Environmental and Social Action Plan

(April 2013)

Lastva – Pljevlja 400kV Transmission Line, Montenegro

The European Bank for Reconstruction and Development (EBRD) and KfW Bankengruppe (KfW) (together, the Lenders) are providing financing to Montenegrin Transmission System Operator (CGES) for the design, construction, and operation of a 400kV overhead transmission line from Lastva Grbaljska to Pljevlja via Cevo, and associated substations in Montenegro. The project includes the following elements:

- The construction and operation of a new 400/110/35 kV substation Lastva and the extension of the existing 400/220/110 kV substation Pljevlja, to be financed by KfW
- The diversion near Cevo of the 400kV Trebinje Podgorica overhead line to the new Lastva substation, to be financed by EBRD.
- The construction of a new 400 kV overhead line from Lastva substation to Pljevlja via Cevo, to be financed by EBRD.
- A small expansion of an existing substation near Plievlja, to be financed by EBRD.

CGES has prepared and disclosed an Environmental and Social Impact Assessment (ESIA). This ESIA described the project and the natural and human resources that could be affected, and evaluated the potential impacts the project could have on those resources. The ESIA also describes a series of actions that will need to be taken to prevent, control, or otherwise mitigate potential impacts. Those requirements are described in this Environmental and Social Action Plan (ESAP), which will be part of the financing agreements between each Lender and CGES. The performance of the required actions will be reported to EBRD and KfW by CGES and will be audited or otherwise evaluated by the Lenders during construction¹⁾ and operation of the project.

The table below constitutes the ESAP. It identifies the actions required, the basis of the requirement, the responsible entity, the timing of the action, and the criteria to be used for determining whether the goal of the action has been successfully achieved. Implementation of all the actions is the ultimate responsibility of CGES. When other companies perform work under contract, CGES will be responsible for their compliance with the requirements of the ESAP, even if direct oversight of the work is by a contractor. This is expected to be accomplished by inclusion of requirements in contracts and subcontracts, and by direct oversight and supervision by CGES and/or its oversight contractor.

As agreed by the Lenders and CGES, this ESAP may be revised from time to time during project performance. No changes will allow violations of Montenegrin law or of Lender requirements for environmental and social performance.

For purposes of this ESAP, "construction" includes all actions in the field to prepare and construct the various components of the proposed project, including the overhead transmission line, access roads and substations. "Operation" means operation and maintenance of all facilities for the ultimate purpose of conveying electricity. "Project performance" includes the entire period of construction, operation, and decommissioning.

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No.	Action	Source of requirement	Timetable / Project Phase	Target and Evaluation Criteria For Successful Implementation ²⁾	
0	Submit report to the Lenders on environmental, social, health and safety performance, including status of each ESAP element and other agreed activities.	EBRD	- Annually during construction and operation	Submission of reports to Lenders on schedule and in a mutually agreed format, with agreed supporting documentation	
1	Environmental and social management				
1.1	Develop EIA prior to obtaining construction license (as prescribed by Construction Law). If further mitigation is required by Montenegrin authorities in addition to any requirement of this ESAP, consult with Lenders prior to preparing final EIA.	Montenegrin law	As required by Montenegrin authorities.	 Report to Lenders on status of draft EIA preparation, disclosure, and consultations Consult with Lenders as needed regarding additional mitigation Approval by Montenegrin authorities 	
1.2	Develop and implement Environmental and Social Management Systems (ESMS) equivalent to those under ISO 9000, ISO 14001, ISO 26000. (Note: certification is not required, only equivalence)	Best practice / EBRD PR 1	Develop systems prior to operation Implement systems during operation	Systems are developed, staff trained and systems are implemented. Status reported in each report to Lenders	
1.3	Establish and implement corporate policy and procedures for oversight of contractor environmental, occupational health and safety, and social (ESHS) performance during construction, to include (at a minimum): - Inclusion of appropriate ESAP and other legal requirements in contracts, including requirement for staff/management training. - Assignment of clear responsibilities within CGES and oversight contractor for oversight of contractors	Best practice / EBRD PR 1, 2	- Upon entry into contracts/ subcontracts - Prior to contractor activities	Include in ESHS reports to Lenders: - Contractor oversight programme description and adoption status - Highlights of performance (appointments, inspections, etc.)	

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²⁾ Unless otherwise noted or agreed, "report to EBRD" refers to inclusion of required information in the ESHS reports required under item 0 of this ESAP.

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	 Periodic inspections of contractors' construction camps and operations for ESAP compliance. Contractor reports on performance sufficient to allow inclusion of data in ESHS reports to the Lenders and to allow CGES to determine if corrective actions are needed. Verification of training and professional credentials for contractor ESHS managers and staff. Requirement for contractor worker grievance mechanism the same as or equivalent to what is required under item 2.5 for CGES employees. 			
1.4	Acquire and comply with all required permits and authorizations	Montenegrin law EBRD PR 1	Prior to beginning any activities that require permits or authorizations	 Permits & authorizations received Reports submitted to authorities as required Compliance status reported to Lenders
1.5	 Monitor UNESCO communications with Montenegro authorities regarding the UNESCO designations of the Tara River Canyon Reports to lenders status of UNESCO designations and of any communications regarding Project Report to lenders immediately if UNESCO designations are negatively influenced or jeopardised by Project activities. 	EBRD PR 1	- Until one year after construction affecting the Tara River Canyon is complete	- Communications with authorities maintained
2	Labour and working conditions			
2.1	Develop and implement an Occupational Health and Safety (OHS) Plan to guide all activities on project sites during site preparation, construction, dismantling and	Montenegrin law EBRD PR 2 Best Practice	Develop respective plans prior to construction and prior to operation Implement the respective	- Submission and approval of CGES/Contractor plan by independent OHS professional and/or Lenders prior to

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	operation. Also require contractors to develop plans or comply with CGES plan. Plan requirements to include (but not be limited to): - Job- and task-specific hazard analysis and controls for all activities - Provision of personal protection equipment (PPE), requirements for use of PPE, and enforcement of PPE use - Safety training for all personnel in their language, covering hazards and safety protocols of their jobs - Review and approval of contractors' OHS plans, which must meet same standards as CGES plan - Oversight of contractor OHS implementation, including mandatory reporting - Recording incident statistics, including total work hours, lost time incidents, major injuries, fatalities, etc.		plans during construction and operation	construction - Submission of contractor OHS plan(s) and approval by CGES - Report to Lenders on OHS issues, including incident and enforcement statistics, status of training, etc. Report to cover CGES and contractor workforces - Report to Lenders immediately in case of major accidents and/or fatalities		
2.2	Appoint and maintain a supervisory person to be responsible for overseeing OHS for the entire project, to report directly to the project manager, and subsequently to CGES management.	Best practice EBRD PR 2	Appointed prior to construction and prior to operation, maintained at all times during construction and operation.	 Appointment of qualified OHS manager Qualifications submitted to Lenders with first report under item 0 Training provided for OHS leaders on construction crews Responsible persons maintained at all times 		
2.3	Appoint and maintain on-site on all shifts and all construction workcrews a person with first aid training at all construction sites.	Best practice EBRD PR 2	all construction sites: appoint and maintain at all times during construction	 Appointment of qualified persons Provide training as needed (OHS management training for SS, first aid for crews) Report to Lenders on appointments and training 		

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No.	Action	Source of requirement	Timetable / Project Phase	Target and Evaluation Criteria For Successful Implementation ²⁾	
2.4	Support local labor force and economy by: - Providing realistic information on employment opportunities, with transparent hiring practices - Advertising for all open positions - Employing local workers where possiblePaying wages at least average for the area for comparable positions Providing opportunities for local firms to subcontract supplies and services where possible	Montenegrin law EBRD PR 2 Best Practice	Prior to workforce selection and prior to establishment of work camps	 Local announcements when hiring Training for local workers Wages comparable to regional averages 	
2.5	Develop and implement a formal grievance mechanism for employees and contractors. (note: this is separate from the stakeholder grievance mechanism required under EBRD PR 10)	EBRD PR 2 Best Practice	Develop and implement prior to construction and during construction and operation	Reports to Lenders on the operation of grievance mechanism (grievances and resolutions)	
2.6	Develop/update HR Policy and Procedures Manual as needed to fully comply with national law and EBRD requirements.	Montenegrin law EBRD PR 2 Best Practice	Prior to construction	 Submission of HR Policy and Procedures to the Lenders for review Include in report to Lenders data on workers, including dismissals and new hires, status of medical checks, etc. Include in reports to Lenders the numbers of workers in various categories (management vs skilled vs unskilled, local vs nonlocal vs expatriate, women vs men) 	
2.7	Maintain conditions (sanitation, privacy, food, etc.) in work camps to meet Montenegrin law and international best practice	Montenegrin law EBRD PR 2 Best Practice	Prior to use of work camp	- Acceptable conditions in camp - Consultation with local authorities regarding construction camp - Report to Lenders on work camps	

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3	Pollution prevention and abatement				
3.1	Implement air quality management and construction practices to prevent dust and particulate emissions by effective control of potential sources, including (at a minimum): - Applying water sprinkling measures. - Regular inspection of local roads. - Proper maintenance of all construction machinery and equipment. - Appropriate restriction of vehicle speeds on unpaved roads. - Cover loads as needed to prevent dust release.	Montenegrin law EBRD PR 3 Best practice	- Develop prior to construction - Implement during construction, dismantling	Report to Lenders on highlights of dust control/ suppression activities.	
3.2	Good construction practice to prevent water pollution, including (at a minimum): - No water discharge directly to watercourses. - Strict erosion control measures to prevent run-off to water (see 3.3) - Provision of spill and leak cleanup materials / equipment. - Regular maintenance of all machinery to prevent engine oil and fuel leaks. - Provision of portable toilets to prevent any sewage being discharged on site. - Minimize crossing of watercourses by vehicles and machinery - Minimize works near rivers in wet weather. - Site restoration/re-vegetation soon after construction completed. - No towers within 10 meters of surface water	Montenegrin law / EBRD PR 3 / Best practice	Implement during construction and dismantling	 No unauthorized discharges to waters. No disruption of aquatic habitats. Restoration of all disturbed land Report to Lenders any accidental discharges. 	
3.3	Develop and implement site specific erosion control measures for all areas where the ground will be disturbed	Montenegrin Law EBRD PR 3	- Develop prior to construction	- Minimize erosion and soil disturbance.	

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	during construction in accordance to good international practices.	Best practice	- Implement during construction and dismantling	- Report to Lenders on highlights of erosion control measures.		
3.4	of all waste types to be generated during construction, dismantling and operation.	fall waste types to be generated during construction, smantling and operation. EBRD PR 3 construction - Implement during	construction	- Plan reviewed and/or approved by competent authorities, if required - Report to Lenders on status of		
	Ensure all off-site management is by licensed companies and in licensed places		and operation	plan development and approval Reports to authorities as required in permits Reports to CGES by all contractors on amounts, types, and management of all solid wastes Consolidated reports to Lenders on amounts, types and management of all solid wastes		
	Wastes to include excess excavated material, spill cleanup material, sanitary wastes, domestic waste, plant and wood wastes (from vegetation cutting), etc.					
3.5	Develop Landscape Plan for substation Lastva Grbaljska, to include (but not be limited to): - Maximum sheltering of built structures by means of vegetation where possible - Preservation of natural spatial values (terrain configuration, hydrological processes,) - Harmonization of compositional solution of greenery with landscape features and area purposes - Maximum preservation of existing vital and functional trees, whether they grow as a group or individually and their fitting into the new urban solution.	Best practice	Develop prior start of construction Implement during construction	 Plan discussed and agreed with local authorities Report to Lenders on development and implementation of Plan 		
4	Community health, safety, and security	<u> </u>	1	1		

Montenegrin law

- During design and

- Public exposure to the fields in

4.1

Ensure compliance with international standards on public

No.	Action	Source of requirement	Timetable / Project Phase	Target and Evaluation Criteria For Successful Implementation ²⁾	
	exposure (see section 7.5 of the ESIA) to electric and magnetic fields, including: - appropriate selection of tower sites away from houses - compliance with technical specifications for minimum height of the OHL conductors measurements of electric and magnetic fields as required and/or requested.	EBRD PR 4 Best Practice	construction - Measurements during pre-construction stage, post-construction stage and periodical measurements	compliance to international standards Report to Lenders on measurement results	
4.2	Develop and implement procedures to protect public health and safety, to include (but not be limited to): - Security as needed to prevent unauthorized access to project locations Notice to local authorities and nearby residents before major activities and traffic Hazard notices/signs/barriers to prevent access to energized components.	Montenegrin law EBRD PR 4 / Best practice	- Develop prior to construction - Implement during the construction	- Safety conditions achieved	
4.3	Establish and enforce rules for worker behavior when dealing with local residents and visitors in order to prevent disturbances and adverse impacts.	Montenegrin law EBRD PR 4 / Best practice	- During the construction	 No serious incidents between workers and local population. Report to Lenders on all incidents. 	
4.4	Develop and implement traffic management plan, including: - Transport management planning—route planning - Training for drivers and equipment operators, enforcement of rules - Speed limits - Vehicle management and maintenance - Community liaison and safety	EBRD PR 4 / Best practice	- Develop prior to construction - Implement during the construction and dismantling	 Traffic management plan agreed with local and traffic authorities Submission of plans to Lenders with first report Plan implemented 	
4.5	Good construction practice to prevent off-site nuisance from construction and dismantling noise.	Montenegrin law EBRD PR 4 Best practice	Implement during construction and dismantling	Noise level reduced and adverse effects avoided.	

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No.	Action	Source of requirement	Timetable / Project Phase	Target and Evaluation Criteria For Successful Implementation ²⁾
4.6	Implement measures to mitigate nuisance from operational noise: - Appropriate corona testing - Engineering measures to suppress operational noise at substations - Response to complaints: measure and mitigate as needed to meet standards	Montenegrin law EBRD PR 4 Best practice	Develop during design stage and prior to construction Measurements during operation, if requested	 Noise level reduced and adverse effects avoided. Report to Lenders on any significant noise issues, including complaints and resolutions
5	Land acquisition, involuntary resettlement and econ	omic displacement		,
5.1	In consultation with affected persons, develop and implement a detailed Land Acquisition and Compensation Framework (LACF), in line with EBRD requirements and Montenegrin law. Wherever possible, avoid expropriation. (note: LACF developed and implementation begun prior to EBRD project approval)	Montenegrin law EBRD PR 5	 Apply it for any land acquisition or compensation (comment: approval of EBRD already mentioned in Action and Target and evaluation criteria) 	 - LACF reviewed and approved by EBRD - All land acquisition or compensation in accordance with LACF. - Report to Lenders on status of LACF implementation, including all economic losses due to project and any compensation or replacement paid
5.2	Designate person(s) / department to take responsibility for land acquisitions and to manage the process in accordance with Montenegrin law and EBRD's policy requirements.	EBRD PR 5	- During the development / implementation of the Land Acquisition and Compensation Framework	- Designation of person(s) / department designated - Identify person/department in report to Lenders
5.3	Designate person(s) to act as the point of contact for the community members affected by land acquisition.	EBRD PR 5	- During the development / implementation of the Land Acquisition and Compensation Framework	 Designation of contact person Provision of contact details to affected people Identify person and activities in report to Lenders
5.4	Continue and complete good-faith negotiations with	Montenegrin law	- CGES letter of	- Good-faith negotiations, and

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No.	Action	Source of requirement	Timetable / Project Phase	Target and Evaluation Criteria For Successful Implementation ²⁾
	representatives of the local authorities affected by the construction of the substation regarding compensation for potential impacts.	EBRD PRs 1 & 5	commitment to enter into good-faith negotiations, before Lenders' approval. - Agreement with local authorities in line with local legal framework	agreement - Investments in community improvements as agreed - Report to Bank the status of negotiations and on investments
6	Biodiversity conservation and sustainable management	nent of living natural r	resources	
6.1	Good construction practice, including (at minimum): - Maximize use of existing access roads and minimize construction of new roads. - No construction camps or lay-down areas within sensitive ecological areas (protected or designated nature conservation sites such as National Parks, Emerald Sites, and proposed protected areas). - Following pre-construction bio-surveys of final tower designs and locations, micro-locate towers to prevent adverse effects on protected species and sensitive habitat in or near tower locations, reschedule construction as needed to avoid effects on protected species. For protected areas, consult with responsible authorities and reach agreement on tower locations and construction schedules - Establish and enforce rules for workers to prohibit fires, collecting plants or eggs, disturbance and hunting of game, birds, etc. - Re-vegetate with native species all disturbed land as soon as possible after construction. Monitor until vegetative cover is self-sustaining.	Montenegrin law EBRD PR 6	Prior to and during construction	 Nature resources protected. Tower microlocations and construction scheduling prevent adverse impacts. Successful establishment of vegetation Report to Lenders on actions taken to protect resources and on status of revegetation programme. Report to Lenders on actions taken to control worker behavior, including incidents.
6.2	Request that relevant authorities review report on	Montenegrin law	- Request review prior to financial close	- Consultations with authorities on Lastva study

No.	Action	Source of requirement	Timetable / Project Phase	Target and Evaluation Criteria For Successful Implementation ²⁾	
	biodiversity at substation Lastva and findings regarding protection status of the area. Implement any requirements imposed by authorities following their review.	EBRD PR 6 EU Habitats Directive	- Adopt and implement recommendations by authorities prior to any construction that would affect salt marsh habitat at Lastva substation site.	 Implementation of recommendations, if any Report to Lenders on status of review and on any further requirements 	
6.3	As agreed with authorities: - Place bird diverters on sections of the line, including at a minimum: - Between localities Trubjela and Vodnji Do at vicinity of Slano Lake - Crossing of Komarnica canyon/valley at localities Lucki Do and Razvrslje - Crossing Tara River canyon, after consultation with and agreement of National Park authorities - Design towers and conductors to minimize perching and associated risk of electrocution	Montenegrin law EBRD PR 6 Best practice	Prior to energizing line	 Report on bird diverter placement and on designs to reduce risk of electrocution. Report immediately any excess or unusually high mortality. 	
6.4	Enter into negotiations with relevant authorities and Park administration for satisfactory compensation for the crossing of Lovcen National Park and Durmitor National Park. The compensation measures will address the limited additional impact of the project and will be in addition to the compensation for the individual landowners in line with regulations and standards. This compensation will serve the two National Parks as whole.	Montenegrin law EBRD PR 6	Prior to construction in respective Park	 Negotiations concluded, appropriate compensation agreed Report to Bank on status of negotiations and compensation 	
6.5	Schedule work in NP Lovcen and NP Durmitor and other proposed protected areas in consultation with competent authorities (Park administration) as needed to minimize disturbance to flora and fauna.	Montenegrin law EBRD PR 6	Prior to construction in protected areas	- Minimal disturbance to flora and fauna - Consult with authorities before construction - Schedule work as agreed	

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				- Report to Lenders results of consultation and scheduling

8	Cultural heritage			
8.1	Develop and implement a chance find procedure and ensure all contractors and other relevant parties are trained in its use.	Montenegrin law / EBRD PR 8	Develop prior to construction Implement during the construction	- Review and approval of the procedure by competent authority Report to authorities in case of finds.
8.2	Consult with authorities to plan and schedule all work in NP Lovcen and NP Durmitor in order to prevent impacts on cultural heritage and minimize impact on tourism.	Law of Montenegro / EBRD PR 4 and 8	Prior to construction protected areas	Consultations with competent authorities All work in compliance with NP and UNESCO rules Report to Lenders on consultations
10	Information disclosure and stakeholder engagemen	nt	•	
10.1	Implement Stakeholder Engagement Plan, including stakeholder grievance mechanism	EBRD PR 10 / Best practice	During construction and operaton	Report to Lenders on stakeholder engagement Report to Lenders on all grievances and resolutions
10.2	Develop and implement formal grievance mechanism in SEP for external stakeholders	EBRD PR 10 / Best Practice	Develop and implement prior to construction and during construction and operation	- Timely resolution of all grievances Report to Lenders on all grievances and resolutions
10.3	Notify and consult with local authorities prior to construction activities within 2 km of any populated area. Place signs as needed to inform residents and visitors of activities and to warn of traffic and other hazards	Montenegrin law EBRD PR 4 & 10 / Best Practice	Prior to construction near any populated area	Consultations with local authorities Report to Lenders on consultations and signage
10.4	Disclose landscape/visual impact assessment when completed by WYG to the local authorities. Where technically feasible, modify design (including shading, colour, shielding) in response to concerns.	EBRD PR 10	Prior to first disbursement	Report to Bank on consultations and outcomes.