



# ESAP

Final

12 September 2017





Mott MacDonald  
Victory House  
Trafalgar Place  
Brighton BN1 4FY  
United Kingdom

T +44 (0)1273 365000  
F +44 (0)1273 365100  
mottmac.com

European Bank for  
Reconstruction and  
Development  
1 Exchange Square,  
London EC2A 2JN

# ESAP

## Final

12 September 2017



# Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	08 August 2017	N Court J Yasenko	T Streater G Clamp	G Clamp	Final draft
B	12 August 2017	N Court J Yasenko	T Streater G Clamp	G Clamp	Final incorporating EBRD and Alcazar comments

**Document reference:** 387353 | 1 | A

**Information class:** Standard

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

# Contents

1	Environmental and social action plan	2
---	--------------------------------------	---

# 1 Environmental and social action plan

An environmental social action plan ESAP has been developed for the project and includes the following:

- Actions required for achieving compliance with national requirements and the EBRD ESP (2014) and PRs both at the company and the project level
- Management arrangements and procedures required for improvement management capabilities and ESHS performance of the company and the Project
- Monitoring and control provisions for promoting project ESHS compliance at contractors and through the supply chain.

Description of the identified impacts and risks, mitigation measures, management procedures and monitoring requirements shall be used as a basis for the development of the company ESMP and H&S management plan at a later stage of the project as part of management systems to be introduced in the company (as described in the ESAP below)

**Table 1: ESAP**

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
PR1	Assessment and Management of Environmental and Social Impacts and Issues						
1.1	Develop and implement a project specific ESMS in line with the sponsor's existing internal guidance/framework documents (i.e. Component 0-7)	Optimisation of environmental and social management through a formalised system. Provide resources for training and monitoring of emissions	EBRD PR1 Best practice	Project company and EPC contractor resources Responsibility: EPC contractor to develop a project specific ESMS and align it to the project company's ESMS; project company to review and approve EPC contractor ESMS	Prior to construction and first disbursement	Develop and implement a robust ESMS Annual ESHS Report to the Bank	Open
1.2	Review and approve EPC contractor ESMS	Ensure effective ESMS developed to manage risks and impacts throughout the project lifecycle	EBRD PR1 Best practice	Project company Responsibility: project company ES manager	Prior to construction and first disbursement	Review and approve ESMS	Open
1.3	Implement detailed Project ESMP in line with the framework ESMP and its internal guidance/framework documents ESMP should encompass all sub plans referred in ESIA or in this assessment (for construction and operation), as well as outline of issues to be addressed within each sub plan and responsibilities. Clear templates for regular monitoring and	Optimisation of environmental and social management on site through formalised system Labour unrest Community unrest Company reputational damage	EBRD PR1 Best practice	EPC contractor, project company Responsibility: EPC contractor to implement monitoring plan, project company QHES manager to oversee implementation	Prior to construction and first disbursement	ESMP	Open



No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
	reporting of ESHS performance and KPIs is required						
1.4	Develop Construction ESMP and sub plans	Optimisation of environmental and social management through formalised system Labour unrest. Community unrest. Company reputational damage.	EBRD PR1	EPC contractor Responsibility: EPC contractor ES manager	Prior to start of construction	Completed CESMP and development of all sub plans identified	Open
1.5	Update project organogram, roles and responsibilities and ensure consistency with EPC contractor	Ensure effective project ES oversight	EBRD PR1	Project company, EPC contractor Responsibility: EPC contractor to finalise organogram, roles and responsibilities; Project company QHES manager to sign off organogram	Prior to financial close	Updated organogram	Open
1.6	Develop and implement supply chain audit and monitoring procedure on EHSS matters Include supply chain monitoring requirement in the EPC contract.	Avoid accidents related to occupational health and safety, prevent pollution and child and forced labour, company reputational damage	EBRD PR1, 2 Voluntary and best practice	Project company and EPC contractor resources Responsibility: Project company HR manager to include relevant clauses in contract; EPC contractor to develop and implement supply chain audit procedure and monitoring plan.	Prior to appointment of suppliers Prior to construction and first disbursement	Approved supply chain audit and monitoring procedure Production of monitoring reports to Lender through the annual E&S report Inclusion of clause in signed EPC Contract	Open
1.7	Implement environmental and social monitoring plan (or include monitoring requirements as part of the ESMP)	Optimisation of environmental and social management through formalised system Labour unrest	EBRD PR1	Project company and EPC contractor resources Responsibility: EPC contractor to implement monitoring plan; Project company	Prior to construction and first disbursement	Standalone environmental and social monitoring plan; or requirements included in the ESMP and reflected in sub plans	Open

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
		Community unrest Company reputational damage.		QHSE manager to oversee implementation			
1.8	Include in EPC contract requirements for EPC contractor and subcontractors to comply with all applicable national ESHS and labour legislation and EBRD's PRs, as well as corporate ESHS guidance.	Ensure compliance with all applicable national, corporate and international requirements: Labour unrest Community unrest Company reputational damage	Jordanian national ESHS and labour laws EBRD PRs Project company's corporate guidance on ESHS and HR	Project company and EPC contractor resources Responsibility: Project company QHSE manager, HR manager, EPC contractor	Prior to financial close	EPC Contract	Open
1.9	Undertake preliminary environmental and social assessment of transmission line	Ensure risks and impacts associated with the development of the transmission line are understood and mitigated	Jordanian national ESHS and labour laws EBRD PRs	Project company Responsibility: project company	Prior to financial close	Environmental and social assessment	Open
PR2	Labour and Working Conditions						
2.1	Develop project specific HR policy based on project company's draft HR and implemented in compliance with PR2. Emphasis should be given to commitments: to ILO core labour standards, implementation of an effective grievance mechanism and promoting women's opportunities to benefit from the Project. Applicable to all workers on Project.	Labour unrest Child and forced labour, company reputational damage, women's empowerment opportunities	Jordanian labour laws ILO conventions to which Jordan is signatory EBRD PR2 Voluntary and best practice	Project company resources: human resource manager Responsibility: EPC contractor to develop and implement HR policy and undertake periodic monitoring to ensure subcontractors' and main suppliers' compliance; Project company HR manager, to approve HR policy and oversee compliance	Prior to financial close	HR policy, translated into Arabic. Compliance requirements included in EPC contract Disseminate to all workers (direct and contracted)	Open
2.2	Provide contracts and	Labour unrest,	Jordanian labour laws	EPC contractor, project	Prior to	Signed employment	Open

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
	HR policy to existing employees, including information on the duration of their employment contracts.	company reputational damage	ILO conventions to which Jordan is signatory EBRD PR2 Voluntary and best practice	company resources Responsibility: Project company and EPC contractor human resource managers	financial close	contracts Evidence of disclosed HR Policy	
2.3	Develop and implement a workers' grievance mechanism	Labour unrest, company reputational damage	EBRD PR2 Voluntary and best practice	EPC contractor resources Responsibility: EPC human resource manager	Prior to construction	Developed and disclosed grievance mechanisms, in documentations, noticeboards and through tool-box talks. Maintained worker grievance logs Grievance statistics to be included in monitoring reports	Open
2.4	Provide and implement a contractor monitoring plan to identify and address labour rights non-compliances and risks	Labour unrest, company reputational damage	Jordanian labour laws ILO conventions to which Jordan is signatory EBRD PR2 Voluntary and best practice	Project company and EPC Contractor resources Responsibility: Project company HR manager, EPC contractor	Prior to first disbursement Throughout construction Throughout construction	Contractor monitoring plan Contractor monitoring results in monthly construction monitoring reports Monitoring reports to Lender	Open
2.5	Conduct risk assessment of core supply chain regarding working conditions, environmental protection and child and enforced labour in accordance with PR2	Labour unrest, company reputational damage	Jordanian labour laws ILO conventions to which Jordan is signatory EBRD PR2 Voluntary and best practice	Project company and EPC contractor resources Responsibility: EPC contractor to develop and implement supply chain audit and monitoring procedure. Project company HR and QHSE managers to oversee compliance	Prior to construction Prior to operations Prior to whenever a new entity is considered for the supply chain.	Supply chain risk assessment report	Open
2.6	Develop and implement site security	Community unrest, reputational damage,	EBRD PR2 Best practice	Project company resources	Prior to start of construction	Site security management plan	Open

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
	management plan in accordance with GIIP. Including a commitment to meet requirements of the Voluntary Principles on Security and Human Rights	community health and safety risks		EPC contractor resources Responsibility: EPC contractor to develop and implement site security plan; Project company human resource manager to oversee compliance		Zero incidences of grievances related to human rights abuses by security providers	
2.7	Training for security guards in use of force and vetting for past offences  Develop appropriate due diligence questionnaire for site security for review	Community unrest, reputational damage, community health and safety risks	EBRD PR2 Best practice	Project company resources EPC contractor Responsibility: EPC contractor to undertake due diligence questionnaire and to make sure that all security guard have received appropriate training prior to commencing work on site; Project company human resource manager to review and approve questionnaire and oversee compliance	Prior to start of construction	Training undertaken and security guards vetted (records available)  Completed due diligence questionnaire regarding site security  Zero incidences of grievances related to human rights abuses by security providers	Open
2.8	Conduct skills survey in the three closest communities. Set goals for and encourage contractors to hire local workers, with preference for those who may be directly affected by noise, shadow flicker, traffic, or other project activities.	Community unrest, reputational damage, community health and safety risks	EBRD PR2 Best practice	Project company resources EPC contractor Responsibility: Project company human resource manager, CLO, EPC contractor	Establish goals prior to engagement of contractors. Complete skills survey prior to start of construction. Implement local recruitment procedure (as set out in the project's community	Project company revised the project's community integration plan to incorporate these actions Completed skills survey Report on workforce statistics, including proportion of local workforce. Report results of social	

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
					integration plan – to be developed) prior to construction and throughout life time of project (when recruitment is undertaken)	investment program, including for training, education, and other investments that can benefit the project as well as social welfare	
PR3	Resource Efficiency and Pollution Prevention and Control						
3.1	Develop traffic management plan	Community health and safety risks, company reputational damage	EBRD PR3 EBRD PR4 Best practice	EPC contractor, project company Responsibility: EPC contractor ES manager to develop the plan; project company to approve final document	Prior to construction and first disbursement.	Completed traffic management plan	Open
3.2	Develop waste management plan to include: waste water management procedures hazardous substances and materials management	Worker and community health and safety risks, soils and water resource protection, company reputational damage	EBRD PR3	Project company, EPC contractor Responsibility: EPC contractor ES manager to develop the plan; project company to approve the final document	Prior to construction first disbursement.	Completed waste management plan	Open
3.3	Confirm water consumption requirements and permit requirements for water use	Water resource protection	EBRD PR3	EPC contractor Responsibility: EPC contractor ES manager	Prior to first disbursement.	Revised ESIA and permit from Shobak Water Directorate (if required)	Open
PR4	Health and Safety						
4.1	Develop and implement construction OHS plan including measures to protect workers from air pollution and noise and	Labour unrest, health issues and grievances	EBRD PR4 International OHS standards	Project company resources, EPC contractor resources Responsibility: EPC contractor to develop and implement OHS	Prior to start of construction	OHS plan, approved by the Project company and Lender. Design specification to limit air pollutant and noise levels.	Open

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
	incorporating sufficient level of health care facilities and health care awareness programme for workers			plan; project company QHSE manager to approve plan and oversee compliance			
4.2	Develop community health, safety and security management plan that is linked to the traffic management plan and includes measures to protect communities' exposure to diseases and risks from natural hazards	Community health and safety risks, company reputational damage	EBRD PR4 Best practice	Project company resources, EPC contractor resources Responsibility: EPC contractor to develop and implement community health, safety and security plan; project company QHSE manager to approve plan and oversee compliance	Prior to start of construction	Community health, safety and security management plan, to be provided to Lenders for review once developed	Open
4.3	Develop and implement worker's code of conduct which includes rules governing interactions with local communities	Community health and safety risks, community unrest, company reputational damage	Best practice	Project company resources, EPC contractor resources Responsibility: EPC contractor to develop and implement worker' code of conduct, disclose to local communities, and monitor subcontractors' compliance with code; project company QHSE manager to approve Code and oversee compliance	Prior to construction	Worker's code of conduct developed and disclosed to workers and communities	Open
4.4	Include in ESMP the requirement for, and then develop and implement, a project-specific emergency preparedness and response plan (EPRP). Disclose EPRP to local emergency providers	Injuries and death for labour force and communities	Jordanian OHS laws EBRD PR4	Project company resources, EPC contractor resources Responsibility: EPC contractor to develop and implement EPRP and disclose to local emergency providers and communities;	Prior to financial close Prior to construction	Revised ESMP Completed emergency preparedness and response plan, to be provided to Lenders for review once developed Signed EPC Contract	Open

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
	and local communities			project company QHSE manager to approve plan and oversee compliance			
PR5	Land Acquisition, Involuntary Resettlement and Economic Displacement						
5.1	<p>Develop a livelihood restoration plan (LRP) with objective of quantifying, assessing and mitigating economic displacement impacts on the informal land users and seasonal herders within the project area.</p> <p>A livelihood restoration framework will initially be prepared for disclosure and then further developed into a LRP prior to construction. Both documents to be developed in accordance with PR5 LRP to include a land use mapping exercise, socioeconomic survey of land users and nomadic families, economic displacement impact assessment, developed in collaboration with the local affected communities and other relevant local stakeholders, and mitigation measures including consultation</p>	Disputes around land acquisition, legal claims, reputational risk from NGO and other scrutiny or human rights contraventions of nomads and informal land users.	EBRD PR5	Project company resources External consultants Responsibility: Project company QHSE manager to develop Framework and LRP *and addendum if required), to conduct additional consultations, oversee implementation of LRP; EPC Contractor to implement LRP	Livelihood restoration framework to be developed prior to financial close LRP to be developed prior to start of construction. Addendum to LRP may be developed if consultations post start of construction indicate a need.	LRP documents Minutes of consultation meetings Signed compensation agreements and disbursement verification sheets (if applicable) Zero valid grievances related to lack of payment for compensation. Zero valid grievances from nomadic herders related to grazing land. Completed LRP, including land use mapping and evidence of community consultation.	Open

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
	during peak nomadic activity. LRP addendum to be developed, should future consultations, particularly during months of peak herder activity, identify additional users or monitoring requirements to be incorporated.						
5.2	Include livelihood impact monitoring key performance indicators in construction monitoring,	Disputes around land acquisition, economic hardship, loss of company reputation	EBRD PR5	Project company resources, EPC contractor resources Responsibility: EPC contractor	Ongoing monitoring throughout construction aligned with overarching E&S monitoring	Livelihood impact and compensation monitoring results	Open
PR6	Biodiversity and Living Natural Resources						
6.1	Survey project area for spur-thighed tortoise	Impacts (mortality) on spur-thighed tortoise	EBRD PR6	Project company Responsibility: project company ES manager, ES consultant	Prior to construction	Survey results will determine what, if any, mitigation measures are required.	Open
6.2	Develop a collision risk model (CRM)	Mortality of birds and bats	EBRD PR6	Project company Responsibility: project company QHES manager, ES consultant	Prior to financial close	Collision risk model	Open
6.3	Develop and implement an Active Turbine Management Plan in line with BAT To include: carcass monitoring and shutdown methodology and procedures	Mortality of birds and bats	EBRD PR6	EPC contractor, project company Responsibility: EPC contractor to develop; project company to approve final document	Prior to construction	ATMP	Open
6.4	Monitoring (i.e. bird surveys, carcass	Mortality of birds and bats	EBRD PR6	EPC contractor, project company	Throughout operations	Monitoring data	Open



No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
	monitoring) data should be shared with nearby wind farms and BirdLife.			Responsibility: EPC contractor to collect data. Project company to issue to wind farms and BirdLife			
PR8	Cultural Heritage						
8.1	<p>Develop and implement a chance finds procedure in line with lenders' requirements.</p> <p>Develop a cultural heritage management plan which incorporates all enforceable conditions stipulated by DoA and the chance find procedure.</p> <p>Implement all enforceable conditions stipulated by DoA.</p> <p>EPC contractor to also conduct Inspections of construction activities to ensure that archaeological locations are avoided throughout the construction activities and proper code of conduct is enforced.</p> <p>Should new discoveries be made during construction EPC Contractor must inspect actions taken to ensure that all required measures are taken in accordance with DoA requirements.</p>	Damage to cultural heritage, damage to company reputation	EBRD PR8 Best practice	<p>Project company resources</p> <p>External consultants</p> <p>EPC contractor resources</p> <p>Responsibility: Project company environmental manager to develop chance find procedure, EPC contractor to develop cultural management plan which incorporates enforceable conditions by the DoA and includes the project's chance find procedure, implement cultural management plan</p>	Prior to start of construction	<p>Completed final detailed design and evidence of consultation with DoA and its approval</p> <p>Demonstrate compliance with DoA requirements (such as photos of fencing)</p> <p>Develop and implement a cultural management plan and chance finds procedure</p> <p>Demonstrate relevant training provided</p> <p>Provide timeline and movement corridors for machinery in the vicinity of identified sites</p> <p>Supervision by DoA approved professional during construction</p> <p>Monitoring reports to AE, DoA and Lenders</p>	Open

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
	These requirements are to be included in the ESMP and EPC contract						
8.2	Disclose draft ESIA results to local communities (August 2017) and update SEP accordingly. Inform local communities should any chance finds be discovered	Damage to company reputation	EBRD PR8 Best practice	Project company resources External consultants Responsibility: Project company QHSE manager, EPC contractor	Prior to start of construction, and during construction (if required)	Disclosed ESIA Minutes of meetings	Open
PR10	Information Disclosure and Stakeholder Engagement						
10.1	Update SEP to include other informal land users as identified stakeholders, add information and disclosure activities regarding agreed compensation process and rates should the findings of the further land use assessment identify that compensation is necessary, include proposed consultation activities on draft ESIA, and provide summary of consultations held with affected land users prior to and during construction period	Company reputational damage Loss of trust with community and unrest	EBRD PR5, 10	Project company resources External consultants Responsibility: Project company QHSE to update SEP prior to construction, EPC Contractor to provide further updates to SEP as required, during construction phase	Prior to start of construction, and during construction phase	Updated SEP	Open
10.2	Conduct consultation on draft ESIA results, including potential impacts on land users.	Company reputational damage Loss of trust with community and unrest	EBRD PR10	Project company resources External consultants Responsibility: Project	Prior to financial close	Disclosed ESIA and SEP Minutes of meetings	Open

No.	Action	Environmental & social risks (liability/benefits)	Requirement (Legislative, EBRD PR, best practice)	Resources, investment needs, responsibility	Timetable	Target and evaluation criteria for successful implementation	Status
	Update disclosed SEP			company QHSE Manager, CLO			
10.3	Disclose community grievance mechanism, including form for crop damage reimbursement, if applicable	Company reputational damage Loss of trust with community and unrest	EBRD PR10	Project company resources External consultants Responsibility: Project company QHSE, CLO	Prior to start of construction and operations Grievance monitoring included in monthly monitoring reports	Updated SEP detailing grievance mechanism Minutes of meetings	Open
10.4	Undertake pre- and construction consultation activities with local communities and include commitment to disclose monitoring data to local communities	Company reputational damage Loss of trust with community and unrest	EBRD PR10	Project company resources External consultants Responsibility: Project company QHSE, CLO	Prior to start of construction and regularly throughout construction, and when key changes in project activities occur	Updated SEP Minutes of meetings Minutes of meetings	Open
10.5	Develop community integration plan, as outlined in the draft SEP	Ensure compliance with all applicable national, corporate and international requirements: Labour unrest Community unrest Company reputational damage	Jordanian national labour laws EBRD PRs	Project company and EPC contractor resources Responsibility: Project company QHSE manager, HR manager, EPC contractor	Prior to financial close	EPC Contract	Open

