

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.: ISDSA1121

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I. BASIC INFORMATION

1. Basic Project Data

Country:	Kosovo	Project ID:	P133829
Project Name:	Kosovo Water Security and Canal Protection Project (P133829)		
Task Team Leader(s):	Ahmed Shawky M. Abdel Ghany		
Estimated Appraisal Date:	22-Feb-2016	Estimated Board Date:	29-Jul-2016
Managing Unit:	GWA09	Lending Instrument:	Investment Project Financing
Sector(s):	Irrigation and drainage (40%), Water supply (25%), General energy sector (25%), Wastewater Treatment and Disposal (10%)		
Theme(s):	Water resource management (100%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	28.00	Total Bank Financing:	28.00
Financing Gap:	0.00		
Financing Source			Amount
BORROWER/RECIPIENT			0.00
International Development Association (IDA)			28.00
Total			28.00
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

2. Project Development Objective(s)

The development objective of the project is to contribute to restoring the canal original capacity as needed to secure bulk water for the various canal water users in Central Kosovo.

3. Project Description

The project consists of three components: (i) Canal infrastructure rehabilitation and modernization,

(ii) Water resources protection and monitoring, and (iii) Project management support.

To be ready for implementation once the project is approved, the SCADA system under component 2 has been designed up to the detailed design level, and bidding document has been prepared (equipment and associated training and operation services), to be implemented in the first year of project implementation.

Component 1: Infrastructure Rehabilitation and Modernization (categories: civil works)

This component would focus on physical improvements to the deteriorated sections of the canal and its structures as well as improvements of hydraulic operations. Works under this component include (subject to the detailed design which will be undertaken after project approval):

Subcomponent 1 (a) Small works for Gazivoda dam safety, canal repair and increased stability for protection against renewed physical damage from landslides and unstable soils (through lining, treatment of joints, abutments, foundations, cuttings, aqueducts, culverts, tile drains to control uplift pressure).

Subcomponent 1 (b) Developing hydraulic-storage capacity along the canal. The project Legal Agreement would comprise a flexible language on developing new water storage, conducive to determining its exact size and location during the first Project Year after completing its detailed designs and site-specific safeguards studies. One possible option (for which preliminary design was undertaken under the FS) is to develop an emergency-and-balancing reservoir along the canal at Mihaliq area (in Vushtri municipality), for short-term storage (10 days) in order to: (1) bridge peak water demand and (2) enable continuation of water supply to the users during the temporary outages for canal repair, or amid having extreme events that disrupt the canal flow. Another option is to develop several micro storages along the canal.

Component 2: Water Resources Protection and Management (categories: civil works and equipment)

The project would also cover related water-resource management measures along the canal:

Subcomponent 2 (a) Protection of the canal against renewed pollution, accidental pollution and other threats and man-made disruptions, through fencing, selective covers, or parallel interceptor drains with vegetative beds (subject to the detailed design). This would help address the ambient water quality in the canal, to meet the inflow quality requirements for the power plants and for the new Pristina Water Treatment Plant.

Subcomponent 2 (b) Equipment for better management of gates and regulation of water flows, water monitoring (for the main Iber canal and for its secondary delivery system), including provisions for remote monitoring and controlling of related structures. A relatively advanced SCADA would be installed given the importance of the canal. The equipment would also include instrumentation for optimized operational schedule of the Gazivoda reservoir and its downstream balancing reservoir in Pridvorica, integrated with the proposed canal SCADA (to balance the releases for hydropower with the releases for the Iber canal).

Component 3: Project Management, Coordination, Monitoring and Evaluation (categories: consultants, training, and incremental operating costs)

This component would cover overall project management as well as coordination among the different ministries/agencies involved in water management as related to the Iber-Lepenc Canal. The activities would include the detailed design and supervision of the works contracts. The Project Implementation Unit (PIU) to be located within the Iber-Lepenc Company, will be responsible for day-to-day management of project activities and will work with relevant staff in other ministries such as the MESP on the project's safeguard aspects (Environmental and Social Impact Assessment Framework, ESIAF, and Resettlement Policy Framework, RPF) as well as on Monitoring and Evaluation (M&E).

As an overview the works that might be financed include: new concrete, rehabilitation of joints, rehabilitation of aqueducts, rehabilitations and new sections of access roads along the canal, bridge rehabilitation, including walkway bridges, slabs covering, reconstruction of crossing channels above and under the canal, retaining walls, storm water culverts, water distribution boxes, clearing of vegetation, fencing, 4000 m³ compensation reservoir, etc.

The project will establish a Project Steering Committee, comprising high level officials from the various ministries engaged in the water sector (MESP, MED, Water Task Force, MAFRD) who would work together to provide advice and oversight for project activities. Given the multi-sector nature of water use, the Committee would be charged with reaching agreements as necessary in the efficient management and distribution of water from the Iber canal. As for gender development, the socioeconomic studies under the ESIAF includes the identification of any vulnerable groups, including internally-displaced people or refugees, ethnic groups such as Roma, landless laborers, and the rights of female household heads and women in common-law unions. The public consultation and grievance procedure under the RPF/ESIAF with ESMF will comprise measures ensuring that such vulnerable groups are consulted during subproject design and implementation.

The Bank intends to mobilize a small Bank-executed trust-fund grant (WPP/WSP) to improve the capacity of ILC on the utility management aspects of managing the water restored/saved by the project.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Environmental relevance of the project and majority of potential adverse environmental impacts relate predominately to activities envisaged within the project Component 1: Infrastructure Rehabilitation and Modernization which encompasses rehabilitation works on IL water canal and Gazivoda dam as well as development of Mihaliq dam and emergency reservoir. Some environmental impacts are also possible under the Component 2: Water Resources Protection and Management, however, these activities are small scale and include mainly protection work such as fencing of the canal area and light equipment purchase.

The Iber-Lepenc (IL) canal, subject to rehabilitation works, is 49 km man-made hydraulic structure supplying water to central Kosovo. It runs from Gazivoda (Ujman) lake up to Prishtina city and ends at Badovc Lake. The intake for the IL canal "sub-basin" is Gazivoda reservoir on the Ibër River. The IL canal conveys bulk water by gravity through a system comprising canal, siphons, aqueducts and pipes to supply various users. The excess water is released in the upstream part of the Sitnica River that flows back into the Ibër River, carrying flow to Serbia. In its full length the canal passes through the territory of four municipalities - namely: Zubin Potok, Mitrovica, Vushtrri and Prishtina - passing through about 33 rural settlements and two cities.

The water resource from the canal is used for various purposes: domestic, irrigation, industries and cooling of Kosovo A (in the summer months) and Kosovo B thermal power plants. It is expected that the demand for water from the IL canal will increase significantly with the new water treatment plants in Shkabaj and Vushtrri and the construction of KRPP coal power plant (600-MW lignite-fired power plant). Nevertheless, this increase of water use would occur even without the canal rehabilitation; and conversely, the canal rehabilitation would be needed even in the absence of these other investments.

Current state of IL water management infrastructures is characterized by major leakages from wear-down and insufficient maintenance, extensive water losses, and vulnerability to disruption by landslides, leakages and pollution.

The section of the IL canal that will be rehabilitated under the World Bank project crosses two major landscape units: the hilly areas with dense forest cover in the northern part and alluvial plain of central Kosovo in its section between Buschta Village and Pristina. The landscape of the geographical project area is fairly urbanized in the north, while the alluvial plain of central Kosovo is more densely populated and characterized by open field landscapes (mostly agrarian with plots in irregular forms and predominately planted with corn, maize, potatoes and forage crops), spangled with settlements of various sizes. Close to Pristina and the KEK Power Plan, the anthropogenic character of the landscape is intensified by the dense network of infrastructures (roads and power lines).

The envisaged works on existing Gazivoda dam include small rehabilitation works related to spillway gates and optimized operations and works on increased stability for protection against landslides and unstable soils. Gazivoda dam is rock filled embankment dam which creates Gazivoda Lake. It is located in the Mitrovica District, Northern Kosovo. The lake is surrounded by forested hills and meadows and its shores are not populated. There are no nature protected areas located in Mitrovica District.

IL Canal with Gazivoda dam present an existing infrastructure and the planned works will be predominantly rehabilitation ones, therefore no negative, irreversible or lasting, impacts to landscape, nature elements or environment are expected.

The proposed Mihaliq dam is located in Vushtrri District. The area is predominantly rural with isolated farms and scattered settlements. The area for the emergency reservoir Mihaliq (ERM) lies in both sides of the valley and is predominately agricultural (cereals and grazing) land. The area of implementation of the future reservoir is about 30 ha and it is not inhabited.

ERM will be of large capacity approximately 3.7 million m³, with a dam about 20-25 m in height. The relatively high dam results from the topography of the site selected for the planned reservoir (deep and narrow). There are no protected areas in the vicinity of the proposed dam, nor anywhere in Vushtrri District and no significant or sensitive species. The nearest village is located approximately 1 (one) km downstream from the dam. Besides the height of the proposed dam and nearby downstream settlement, no other particular environmental risk factors have been identified relating to the new reservoir (no impact on natural habitats, physical cultural objects, physical relocation of population, etc.).

Social Safeguards - As the project will invest in the rehabilitation of the canal, one obvious impact will be temporary land acquisition of the right of way to the canal and doing the rehabilitation works. Depending on the feasibility study, and where the location of the short term storage will be permanent, land acquisition impacts might be expected. For example if project will finance ERM than there will be a need for expropriation of approximately 30ha (and much less likely involuntary resettlement or demolition of structure in use) whereby 1/2 of land is cultivated only, with cereals.

5. Environmental and Social Safeguards Specialists

Bekim Imeri (GSU03)

Natasa Vetma (GEN03)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The WB classified the project as category B project which implies that the project will not cause long-lasting, significant or/and adverse impacts to human health and environment.</p> <p>The environmental impacts are expected mostly from the Component 1: Infrastructure Rehabilitation and Modernization. Some construction works are also envisaged in the Component 2: Water Resources Protection and Management. Works on Gazivoda dam and canal repair (sub-component 1a) present works on existing infrastructure and they include no widening or extension works, only rehabilitation. Some access roads might be extended.</p> <p>National legislation does not call for ESIA for IL canal lining or Gazivoda rehabilitation works. During the project preparation, Environmental and Social Impact Assessment Framework (ESIAF) with Environmental and Social Management Framework (ESMF) based on FS findings and available technical documentation was prepared as a form of environmental assessment for the existing infrastructure and planned works. Based on identified impacts and partly mitigation measures, process based ESMF with templates and ToRs for EMP checklists, EMPs and EIAs was prepared prior to the appraisal. Based on the screening process of ESMF, appropriate environmental due diligence documents will be prepared during the project implementation.</p> <p>Construction of the emergency reservoir at Mihaliq (ERM) including its dam, might require full ESIA under the Kosovo environmental legislation, depending on the Ministry of Environment and Spatial Planning opinion. Due to the size of the proposed Mihaliq dam and safety risks, ESIAF was carried out based on component preliminary designs and preliminary feasibility study identifying issues requiring special attention during preparation of full ESIA in accordance with national and WB procedures.</p> <p>The ESIAF identified major impacts and themes that should be addressed in ERM ESIA. Based on these conclusions draft ToR for full ESIA was delivered as a part of the document. The ERM ESIA, including site specific EMP, will be prepared the during design period, i.e. before the works on ERM commence as well as timely</p>

		disclosed and consulted with the public at least twice through a website and public consultation meetings.
Natural Habitats OP/BP 4.04	No	The works envisaged on the existing IL canal, Gazivoda dam or Mihailq dam will not impact any protected areas, important habitats or fragile ecosystems. Gazivoda dam as well as prospective Mihailq dam are located in districts (Mitrovica and Vusthri) that encompass no protected or sensitive areas on their territories. IL canal passes through 4 districts (Mitrovica, Vusthri, Obiliq, Pristina) however, neither Gazivoda dam or canal rehabilitation will claim additional surfaces while ERM will be constructed on predominantly anthropogenic land surfaces (agricultural or deserted agricultural land). Development of ERM, however, will pose a barrier to terrestrial animals which was addressed in the ESIAF and will be reflected in resulting environmental due diligence documents, ESIA in particular.
Forests OP/BP 4.36	No	Planned Gazivoda dam and water canal rehabilitation works do not include widening or spreading to additional land surfaces. Possible extension of access roads might happened, but it is still not confirmed. ERM will be developed in the valley of the Bencuk creek which does not have forest communities present, only a small number of individual trees and is comprised mostly from agricultural land. Therefore, impact on the health and quality of forests is not envisaged by ERM.
Pest Management OP 4.09	No	Increased efficiency of canal, foreseen decrease in losses in the network and subsequent increased availability of water resources could impact agriculture practices, however, studies have shown that market access/ conditions, rather than water abundance, are the primary constraint to agriculture in the service area. Increase in amount of areas under irrigation is foreseen over time therefore, however, increased availability of water is not expected to lead to an expansion or intensification of agriculture immediately, therefore this OP is not triggered.
Physical Cultural Resources OP/BP 4.11	No	There are no cultural heritage sites or objects in the vicinity of ILC according to ESIAF, and impact to physical or cultural resources are not expected. The chance findings due to earth works are, however, always possible, which is reflected in the environmental due diligence procedures and documents, meaning that chance finds clauses are included to ESIAF with ESMF and subsequently to EMPs and EMP Checklists.
Indigenous Peoples OP/	No	

BP 4.10		
Involuntary Resettlement OP/BP 4.12	Yes	OP 4.12 is triggered because the area through which the canal passes is densely populated, so some of the protection measures (e.g. fences along canal banks) are likely to require some minor land acquisition, though not expected to require any physical relocation. In addition, land acquisition would probably be required for the storage reservoir(s) if they are included in the project (pending detailed designs). RPF is prepared to guide expropriation for works to be defined and designed in the following years. For every sub-project requiring land acquisition, a sub-project-specific RAP will be prepared.
Safety of Dams OP/BP 4.37	Yes	<p>The project envisages works (safety improvements) on Gazivoda dam and new construction of Mihaliq dam (ERM development). Mihaliq dam is considered large (20 – 25 m h; 3.7 mil m3) and it is located in the valley of the creek of Beçuk only 1 km from the nearest downstream settlement which presents a safety risk. For these reasons OP/BP 4.37 is triggered. Pre-selection of Panel of Experts (PoE) for the development of Mihailiq dam and rehabilitation of Gazivoda dam has been completed. PoE will be appointed in time to review all dam safety documents, but possibly after the appraisal.</p> <p>For Gazivoda dam, a plan for construction supervision (CS) and quality assurance (QA) was prepared during project preparation, as well as the Framework O&M and EPP. For Mihaliq dam draft construction supervision (CSP) and quality assurance plan (QAP); frameworks for the Operation and Maintenance (O&M) plan and Emergency Preparedness Plan (EPP) were prepared prior to the appraisal. PoE must review all (Gazivoda and Mihaliq) dam safety assessments and associated Emergency Preparedness Plans (EPP) before the development of detailed designs and site specific ESIA (including ESMP).</p>
Projects on International Waterways OP/BP 7.50	Yes	<p>Iber River is shared with Serbia both upstream and downstream from IL canal so impacts to its water body potentially present a trans-boundary impact issue. Iber is a contributor to Black Sea basin.</p> <p>As the proposed project, in the part of IL and Gazivoda dam rehabilitation finances only repair / rehabilitation works, it can be considered rehabilitation of existing / ongoing scheme. For ERM, it is expected that the development would only restore the original capacity of the canal. Possible addition of equipment for better management, and emergency or balancing reservoir along</p>

		<p>the channel, would not change the purpose of the canal, nor appreciably change the Iber-river water quantity or quality.</p> <p>The impact to trans-boundary waters was investigated on two levels: (i) for impact of works on the canal and on Gazivoda dam: per the advice from LEGEN, the team sought an exemption from the notification as the preliminary documentation indicated there was no appreciable impact on the quantity or quality of the water flowing back to Serbia. Moreover, the project would not finance works that increase water consumption; and (ii) for the development of Mihaliq dam and reservoir (ERM): ESIAF and FS were developed and thereof, based on preliminary analysis of the ERM impacts to downstream waters, LEGEN was re-consulted on the notification requirement. In more detail: The ERM reservoir's size (3.7 million m³) would be as small as 1% of Gazivoda reservoir. Canal operators are aware that the river flows required by Serbia need to be maintained, including the legally-mandated minimum environmental flow for the Iber/Sitnica river, estimated at 0.50 m³/sec in monthly average or 1.5 m³/sec in monthly peak, which can be met given that the "as-built" canal discharge ranges from 5 to 15 m³/sec. Thus, expecting no appreciable harm to the riparian countries, exception from the notification of riparians was sought. The exception request for both Gazivoda dam and IL canal rehabilitation as well as ERM has been cleared by LEGEN.</p> <p>After the detailed design and ESIA for the ERM, the notification requirement would be re-assessed in consultation with LEGEN (in case the findings deviate from the preliminary findings of appraisal-stage FS and ESIAF, which is not likely).</p>
Projects in Disputed Areas OP/BP 7.60	No	<p>Some administrative issues related to OP 7.60, might occur due to the fact that Republic of Kosovo is not recognized as an independent state by its immediate neighbor and Ibar riparian country, Republic of Serbia. In addition, Gazivoda dam, and part of the Canal, is located in the Northern Kosovo, which does not recognize National Government of Kosovo, and there is limited accessibility for the representatives of the Republic of Kosovo, as well as the WB team. However, LEGEC concluded that, based on several agreements and accords signed in 2012 and 2013, this policy would not apply. Nevertheless, risks associated with problem</p>

	implementation because of the fact that the Bank team and ILC Company has limited access to North of Kosovo needs to be recognized. The team already discussed various procurement measures to alleviate risk (hiring local company, etc.)
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II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

Environmental and Social Assessment OP4.01

The project triggers OP 4.01. The World Bank classifies the project as category B project as the project activities present no major environmental risks and no significant, unprecedented, irreversible impacts to the environment are expected as a result of the project activities. Prior to the appraisal ESIAF with ESMF was prepared and only Feasibility Study (FS) and SCADA detail design were available which presented the basis for ESIAF development. Therefore, ESIAF, is a rather technical framework reflecting FS and component-level preliminary designs. ESIAF serves as initial environmental impact assessment for different components of the project. The impacts are assessed based on field visits and pre-feasibility and feasibility studies available. ESIAF is therefore conducted both for (i) Mihaliq emergency reservoir and dam and (ii) Gazivoda rehabilitation and IL canal rehabilitation. The ESIAF provides baseline information and project description for all components, and predicts impacts to the level possible depending on the level of design. Mitigation measures are also proposed as part of the ESIAF, based on identified impacts and description of works. ESIAF especially serves as preliminary ESIA for dam and reservoir as full ESIA will be prepared later during the project implementation. It also identifies site investigation and monitoring that needs to be done for the full ESIA and proposed ToR for the full ESIA. Identified potential impacts of the dam and reservoir will be fully addressed in full ESIA once all technical and other project details are known. The complementary ESMF, serves as process oriented framework and defines type of environmental due diligence documents that need to be prepared for different project components / activities. For small rehabilitation works, ESMF provides template EMP checklist, prepared based on the impacts and mitigation measures identified in ESIAF. ToRs and description of other type of due diligence document is also provided.

The impacts associated with the canal rehabilitation and Gazivoda dam are small scale, temporary and site specific, in a way typical for infrastructure rehabilitation works (noise, waste, resource materials, etc.) therefore would be easily mitigated through implementation of respective site EMPs.

The ESIAF however recognizes following: Main potential impacts of the Mihaliq reservoir will result from the filling in the emergency reservoir. In association with this main impact will be the change in regime from a highly oxygenated river stream to a lake with calm water and a risk of accumulation of nutrients such as phosphorus and nitrogen. The Mihaliq dam is deemed a large dam (due to terrain steep slopes) with the reservoir capacity around 3.7 million m³ and the dam 20-25 m high. Besides the height of the proposed dam and nearby downstream settlement (1 km away), no other particular environmental risk factors have been identified relating to the new reservoir (no impact on natural habitats, physical cultural objects, physical relocation of population, etc.).

International Waterways OP 7.50

Projects on International Waterways OP/BP 7.50 was initially triggered considering potential impacts, amongst which, some could be labeled as trans-boundary impacts (e.g. potential impact to velocity, water abundance and quality of water in the operational phase). The water in the IL Canal is taken from the Iber river which, downstream from the reservoir and after its use in Kosovo, returns to Serbia and flows into Morava River and further to Danube River. Adverse impacts on the water body, including its quality and abundance, from the rehabilitation works on IL Canal and safety upgrades on Gazivoda dam are not expected since the works are mostly rehabilitation works, restoring the original capacity. It is also unlikely that Mihaliq emergency reservoir (ERM), would impact features of downstream river courses. When constructed, ERM, with its reservoir's size (approx. 3.7 million m³) would count as uptake as small as 1% of Gazivoda reservoir. The current intake delivers about 3m³/s while the maximum assessed intake of the canal is 10.8m³/s. This maximum presents a half of the originally designed intake capacity of 22 m³/s at head, which again points to that Project activities implementation would merely restore the original capacity, or part of the capacity, of the canal. Based on FS and ESIAF findings, expecting no appreciable harm to the riparian countries, exception from the notification of riparians was sought and cleared by LEGEN.

Dam Safety OP 4.37

The Component 1 includes development of a new dam (ERM) that is considered large and as such the dam presents potential risk therefore Safety of Dams OP/BP 4.37 policy is triggered. According to preliminary technical information, Mihaliq dam will be 600m long and 20-25 meters high and the reservoir will accumulate 3.7mil. m³ or water. Although the terrain that is planned to be flooded is not inhabited, the nearest settlement is located only 1 km downstream.

Disputed Areas OP 7.60

OP 7.60 Projects in Disputed Areas is not triggered for the Project, since Northern Kosovo, where a part of the works will take place (e.g. Gazivoda Dam and part of the IL Canal) does not officially classify as a disputed area based on several agreements and accords signed in 2012 and 2013. However, Republic of Kosovo is not recognized as an independent state by some districts in Northern Kosovo as well as Republic of Serbia which can cause some administrative and access issues presenting an implementation risk. Procurement and implementation arrangements will be made to manage these risks.

Natural Habitats OP4.04

ESIAF analyses and pre-assessments showed that neither works on IL Canal and Gazivoda Dam or Mihaliq Dam are located in PA, critical or sensitive areas or bordering them. The works on existing infrastructure does not include uptake of new land or extensions. Development of ERM, however, will pose a barrier to fauna which was addressed in the ESIAF and will be reflected in full ESIA and mitigation or avoidance measures will be looked for in site specific ESMP. One internationally protected bird species (white stork) was observed in the project area. The IUCN classification of this species is Least Concern (LC) and its presence, impacts and eventual mitigation measures will be further elaborated in the ESIA. Therefore, ESIAF findings concluded no sensitive flora or fauna species or communities inhabit the area thus OP 4.04 Natural Habitats

was not triggered.

Forests OP 4.36

OP 4.36 was not triggered because rehabilitation works on IL canal, though passing along forests in the northern part does not foresee widening of the canal thus this forest will not be affected. Some small vegetation clearance for sanitation and Canal safety reasons will take place, but only from the protective corridors. Some access roads might be extended but not in forest areas. The construction of ERM is planned in the area comprised of agricultural land and other anthropogenic land types.

Involuntary Resettlement OP 4.12

The envisaged emergency reservoir Mihaliq (ERM), is considered relatively large, and the topography of the terrain is requiring a high dam to create it. The preliminary design of the dam and reservoir is not yet known and the risk assessment will follow the full ESIA which is mandatory for this type of project under the current Kosovo environmental legislation. The works on Mihaliq dam encompass (i) earth works including clearing the construction site, removal of greenery, removal of top soil. As a result of these activities generation of large quantities of mineral waste, organic waste and other types of waste is expected. (ii) Water management works redirecting existing streams in order to conduct construction works are required and which may cause water turbidity, pollution with heavy metals, organic waste, suspended solids, cause reduced oxygen presence in water and in general lower the water quality level which can subsequently negatively affect animal as well as human health. (iii) Operating of heavy machinery and transportation vehicles may result in increased noise and vibrations in the immediate surrounding resulting in negative health effects to present workers and disturbance of animals. In this specific case, amphibians, fish and birds (e.g. stork) will be mostly affected. (iv), Potential influence on water quality and biological communities of both the lake (water reservoir) and the Sitniza river subsidiary concerned are possible, but not yet known and will depend on the technical design of the dam and reservoir. Other effects may also include: (v) Potential pollution of the reservoir, particularly due to run-off and human activities; (vi) Deposit and spillage of domestic or hazardous substances (pesticides), in the watershed and vicinity of the project, (vii) Impact to ambient air due to heavy machinery during the construction and maintenance, but also changes in water regime; (viii) Land cover and the stability of the soils; (ix) Landscape pollution, (x) Loss of habitat which mostly consist of agricultural, anthropogenic areas.

Works related to sub-component 1a, IL Canal and Gazivoda dam rehabilitation, since encompassing rehabilitation works only and no additional works on widening or extension of the IL canal will be financed, are expected to be smaller scale construction works (especially in comparison to Mihaliq dam development). As such, no adverse significant, irreversible impacts are expected to result from their implementation. Potential impacts will be localized and temporary, predictable and typical for rehabilitation works: (i) Erosion in areas along the canal which present a steep slope; (ii) Impacts from inadequate sewage systems in housing near the canal and from work camps, (iii) Excavation of construction materials and all different kinds of solid waste previously dumped near the IL canal, (iv) Vegetation removal, (v) Potential pollutant discharges in the canal due to works; (vi) Noise and air emissions during the works; (vii) Animal and human disturbance.

This also partially, and to the smaller scale, applies to and component 2 activities which envisages

only light concrete work and equipment purchase as those that might produce any environmental impact. Aforementioned impacts are typical and predictable relatively easy to mitigate.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

Many potential indirect impacts of potentially associated projects in the construction and operational phase of the project have been discussed, including construction of Kosovo C power plant, water treatment plants, possibility of increased irrigation, and more. The preliminary assessments showed that these investments are predominantly stirred by other factors and circumstances and would develop independently from the Water Security and Canal Protection project. Potential impacts can be grouped in two themes: (i) potentially associated projects and (ii) impacts from development of Mihaliq emergency reservoir, the second being already elaborated in the previous section (II A.1).

IL Canal and Gazivoda dam present existing and operating water distribution and management infrastructure. Although these improvements will most certainly benefit already planned projects, none of them occurred as a result of the planned IL Canal improvements. Works on this infrastructure consist of repair and rehabilitation activities impacting, in the long term, mainly its efficiency and water quality and both in the positive sense. Amongst other things, as a result of project subcomponent 1a implementation, improvements in water quality and abundance along the IL Canal is expected. Additionally, even if a reservoir would be built along the IL Canal and meeting the legally-mandated minimum environmental flow for the Iber/ Sitnica river, estimated at 0.50 m³/sec in monthly average or 1.5 m³/sec in monthly peak, can be easily accomplished given that the “as-designed” canal discharge ranges from 3 to 15 m³/sec.

Currently, LC canal feeds 2 large secondary irrigation canals: Hamidi-Vasileve and Besi-Gracanka. In theory, changes in water abundance could impact agriculture practices, however, it is unlikely scenario in this case since: (i) studies have shown that market access/conditions, rather than water, are the primary constraint to agriculture in the service area, (ii) no irrigation expansion projects will be financed from this project, (iii) agricultural sector is not very developed in this part of Kosovo and the Government of Kosovo has no specific plans to promote irrigation expansion in the near future.

Although there is a number of planned off-takes from the Iber canal (a new power plant Kosovo C, a new water supply and intake for Pristina and Mitrovice water supply), these planned investments are not considered to be associated/linked with the present project because they are expected to proceed with or without the canal upgrading. Each of the planned projects will have an EIA carried out under national law and/or the requirements of involved IFIs (e.g. KFW) or private investors.

Main existing road accessing the Mihaliq dam will probably be rehabilitated, and short stretch of road constructed, due to planned construction works as well as the operation of dam. Impacts related to increased accessibility of the area will be considered in the full ESIA.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

Currently, it is not possible to close the Ibër canal even for a few hours for maintenance, cleaning or any unforeseen emergency. For this purpose option of several smaller reservoir vs ERM were discussed and analyzed. The development of Mihaliq reservoir was chosen (although still not confirmed) as favorable solution due to two main factors:

- (i) The topography of the location allows building the reservoir with the required storage size

(around 3 million m³). This size can bridge demands from inter alia the new KRPP Power Plant, the new treatment plant in Shkabaj, and irrigation peaks in case formerly-irrigated areas are restored.

(ii) There is no need for resettlement of inhabitants. The large surfaces of land are already state owned (only a limited voluntary acquisition of farm lands will be sought). In addition to unforeseen emergency, issues of: (i) bridging the peak demands, (ii) decreasing water turbidity after rain episodes making water incompliant with bulk consumers demands such as Pristina Water Company, and (iii) satisfying long-term increase in population and irrigation were considered as well.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The Borrower, ILC, in line with the project categorization and preliminary environmental and social screening as well as Feasibility Study for the prospective works and component-level preliminary designs, prepared Environmental Impact Assessment Framework (ESIAF) with Environmental and Social Management Framework (ESMF) for both rehabilitation works on the existing infrastructure (Gazivoda dam and water canal) and the planned new Mihaliq dam and reservoir.

Based on project components, the following activities are subject to the ESIAF:

- a. Works for canal repair and increased stability and for protection against renewed physical damage from landslides, pollution and unstable soils at canal works;
- b. Equipment for modernization and urgent repairs of the optimized operational schedule of the Gazivoda reservoir and dam – guidance and timeline on what and when will be prepared for the rehabilitation works;
- c. Development of Mihaliq emergency/balancing reservoirs along the canal – impacts and mitigation measures that are identifiable at the feasibility stage, identification of missing information and defining ToR for the ESIA to be conducted before construction commencement.

Kosovo environmental legislation does not require full ESIA for canal and dam rehabilitation works therefore ESIAF presents impacts assessment for Gazivoda dam and IL Canal rehabilitation, in the present environmental context and for known technical design. For Mihaliq dam and emergency reservoir (ERM), ESIAF presents a preliminary assessment aiming at identification of potential impacts that need special attention in the full ESIA and identifies site investigation and monitoring that needs to be done for the full ESIA .

Based on ESIAF findings, ESMF was prepared as a guiding document which defines environmental and social screening, mitigating, monitoring and auditing procedures and management plans for the project activities. The documents required for different activities under project include, EMP checklists, EMPs, and EIAs.

For Gazivoda dam and IL Canal rehabilitation appropriate due diligence draft document or templates were prepared as a part of ESMF: (i) Site specific Environmental Monitoring Plan (EMP) template, including environmental monitoring plan and (ii) overall EMP Checklist prepared for the environmental management of the works related to all canal rehabilitation and safety enhancement. While site specific EMPs are to be applied to construction and other works in specific circumstances that can have more significant or lasting impact, EMP Checklist presented in the ESIAF with ESMF is used for small scale works that have predictable, typical effect that can be easily mitigated with standard and generally applicable measures. A particular EMP Checklist would apply per section of canal on which works would be carried on. Both, EMP and

EMP Checklist will become an integral part of the bidding documentation. They should be finalized by works contractor and supervising engineer, as well as approved by the ILC and WB Environmental Specialist and disclosed, before commencement of works.

The suggested mitigation measures identified for ERM, will be reevaluated and adjusted based on conclusions of full ESIA. For Mihaliq reservoir a full ESIA will be prepared according to Kosovo environmental legislation, and according to WB procedures, during the project implementation.

The project will support installation of the new instrumentation plan and monitoring (as part of the SCADA turnkey contract) to determine what if any other safety improvement measures are required for Gazivoda dam. Therefore CS, QA, Framework O&M and EPP were prepared for existing dam. PoE will prepare updated / detailed dam-safety assessments and the associated safety plans, e.g. O&M, and EPP, during project implementation, but prior to works commencement.

For Mihaliq dam (ERM), draft construction supervision (CSP) and quality assurance plan (QAP); frameworks for the Operation and Maintenance (O&M) plan and Emergency Preparedness Plan (EPP) were prepared prior to appraisal. Detailed Construction Supervision and Quality Assurance Plan and Instrumentation plan; updated / detailed dam-safety assessments and the associated safety plans (e.g. O&M plan and EPP) for Mihaliq dam should be prepared significantly prior to preparation of detailed design and specific ESIA /ESMP.

The borrower prepared Resettlement Policy Framework to address potential land impacts and acquisition temporary and permanent for both canal rehabilitation works and Emergency Reservoir sub-project. ILC legal department will formally process any land acquisition for the need of the project. However once the project implementation starts ILC will have to have external support to be able to comply with World Bank Operation Policy 4.12.

Strengthening the ILC capacity is necessary to implement WB safeguards and the national environmental requirements. The key safeguards personnel on the ILC-PIU (at least one "safeguards officer") would be identified at project appraisal and most probably would be the head of the Legal Department of ILC. The identified personnel would undergo WB safeguards training in the first year of project implementation (via the project budget, component 3). A consortium of international-and-national implementation consultants would be recruited under competitive selection after project approval, to support the Government/PIU with detailed design, safeguards, and construction supervision. The safeguards officer on the ILC-PIU (legal department) would be tasked with the overall oversight of project safeguards (in coordination with the Ministry of Environment and Spatial Planning), including overseeing the activities and deliverables of the aforementioned safeguards implementation consultants. [Prior to project appraisal, the Bank assisted ILC to undertake "advance procurement" of an individual international expert, selected competitively, to help the ILC-PIU with all procurement activities, including procuring the aforementioned project-implementation consortium as well as the dams Panel of Experts (POE) as per OP4.37].

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Key stakeholders to the project and consultation procedures are Iber-Lepenc Canal Corporation, Ministry of Economic Development, and Ministry of Environment and Spatial Planning.

The ESIAF with ESMF, and RPF were disclosed on February 10, 2016 on ILC web sites where they remained available to public for two weeks. Documents were also available in hard copy on

premises of ILC, Vushtrii municipality as well in Northern part of the Kosovo more specifically Zubin Potok in English, Albanian and Serbian language. In parallel with publishing the ESIAF with ESMF, call for comments was issued, with electronic and postal addresses at disposal for sending comments. Public consultations would take place in Pristina on February 26, 2016, Zubin Potok on February 25, 2016, and Vushtrii municipality on February 23, 2016. All relevant comments and Public Consultation Minutes would be included in the final version of ESMF.

The WB disclosure and consultation procedures apply also to the other environmental due diligence documentation developed during the project implementation such as EIA for Mihailiq reservoir and relevant EMPs or EMP Checklists for works. Public consultation invitations, announcements, list of attendants, summaries of comments received, etc. should be collected and attached to the project/sub-project ESIA/ESMFs/EMPs for InfoShop disclosure. The documents are only considered final when public consultation minutes and disclosure conclusions are included to the document.

Prior to appraisal following Dam Safety documents were disclosed: a) For Gazivoda dam: Construction Supervision (CSP) and Quality Assurance Plan (QAP); Framework Operation and Maintenance (O&M) plan and Framework Emergency Preparedness Plan (EPP); b) For the new dam: draft Construction Supervision (CSP) and Quality Assurance Plan (QAP); Framework Operation and Maintenance (O&M) plan and Framework Emergency Preparedness Plan (EPP).

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	12-Jan-2016
Date of submission to InfoShop	10-Feb-2016
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
Kosovo	10-Feb-2016
<i>Comments:</i> The ESIAF with ESMF is available on the web site of ILC from February 10, 2016 for two weeks. In the same time, a hard copy of the documents was available for consultations at the reception of ILC premises in Pristina, Zubin Potok and Vushtrii municipality.	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	12-Jan-2016
Date of submission to InfoShop	10-Feb-2016
"In country" Disclosure	
Kosovo	10-Feb-2016
<i>Comments:</i> The RPF is available on the web site of ILC from February 10, 2016 for two weeks. In the same time, a hard copy of the documents was available for consultations at the reception of ILC premises in Pristina, Zubin Potok and Vushtrii municipality.	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

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C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment			
Does the project require a stand-alone EA (including EMP) report?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
OP/BP 4.12 - Involuntary Resettlement			
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Is physical displacement/relocation expected?	Yes [<input type="checkbox"/>]	No [<input checked="" type="checkbox"/>]	TBD [<input type="checkbox"/>]
Provided estimated number of people to be affected			
Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods)	Yes [<input type="checkbox"/>]	No [<input type="checkbox"/>]	TBD [<input checked="" type="checkbox"/>]
Provided estimated number of people to be affected			
OP/BP 4.37 - Safety of Dams			
Have dam safety plans been prepared?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
OP 7.50 - Projects on International Waterways			
Have the other riparians been notified of the project?	Yes [<input type="checkbox"/>]	No [<input checked="" type="checkbox"/>]	NA [<input type="checkbox"/>]
If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Has the RVP approved such an exception?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
The World Bank Policy on Disclosure of Information			
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
All Safeguard Policies			

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

III. APPROVALS

Task Team Leader(s):	Name: Ahmed Shawky M. Abdel Ghany	
<i>Approved By</i>		
Safeguards Advisor:	Name: Agnes I. Kiss (SA)	Date: 18-Feb-2016
Practice Manager/ Manager:	Name: Steven N. Schonberger (PMGR)	Date: 18-Feb-2016