

Abbreviations:

NEGK: National Electricity Grid of Kyrgyzstan

EBRD: European Bank for Reconstruction and Development

E&S: Environmental & Social

H&S: Health and Safety

HSEMP: Health, Safety and Environment Management Plan

ESAP: Environmental and Social Action Plan

ESMP: Environmental and Social Management Plan

ESMS: Environmental & Social Management System

OHS: Occupational Health and Safety

PR: Performance Requirements (as defined by EBRD's Environmental and Social Policy)

SEP: Stakeholder Engagement Plan

Project implementation arrangements:

The planned implementation arrangements are recalled hereafter for the ease of the ESAP reader:

- NEGK is the implementing entity of the project (“the Company” in the ESAP).
- NEGK will not hire a Contractor, the project will be implemented using the companies’ internal staff.
- The Electricity supply will be operated by NEGK in the future.

No.	Action	Risk / benefit	Source for requirement	Responsible party	Timetable	Target and Key performance indicators
PR1	Assessment and Management of Environmental and Social Impacts and Issues					
1.1	<p>NEGK E&S manager</p> <p>Assign within the Company one person (the "E&S Manager") to be responsible for the implementation of the ESAP and of the Environmental, Social, Health and Safety requirements of the Kyrgyzstan legislation full-time during the construction phase and the first year of operation and part-time during the operation phase. He/she must be based in Kyrgyzstan and should be experienced or trained to deliver the project meeting IFI standards. He/she shall directly report on E&S matters to the person who has overall responsibility for the Project within the Company.</p>	Assignment of responsibilities	EBRD Loan requirement	NEGK PIU	For the entire duration of the financing agreement	Position assigned and maintained
1.2	<p>Project E&S officer</p> <p>Assign within the project one person (the "E&S Officer") for each region to be responsible for the implementation of day-to-day E&S performance during installation period.</p>	Assignment of responsibilities	E&S requirements implementations	NEGK E&S manager	For the entire duration of the financing agreement	Position assigned and maintained
1.3	<p>Project H&S manager</p> <p>Assign within the project region one H&S manager and H&S officers per 50 people crew, on full-time basis.</p>	Assignment of responsibilities	E&S requirements implementations	NEGK H&S Manager	For the entire duration of the financing agreement	Position assigned and maintained
1.4	<p>E&S Reporting to EBRD</p> <p>Report to EBRD on:</p> <ul style="list-style-type: none"> • Implementation status of the ESAP actions • Environmental and social performance of the project activities 	Monitoring & reporting	EBRD Loan requirement	NEGK PIU	<p>Every six months during construction</p> <p>Every year after construction, until the end of the financing agreement</p>	Reports submitted to EBRD

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1.5	<p>E&S management systems (ESMS)</p> <p>Establish an ESMS for the Project for the implementation of the pre-construction and construction activities.</p>	<p>EHS procedures to be developed/ Continuous improvement of EHS performance</p>	<p>Good International Practices EBRD PR1</p>	<p>NEGK E&S manager</p>	<p>Before the beginning of construction activities</p>	<p>ESMS prepared, put in place and operated</p>
1.6	<p>ESMPs</p> <p>Develop and implement ESMPs for the implementation of the operation activities, including an Occupational Health and Safety plan meeting Kyrgyzstan legislation and PR4 requirements.</p>	<p>E&S management system</p>	<p>EBRD Pr1 GIP</p>	<p>NEGK E&S manager with support from H&S manager</p>	<p>ESMPs in place before the construction and updated before operation activities.</p>	<p>ESMPs established and run by the E&S manager</p>

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1.7	<p>Integration of E&S requirements in the Project</p> <p>Add the following activities in the Project. Ensure their effective preparation and implementation through the services and works procured for the Project:</p> <ul style="list-style-type: none"> • Include in the scope of the detailed technical studies a social survey in the project regions, aimed at identifying the lessons learned from previous electricity supply digitalization projects, from a social perspective. Integrate these lessons learned in the Project. • Introduce billing and payment methods that can be personalized and facilitate access to bills and payments for all kinds of customers (including direct debit, billing/payment by phone, and a mix of both web based and non-web based solutions) • Rehabilitation of technical buildings: see actions 3.1 • Oil polluted wastes elimination: see action 3.2 • Supply the Project with electrical and electronic equipment that meet the requirements of Directive 2011/65/EU, so that they can later be recycled. 	Project E&S optimization	<p>Good International Practices</p> <p>EBRD PR1</p>	NEGK PIU	During the Project preparation and construction phases	E&S requirements included in the relevant Project documentation, in order to ensure their effective implementation
1.8	<p>Permits and authorizations:</p> <p>Obtain and maintain all necessary environmental, social and health& safety permits and authorizations required for the Project.</p>	Compliance with regulatory requirements	Kyrgyzstan law	NEGK PIU	As required by national regulations.	Permits and authorizations obtained and maintained.

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1.9	<p>Transition period for new billing/payment method</p> <p>During one year after installation of smart meters, contact customers who have not paid their bill within the set 5 days limit, and establish whether the customer is:</p> <ul style="list-style-type: none"> absent with low consumption: in this case wait until next month – do not disconnect. vulnerable (poor or unable to manage payment due to age or disability or other legitimate reason): provide guidance support to the identified vulnerable customers to visit and register in the municipal entities that provide social welfare support. Others: give a warning and 5 additional days to pay before disconnection. 	Impacts on vulnerable consumers – complaints risks minimization.	Good International Practices EBRD PR1	NEGK PIU	During one year after installation of smart meters	Number of automatic disconnections avoided.
PR2	Labour and Working Conditions					
2.1	<p>Human Resources Policy</p> <p>Prepare and appropriately communicate to Project employees an HR policy meeting Kyrgyzstan legislation and EBRD PR2 requirements. The HR policy will cover and ensure compliance with the relevant requirements for the following: (i) working relationships; (ii) workers' rights and obligations; (iii) wages, benefits and conditions of work; (iv) non-discrimination and equal opportunity, gender-based violence and harassment; (v) prevention of child labour and forced labour; (vi) freedom of association and right to collective bargaining; (vii) workers accommodation (if applicable). It should also include a workers grievance mechanism.</p>	HR Policy	EBRD PR2 GIP	NEGK E&S manager and HR manager with support of PIU	During construction and operation period	HR Policy attached to workers contracts

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2.2	<p>Equal opportunities:</p> <p>Implement actions aimed at improving the attractiveness of the NEGK for female workers:</p> <ul style="list-style-type: none"> • Provide a work environment suitable for men and women (separate toilets and change rooms) • Specify on job announcement that positions are open to both men and women <p>Report the men/ women ratio in reporting to EBRD</p>	Equal Opportunities	<p>Good International Practices</p> <p>EBRD Strategy for the Promotion of Gender Equality</p>	NEGK PIU	During the Project preparation and construction phases	<p>Work environment suitable for men and women.</p> <p>Equal opportunities provided by NEGK</p>
2.3	<p>Overtime Work:</p> <ul style="list-style-type: none"> • Capacity building and awareness raising on overtime and forced labour risks should be provided to company management • Overtime work should not exceed national working limits and should be compensated according to the Labour Code of the Kyrgyzstan Republic. 	Risk of Forced Labour	<p>EBRD PR2</p> <p>Labour Code of Kyrgyzstan</p>	NEGK PIU	During construction and operation	<p>Capacity building trainings carried out for NEGK management</p> <p>Workers compensated for overtime work</p>
2.4	<p>Job Rotation:</p> <ul style="list-style-type: none"> • NEGK should seek consent from the employees before rotating the workers to different regions for project implementation. • NEGK should inform the employees one month prior if the scope of work will be changed and should seek consent before doing so. 	Risk of Forced Labour	<p>EBRD PR2</p> <p>Labour Code of Kyrgyzstan</p>	NEGK PIU	During construction and operation	Get written consent in case of change in workplace or scope of work

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2.5	<p>Working Conditions:</p> <p>Ensure that all workers are provided with (i) water and meals, (ii) closet, toilets and showers, (iii) first aid points, (iv) kitchen in the branch offices, (v) portable toilets in case the site is far away from the branch office, (vi) lunch boxes on the site, in case branch office is far away, (vii) transportation of the workers from the branch offices to the site and back.</p>	Worker's hygiene and safety	EBRD PR2 Labour Code of Kyrgyzstan	NEGK PIU	During construction and operation	Working conditions improved accordingly
2.6	<p>Security guards</p> <p>Avoid isolated security guard positions. Always ensure that the security guards work in pairs during construction and operation for safety reasons.</p>	On-site security	EBRD PR2	NEGK E&S manager	During construction and operation	<p>Unarmed security guards recruited for regular security services.</p> <p>Security guards trained at recruitment and annually</p>
2.7	<p>Grievance mechanism</p> <p>Develop and adopt a grievance mechanism, meeting PR2 requirements, for all workforce on site.</p>	Management of potential workers grievances	EBRD PR2 GIP	NEGK E&S manager	During construction and operation period	Grievance mechanism prepared and implemented by NEGK E&S manager
2.8	<p>External Labour Audit</p> <p>Carry out External Labour Audit, conducting anonymous employee surveys using digital methods in order to carry out transparent and realistic labour audit.</p>	Risk of Forced Labour	EBRD PR2 EBRD Loan Requirement	External Auditor with the help of NEGK E&S manager	During construction	External Labour Audit carried out

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PR3	Resource Efficiency and Pollution Prevention and Control					
3.1	<p>Rehabilitation of technical buildings (workshops, storages):</p> <p>Refurbish or rebuild the existing technical buildings: remove and dispose through an authorized company the polluted soil, provide a clean and flat concrete surface, provide ventilation meeting national and international standards, provide drip trays in a number and size fitting the activities of the NEGK branch offices in the project regions.</p>	Pollution control	<p>Kyrgyzstan legislation</p> <p>EBRD PR3 and PR4</p>	NEGK PIU	<p>Integration in the Project scope: during detailed studies</p> <p>Implementation: during construction</p>	<p>Refurbishment prepared and implemented.</p> <p>Safe and clean workspace provided to workers.</p>
3.2	<p>Oil polluted wastes elimination:</p> <p>Eliminate oil polluted wastes through authorized companies.</p> <p>Provide an oil polluted waste management plan for the NEGK.</p>	Pollution prevention	<p>Kyrgyzstan legislation</p> <p>EBRD PR3</p>	NEGK E&S manager	<p>Oil polluted wastes elimination: during construction</p> <p>Oil polluted waste management plan implementation during operation</p>	<p>Oil polluted wastes eliminated.</p> <p>Plan prepared and implemented.</p>
3.3	<p>Waste Management Plan</p> <p>Prepare and implement a waste management plan, distinguishing (i) domestic waste, (ii) industrial waste, (iii) wastewater and (iv) hazardous waste.</p>	Waste Management	<p>Kyrgyzstan Law</p> <p>EBRD PR3</p>	NEGK E&S manager	During construction and operation	Waste Management Plan prepared and implemented
3.4	<p>Waste management</p> <p>Identify authorized sites for the disposal of solid waste generated across construction. Organize and monitor solid waste collection, sorting and disposal to these sites during construction and operation.</p>	Waste Management	<p>Kyrgyzstan Law</p> <p>EBRD PR3</p>	NEGK E&S manager	During construction and operation activities	Waste segregated and disposed

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3.5	Asbestos audit Identify asbestos containing materials in NEGK branch office premises. Prepare and implement an asbestos management plan aimed at eliminating the exposure of workers.	Pollution prevention	EBRD PR3	NEGK PIU	Audit and Plan preparation: during detailed studies. Plan implementation: during construction.	Audit undertaken, plan prepared and implemented.
3.6	Pesticides ban Ban the use of pesticides throughout construction and operation activities.	Pollution prevention	EBRD PR3	NEGK PIU	During the Project preparation and construction phases	No use of pesticides / herbicides
PR4	Health and Safety					
4.1	OHS management system: As part of the ESMS (see action 1.5) and with the assistance of a specialized consultant, prepare and implement an OHS Management System (OHSMS). The OHSMS should be compatible with NEGK procedures, meet good international practices, and be compliant with the national legislation and with EBRD PR4.	OHS procedures to be developed/ Continuous improvement of OHS performance	Kyrgyzstan Legislation EBRD PR4	NEGK H&S manager	Before construction Integration in ESMS when ESMS is ready.	OHSMS prepared, put in place and operated in all project regions
4.2	Personal protection equipment: Plan, budget and procure the acquisition and renewal of personal protection equipment and work wear, taking into account workers size and feedback. Mark (stickers) PPE requirements for all permanent workplaces.	Availability of safety equipment.	EBRD PR4	NEGK H&S manager	As recommended in OHSMS (action 4.1)	PPE available and maintained

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4.3	<p>HSE management:</p> <p>Project H&S manager to prepare a detailed Health & Safety and Environmental Management Plan (HSEMP) and to be approved by NEGK H&S Manager. The HSEMP should include but not be limited to: an OHS risks review and planned mitigation measures, traffic management, waste management procedures and compensation procedures for damage to third party properties.</p> <p>NEGK H&S Department to monitor the effective implementation of the HSEMP.</p>	HSE Management	Best practice EBRD PR4	Project H&S manager	Before construction	HSEMP developed and implemented
4.4	<p>Workplace condition for guards at substations:</p> <p>Provide a suitable building (insulated from extreme weather) for guards at all branch office areas, and access to basic and functional utilities (water, toilets).</p>	Worker's health & safety	Best practice EBRD PR4	NEGK H&S manager	During construction and operation	Suitable workplace provided at the branch offices
4.5	<p>Public safety – transformers fencing:</p> <p>Fence all transformers service areas that are not protected from public access and put "electric shock risk" signs.</p>	Community health & safety	Best practice EBRD PR4	NEGK H&S manager	During construction	All transformer fenced.
4.6	<p>Public safety records and corrective actions:</p> <p>NEGK to keep a record of accidents involving members of the public and related to the companies' activities/infrastructures. Analyse severe accidents / fatalities and implement corrective actions to avoid similar accidents.</p>	Community health & safety	Best practice EBRD PR4	Project H&S manager	For the entire Project duration	Safety record held. Accidents analysed and corrective actions implemented.
PR8	Cultural Heritage					

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8.1	Chance finds: Prepare and implement a chance find procedures, including a training of workers involved in excavations and earthworks regarding the type of chance find likely in the region.	Cultural heritage protection	Kyrgyzstan Legislation EBRD PR8	NEGK E&S manager	Procedure prepared before works start. Workers trained during their induction training.	Procedure prepared. Workers trained and training records provided.
PR10	Stakeholder Engagement					
10.1	Stakeholder Engagement Plan (SEP): Based on the draft provided by EBRD, finalize the stakeholder engagement plan and implement it.	Stakeholder engagement	EBRD PR10	NEGK E&S manager	During the entire project	Stakeholder engagement plan developed, implemented and regularly updated.
10.2	Registration of Electricity Consumers: Liaise with the Municipalities and the households on accelerating the process of land plot registrations to enroll the house owners as electricity consumers.	Corporate Social Responsibility	GIP	NEGK PIU	During the entire project	Land plots registered and households enrolled as electricity consumers
10.3	Grievance Mechanism: Put in force Grievance Mechanism for external stakeholders as described in SEP.	Management of potential communities' grievances	EBRD PR10	NEGK E&S manager	Prior to construction	Internal and external stakeholders are informed on the GM availability