacts on biodiversity.	EBRD PR6 and best practices.	External resources 10000-15000 EUR The Client.	During the preconstruction stage.	The BAP is developed and approved by EBRD.	The BAP is to be agreed with EBRD before being implemented.

⁴https://www.who.int/publications/i/item/WHO-2019-nCoV-Adjusting PH measures-Workplaces-2020.1

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⁵Follow the provisions of Decision No. 121 of the Kyzylorda regional maslikhat dated 16.05.2017 "On approval of the rules for the maintenance and protection of green zones, improvement of the territories of cities and settlements of the Kyzylorda region". https://adilet.zan.kz/rus/docs/V17L0005871 and Order No. 346 of the RoK Minister of the national economy dated 17.04.2015 "On approval of Guidelines for the preparation of design documents for the recultivation of the disturbed lands". https://adilet.zan.kz/rus/docs/V1500011256

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	biotopes in the surrounding territories. The relocation has to be done in April-May when the animals get out of hibernation but before beginning their coupling and nesting.						
6.3	Perform monitoring of the fauna species in the areas along the bypass as well as on the recultivated lands (294.34 ha) temporarily allocated for the Project needs (preferably in spring season). If risks to or deaths of animals are detected, explore the reasons and take preventive actions (e.g., additional fencing or installation of warning signs).	Risk of animals' deaths. Reduced impacts on biodiversity.	EBRD PR6 and best practices.	Internal resources - The Client.	Within the five years after the commissioning of the bypass.	Annual monitoring reports. Preventive measures are undertaken (if required).	
6.4	Conduct consultations with the representatives of the Committee of Forestry and Wildlife under the RoK Ministry of Ecology, Geology and Natural Resources and Association for the Conservation of Biodiversity of Kazakhstan ("ACBK") relating to the potential presence of saiga tatarica within the Project area and vicinities. Implement actions to allow the saiga to leave the Project site before the start of construction works if it is confirmed that saiga can habitat there. The recommended actions as a minimum must include: • furnish the A17 road with saiga crossing passage (50 m in length) with an embankment slope ratio of 1:10, • limit the vehicles' speed up to 50 km/h along the A17 road at least 100 m before and after the saiga crossing passage area, • equip the A17 road with "saiga appearance" warning signs as well as with speed limitation signs near the saiga passage in the following order: 70 km -	Risk of animals' deaths. Reduced impacts on biodiversity.	EBRD PR6 and best practices.	Internal resources - The Client.	During the preconstruction stage.	Preventive measures are undertaken (if required).	As a result of the fauna study it was concluded that the saiga tatarica has not found within the Project site and vicinities, and the area cannot be a saiga habitat. These conclusions were also discussed and agreed with the representative of the ACBK.

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	50 km - 70 km (to avoid sharp breaking) on both sides of the road.									
PR8	Cultural Heritage									
8.1	Elaborate a Change Find Procedure ("CFP") as per EBRD PR8 and national regulations and train the staff to be engaged in excavation and earthworks in applying the CFP.	Risk of damage of historical and cultural objects.	National legislation and EBRD PR8.	The Project's construction contractor	Prior to the commencement of construction works.	CFR is elaborated and the relevant workers of construction contractor are trained				
8.2	Maintain a 50 m buffer zone from the ethnographic period cemetery boundaries (Object 8 in the ESIA). Any construction work should be prohibited within the buffer zone. Install the protective fence along the perimeter of the ethnographic period cemetery.	Risk of damage of historical and cultural objects.	National legislation and EBRD PR8.	The Project's construction contractor	Before the start of construction works.	The buffer zone around the ethnographic period cemetery is defined and the cemetery area is fenced.				
PR10	Information Disclosure and Stakeholder Engagement									
10.1	Implement the Project's SEP and grievance mechanism to ensure a continuous and systematic stakeholder engagement throughout the Project life cycle. Ensure that vulnerable people are identified and consulted throughout the Project. Record all stakeholder activities and logging of grievances to inform the annual monitoring report. The SEP should be reviewed and if necessary updated (on quarterly basis) or when changes occur in the Project.		EBRD PR10 and PR1.	The PIU, CSC, authorities engaged in accordance with Grievance Committee.	Prior to and during the construction stage.	Annual report on stakeholder engagement within the monitoring report to EBRD.				

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