

Environmental and Social Review Summary

Elazig Integrated Health Center

This Environmental and Social Review Summary (ESRS) is prepared by MIGA staff and disclosed in advance of the MIGA Board consideration of the proposed issuance of a Contract of Guarantee. Its purpose is to enhance the transparency of MIGA's activities. This document should not be construed as presuming the outcome of the decision by the MIGA Board of Directors. Board dates are estimates only.

Any documentation which is attached to this ESRS has been prepared by the Project sponsor, and authorization has been given for public release. MIGA has reviewed the attached documentation as provided by the applicant, and considers it of adequate quality to be released to the public, but does not endorse the content.

Country:	Republic of Turkey
Sector:	Infrastructure
Project Enterprise:	ELZ Sağlık Yatırım A.Ş.
Environmental Category:	B
Date ESRS Disclosed:	Revised: July 5, 2016
Status:	Due Diligence

****ESRS attachments were updated online on July 15, 2016.***

A. Project Description

Meridiam Eastern Europe SARL Luxembourg (Meridiam) has asked the Multilateral Investment Guarantee Agency (MIGA) to provide political risk insurance for its investment in the Elazig Integrated Health Campus (Elazig IHC or Project). The Project is part of the Turkish Health Public-Private Partnership Program (PPP Program) developed by the Turkish Ministry of Health (MoH) to increase capacity of public hospital infrastructure in the country. In the specific context of Elazig, the Project could increase the efficiency of health services for the region. MIGA has previously supported the PPP Program by issuing a guarantee to Meridiam for its investment in the Adana Integrated Health Campus and Yozgat Education and Research Hospital, both in Turkey.

The Project site is a vacant land plot in the Ulukent neighborhood in the Elazig Province, situated in the Eastern Anatolia region of Turkey designated by the Elazig Financial Office as a “public area requiring large land use”. The site is under the ownership of Ministry of Finance except for an area of 250 m², which once included a small military cemetery consisting of eight graves whose names are unknown. The cemetery was under the responsibility of the relevant military authority, the 8th Army Corps Commandership, and the eight graves have recently been transferred to another cemetery in Elazig following the approval of relevant institutions¹. The Provincial Directorate of Health has made an application to the Elazig provincial Financial Office for the allocation of the 250 m² area to the MoH to become a part of the IHC area.

¹ “The names of the graves are unknown. Seven of the graves are named as “unknown soldier” and one of the graves is named as “Bugler Hasan”.

The project footprint will cover 233,405 m² (including closed car parking area)) with a hospital area of 156,905 m². It comprises the development of an integrated health campus, consisting of two hospitals and one clinic, with a total capacity of 1,038 beds. In total the development will comprise an 888-bed main hospital, a 150-bed high security forensic psychiatric hospital, and a 60-unit oral and dental clinic. The complex will also include health support facilities, a commercial area, a technical unit building, a helipad, a 76,500 m² car parking area, and a trigeneration plant, consisting of three natural gas engines and a boiler system to supply all energy needs of the project.

The Project sponsors are a consortium of Meridiam and three Turkish companies, Ronisans Holding, Sila Group and Sam Yapi Sanayi ve Ltd. Sti. Under the Project Agreements, Elazig Sağlık Yatırım A.Ş. (ELZ), a special purpose vehicle (SPV) created for the Project and jointly owned by Meridiam, Ronisans, Sila and Sam, will be the Project enterprise and will be responsible for the construction, maintenance, and management of the facilities and for providing medical support services. The MoH will deliver medical care services once the hospital becomes operational. At the end of the Project's operating 25-year period, the facilities will be transferred to the MoH.

B. Environmental and Social Categorization

The Project is a Category B under MIGA's Policy on Environmental and Social Sustainability (2013) because the potential environmental and social impacts are limited, site-specific, largely reversible, and can be readily addressed through mitigation measures. Key environmental and social issues during construction include effects on air and water quality, soil and vegetation removal, increased noise levels and vibration, solid and liquid domestic and hazardous waste management and incidents related to occupational and community health and safety. During operation, key environmental and social impacts include generation of general solid and liquid waste, generation of hazardous waste (including medical waste and residual pharmaceutical waste), air emissions, and occupational and community health, safety and security.

C. Applicable Standards

While all Performance Standards (PS) will be applied to the Project, based on current information, it is expected that the Project will be managed in accordance with the following PSs:

- PS1: Assessment and Management of Environmental and Social Risks and Impacts
- PS2: Labor and Working Conditions
- PS3: Resource Efficiency and Pollution Prevention
- PS4: Community Health, Safety, and Security

PS5 (Land acquisition and Involuntary Resettlement) does not apply to this investment. The Project site is owned by the Treasury and allocated to the MoH for the Project. As the

site is vacant, no physical or economic resettlement is required. The 250 m² land tract is government-owned land and is currently being transferred to MoH.

The development of the Project is not expected to have adverse impacts on biodiversity and PS 6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources) is not applicable. PS7 (Indigenous Peoples) is not relevant to this project since indigenous communities are not present in the area. While impacts on cultural heritage are not anticipated, as part of the ESMS, MIGA will require a chance finds procedure in accordance with PS8 (Cultural Heritage).

In addition, the following World Bank Group Environmental, Health, and Safety (EHS) Guidelines are applicable to the Project:

- World Bank Group General EHS Guidelines
- World Bank Group EHS Guidelines for Health Care Facilities

D. Key Documents and Scope of MIGA Review

MIGA's review consisted of appraising environmental and social information submitted by Meridiam. The following documents have been reviewed by MIGA:

- Environmental and Social Impact Assessment (ESIA): Elazig Integrated Health Campus – August 2015
- Environmental and Social Action Plan: Elazig Integrated Health Campus - August 2015
- Stakeholder Engagement Plan: Elazig Integrated Health Campus – June 2015

In addition to reviewing the above documents, MIGA's environmental and social specialist visited the Project site in early March 2015. The visit included a walk-over of the Project site and meetings with representatives of the Project sponsors, local government officials and local communities. No material changes have been identified between the site visit outcomes and the relevant documentation which has been reviewed.

E. Key Issues and Mitigation

PS1: Assessment and Management of Environmental and Social Risks and Impacts

Environmental and Social Assessment:

An Environmental and Social Impact Assessment (ESIA) and a framework Environmental and Social Action Plan (herein referred to as ESMP) were completed for this project in July 2015 and updated in August 2015. The ESMP includes a description of the mitigation measures during the construction and operation phases of the Project. According to Turkey's EIA Regulation, the Project is required to submit an ESIA and relevant management plan for approval from the Ministry of Environment and Urban Development (MEUD).

The Project is in the process of obtaining the construction permit and will obtain the operational environment permit, as required per the MEUD, which will cover wastewater discharge, air emissions, noise, and the temporary waste storage. The site has obtained an excavation permit as required by local authorities. Excavation works have commenced. ELZ has developed a Traffic and Occupational Safety Plan for this phase of the Project.

ELZ shareholders retained an independent environmental consulting firm (ELC Royal Haskoning) to undertake the environmental and social works and prepare the documents in line with IFC Performance Standards (2012), EBRD Performance Requirements (2008) and applicable sub-sectoral environmental and social guidelines, and WBG EHS general and sector-specific guidelines. The documentation presents baseline information, potential impacts and risks, and mitigation measures for the Project. The ESMP provides a framework for developing required management and monitoring plans per the risks identified for both construction and operations.

Key risks and impacts identified for the construction phase of the Project include health and safety risks intrinsic to construction activities such as physical hazards related to the use of machinery and vehicles, management of hazardous substances, increase of dust emissions from excavation and noise emissions from vehicular traffic and machinery operation. During operation of Elazig IHC, potential ESHS risks include: exposure and spread of infectious diseases induced by handling of materials and improper waste contaminated with blood-borne pathogens; exposure to hazardous materials and waste including specific toxic chemicals and gases used in sterilization of medical equipment, formaldehyde, mercury, solvents, etc.; inadequate solid and liquid waste management; and risks associated to inadequate discharge of contaminated wastewater. The risk of fire is also possible due to the storage, handling, and presence of chemicals, pressurized gases, boards, plastics and other flammable substances. It is expected that proper implementation of Environmental and Social Management System (ESMS) during the construction and operation of the Project will avoid and/or minimize risks and impacts to the extent possible ensuring safe working conditions for the workers and neighboring community.

Management Program:

ELZ is required to develop and administer an ESMS following the requirements outlined in PS1, the ESMP, and those outlined in the Environmental and Social Action Plan (ESAP) developed by MIGA in coordination with ELZ. RMI Ronisans Medikal Insaat Taahhut A.S., which will be responsible for construction, has obtained ISO 9001 Quality Management, ISO 14001 Environmental Management and ISO 18001 Occupational Health and Safety Management certifications. The ESMP delineates responsible parties for the implementation of the mitigation measures, the timing, monitoring, and audit requirements. The ESMP focuses on the avoidance of impacts, and where this is not possible, presents technically and financially feasible and cost-effective mitigation measures to minimize or reduce possible impacts to acceptable levels. Detailed environmental, social, health and safety (ESHS) management plans have been prepared based on the framework ESMP by

the Project for construction as part of the ESMS. Similarly, ESHS plans will be developed for the operation phase. ESHS plans will be required to meet MIGA's requirements, as detailed in the ESAP.

Organizational Capacity:

Roenesans has established an EHS department with responsibility and authority for all EHS matters. The corporate EHS department will be provided with sufficient authority and resources to achieve effective and continuous E&S performance. EHS orientation and training programs will be conducted during construction and operational phases of the project. In addition, the company procured the services of a qualified environmental consulting services firm (Selin Ltd. Sti.), authorized by the Ministry of Environment and Urbanization, to verify the company's compliance with the local legal regulations and fulfill necessary reporting requirements to the national regulatory agencies during construction as per local 'Environmental Officer and Environmental Consulting Firms Regulation'.

Emergency Preparedness and Response:

An Emergency Preparedness and Response Plan (EPRP) was developed as part of the ESMS. The EPRP will be updated accordingly prior to the project operation phase. The plan details management procedures for issues related to occupational accidents, fire, fuel and chemical spills, as well as relevant roles and responsibilities. Contractors and sub-contractors will also be required to develop and prepare their own site-specific EPRPs in line with the overarching plan in the ESMS. The EPRP may be updated throughout the project lifetime as necessary.

Monitoring and Review

MIGA will require that detailed management plans include monitoring procedures of key parameters and indicators to evaluate potential adverse social and environmental impacts as relevant. ESHS management responsibilities, monitoring, and reporting requirements will be outlined within the procedures. Third party employers (contractors) will be managed and monitored by a procurement procedure that includes assessment of the third party performance.

Reporting of EHS indicators is being done internally, as per requirements of the certified management systems, and externally to the national regulatory agencies requiring E&S monitoring. The latter is being done by a licensed consultant company (Selin Ltd).

MIGA will require annual monitoring reports throughout the guarantee period.

PS2: Labor and Working Conditions

It is anticipated that the Project will create employment opportunities during the construction and operation phases. It is estimated that the construction phase will require approximately 3,000 workers. At the moment, the construction workforce consists of 490 direct employees, 87 Ronesans employees and approximately 403 subcontractors. The expected workforce requirement during the operation phase is anticipated to be 1,609 health service personnel and 303 administrative personnel to be employed by MoH, 20 administrative personnel to be employed by ELZ, and 2,023 service employees to be provided through third party service providers of the project company. First priority will be given to a local workforce while providing equal employment opportunities to women. Benefits to the local economy are expected due to the potential influx of immigrant workers.

During construction, worker camps will be located on site to accommodate non-local workforce. A worker camp has already been located on site to accommodate nonlocal workforce. Currently the camp has a 640-bed capacity dormitory but is expected to reach up to 2,620 bed-capacity. The camp site has services and utilities. An infirmary unit was established at construction site and the company signed an agreement with JHSU Company for clinical services and safety purposes. Ambulance service is also outsourced.

ELZ will manage on-site worker accommodation, which will have services and utilities in line with IFC's Guidance on Worker's Accommodation. Workers' accommodation arrangements will not restrict their freedom of movement or of association. Construction workers will be required to attend certified occupational health and safety trainings per local law requirements and will be provided competency-specific technical and awareness training related to their responsibilities on site. During operation, hospital workers will be trained as applicable on procedures developed to manage potential ESHS risks; for example, the safe management of medical and hazardous waste.

It has not been confirmed at this stage whether any retrenchment will occur as a result of the Elazig IHC Project and the potential closure of existing hospitals in the area. According to the Provincial Directorate of Health, rehiring of a significant number of staff may take place once Elazig IHC becomes operational. However, planning at the provincial government level is still ongoing for existing hospitals and no decision has been made official yet. Should there be any retrenchment as a result of hospital closures triggered by the operation of the Elazig IHC Project, MoH will develop a retrenchment plan in accordance with its own labor policy and Turkish labor requirements applicable to all MoH employees. Retrenchment of non-MoH employees will be managed in accordance with Turkish labor law as per their employment contracts. Although the project enterprise is not directly responsible to conduct retrenchment activities, it bears a responsibility to oversee that any relocation and integration of workforce to the Elazig IHC is done in line with MIGA's PS2 requirements.

Human Resources (HR) Policies and Procedures

Labor practices in Turkey are regulated by the Labor Law No. 4857 of 2003, which standardizes employees' work-related rights, working conditions and stipulates obligations

of employers and employees. Turkey also has an Occupational Health and Safety (OHS) Law and a Regulation of Workers Health and Safety that stipulate detailed criteria for safe working conditions at job sites. ELZ has developed a Human Resources (HR) Management Plan in accordance with Turkish Law and PS2, which promotes equal opportunity for employment and remuneration for men and women and requires that subcontractors and comply with human resource procedures and guidelines outlined in the Plan. The HR Management Plan also contains a staff grievance mechanism applicable to all direct and contracted employees. The grievance mechanism will be easily accessible and communicated to all staff.

ELZ has in place an OHS Management Plan for the construction phase of the Project and will be responsible for implementing the Plan and providing training for designated staff performing risk assessments, implementing safe operating procedures, following reporting requirements for accidents, incidents, and safety non-compliances. During operation, it will be required to assign an OHS manager, develop relevant procedures and update the OHS Management Plan accordingly. Employees will be provided training in all relevant environment, social, health and safety management topics, in particular OHS for handling hazardous materials and medical waste for workers and contractors. A Training Plan for the construction and operation phase is also in place as part of the ESMS as described in the ESMP.

Accident reporting procedures, including root-cause analysis, have been implemented. Records show that two lost time accidents were reported from the beginning of the construction start date (April 2016).

For the operation period, an OHS manager will need to be appointed by the company and OHS Management Plan and relevant procedures will be developed before the commissioning of the facility. Employees will be provided training in all relevant environment, social, health and safety management topics, in particular OHS for handling hazardous materials and medical waste. Per the ESAP, the company shall develop and implement relevant environmental, health and safety training as part of the operational phase ESMS as described in the ESMP.

Per the ESAP, ELZ will be required to assess sub-contractor compliance by conducting a compliance study in accordance with relevant items delineated in the ESMP and relevant management plans. ELZ has also developed procedures to manage sub-contractors as part of the ESMS to ensure that they are aware of and abide to environmental and social, OHS, and labor policies.

Supply Chain:

ELZ will undertake a review of the supply chain to identify potential risks and then integrate in its OHS management plan procedures and mitigation measures to address the identified risks. Contracts with sub-contractors will include EHS requirements and provisions consistent with PS2 to address labor issues including child and forced labor.

PS3: Resource Efficiency and Pollution Prevention

Baseline conditions were established for the study area through field measurements for air quality, noise, hydrology, hydrogeology, geology, soil quality, and terrestrial ecology. As a consequence of its previous use as a military training ground, the site has been highly intervened and has significantly lost many of its original natural characteristics. This section summarizes key ESIA findings and proposed mitigation measures to avoid and control potential impacts related to emissions and air pollution, noise and vibration levels, wastewater discharge, and solid, medical, and hazardous waste management among others, as delineated in the ESMP. ELZ has developed relevant ESHS management plans for the construction phase of the project as part of the ESMS. Per the ESAP, the Project is also required to develop and implement ESHS management plans for the operation phase in accordance with MIGA E&S requirements.

Wastewater

Elazig's domestic wastewater is collected and treated physically and biologically in the Elazig Municipality Wastewater Treatment Plant (WWTP) where ultimately all wastewater produced by the Project during construction and operation will be treated. The existing capacity of the WWTP is 69,984 m³/day and although it has not reached its maximum capacity, according to the Elazig Municipality Director of Environmental Protection the current design capacity and efficiency of the WWTP are inadequate for projected urban growth. As reported by Elazig Municipality, a modular treatment system with 50,000 m³/day capacity will be added to the existing WWTP with the objective of increasing its capacity to 120,000 m³/day. The WWTP expansion is expected to take place concurrently with the project construction.

During the Project construction and operation phases the total daily domestic wastewater generation of the Project is estimated to be 510 m³/day and 1,661 m³/day, respectively, which will be within the current treatment capacity of the Elazig Municipality WWTP. ELZ A.S. will obtain a wastewater connection permit since all domestic wastewater during all project phases will be discharged into the existing municipality sewer lines in accordance with Waste Management Regulation (Official Gazette No: 02.04.2015/29314).

Wastewater from medical wards (e.g. body fluids and excreta, anatomical waste), laboratories (e.g. microbiological cultures, stocks of infectious agents), pharmaceutical and chemical stores, and cleaning activities (e.g. waste storage rooms) will be collected via different piping systems and monitored before discharged into the sewer system and the wastewater generated during operation of the IHC is expected to be treated by the Elazig Municipality WWTP.

Wastewater contaminated with radioactive substances will be collected separately and will be monitored prior to being discharged into the sewer system per conditions set under the Regulation on Wastes Generated upon Usage of Radioactive Substances (Official Gazette Date/No02.09.2004/25571). Approval from the municipality will be required prior to discharging radioactive wastewater, per the referenced law. This authorization will be

obtained during the licensing process. Per the WBG EHS Guidelines for Health Care facilities the capacity of the municipality to receive this type of wastewater must be confirmed and a wastewater management plan completed.

Waste Management and Disposal

The production of solid, hazardous, medical and radioactive wastes is expected throughout different phases of the Project. Thus, a project-specific Waste Management Plan (WMP) covering site preparation and construction phases of the hospital has been completed as specified in the ESMP. The plan identifies all waste streams and some anticipated waste quantities, describes transportation and disposal requirements, and outlines waste management responsibilities. All waste streams will be managed and disposed of in accordance with Turkish regulation and WBG EHS Guidelines for Health Care Facilities. Wastes will be collected, segregated, stored, and transported separately from other wastes based on their physical, biological and chemical characteristics. Disposal will be done by a third party company and will consist of delivering it to the Elazig Municipality medical waste collection system and/or licensed medical waste sterilization/disposal plants. All domestic waste will be disposed at the Elazig Municipal landfill. According to the Elazig Municipality Strategic Plan a second lot at the landfill facility will become operational at the end of 2015. Per the ESAP, waste procedures will need to be updated as needed to specify detailed context-specific waste management activities during the operation phase.

Site preparation and construction include soil excavation activities which have already started at the Project site. It is estimated that 620,000 m³ excavation wastes will require off-site disposal of which roughly 201,000 m³ has been excavated to date. Approximately 127,000 m³ of the excavated material has been transferred to the approved excavated material storage area of Elazig Municipality 14.5 km away from the designated area, while the rest is being stored on site to be used as filling material during construction. Soil sampling conducted at the Project site during the ESIA phase did not show any sign of contamination.

Domestic waste generation during construction will include contaminated soils, sanitary and domestic wastes, and clean-up materials from accidental spills. The estimated domestic waste generation during the construction phase is 2,240 kg/day, assuming the number of workers is 2,000 at peak construction. Domestic waste during construction will be stored in waste containers and will be collected by the Elazig Municipality garbage trucks and transported to the municipal landfill 30 km from the site. Estimates for domestic solid waste generation assume that the hospital will produce approximately 2.4 tons/day during the operation of the Elazig IHC.

Generation of hazardous wastes, including medical and radioactive waste, will be a key impact during the operation of the hospital. The medical waste stream is expected to include infectious and pathologic, pharmaceutical, and sharp waste proceeding from

various processes at the hospital. Medical waste will be collected from the hospital and transported to the Elazig Medical Waste Sterilization Facility prior to being disposed in the municipal landfill. The annual medical waste generation for Elazig IHC was estimated at 322 tons (or 882 kg/day, assuming 1,038 beds). Collection and disposal of the medical wastes in the Project will be done in line with Regulation on Medical Wastes Control-Official Gazette Date/No: 22.07.2005/25883.

The radioactive waste stream is expected to include residual radionuclides proceeding from unused liquids from radiotherapy or laboratory research; contaminated glassware, packages or absorbent paper; urine and excreta from patients treated or tested with unsealed radionuclides, etc. Clean-up materials such as spill kits will also be managed as hazardous waste. Disposal will be done by firms authorized by Turkish Atomic Energy Authorization in accordance with regulation on Secure Transfer of Radioactive Materials and the Regulation on Management of Radioactive Wastes. In addition to Turkish regulations, the Project will follow waste management practices stipulated in WBG general and sector-specific EHS guidelines.

Air Emissions

Main sources of air pollution during the construction phase were identified as excavation works and movement of vehicles, and engine emissions from exhaust gas from construction equipment and road traffic. Principal pollutants resulting from these sources are dust and particulate matter (PM) from soil excavation and removal; and nitrogen oxides (NO_x), sulphur dioxide (SO₂) and carbon monoxide (CO) from exhaust of vehicles. Measurements for PM₁₀ and a dust dispersion modeling study were completed to establish baseline conditions and potential impacts within the study area. Test values are significantly below the associated limit values stipulated in the national regulations (IAPCR and RAMAQ), EU directive and WHO. Additionally, a vehicle movement analysis was performed to estimate baseline conditions for NO_x, SO₂, and CO emissions associated with construction activities. All values were under the maximum permissible limits in the national regulation (IAPCR).

Impacts on the air quality during the operation phase will be mainly related to the emissions from the trigeneration plant and boiler system. A dispersion modeling study was undertaken for NO₂, the most significant emission source from the mentioned systems. Hourly and annual values of NO₂ estimated from the trigeneration system are significantly below the associated limit values defined in the national regulations (IAPCR and RAMAQ), EU Directive and WHO Guidelines. Thus, impacts from pollutant and dust emission to the atmosphere is expected to be minimal during all phases of the Project. Monitoring and implementation of mitigation measures for the control of exhaust from all vehicles will be adopted per the ESMP.

Generation of greenhouse gas emissions during the operation of the trigeneration and boiler systems is expected to be 75,187 tons CO₂/year. The project will be required to quantify the direct and indirect emissions annually per PS3 requirements. The Project will be

expected to meet this requirement and undertake necessary actions to minimize these emissions.

Noise and vibration

Impacts from noise and vibration are expected to be moderate during the construction and operation of the hospital. Impacts during construction will be temporary and will result from the operation of construction equipment. Impacts during operation of the hospital will be caused by the emergency generators, helicopter movement and ambulance movements and will have longer lasting effects. Baseline measurements were taken for three representative points at the Project site and indicated that existing day, evening, and nighttime values comply with Turkish regulatory limits and IFC standards. A Noise Monitoring and Control Plan containing adequate monitoring procedures and mitigation measures (per local legislation and PS3) have been developed for the Project as part of the ESMS.

Water and energy use

Drinking and potable water during the construction and operation phases of the Project will be provided from the Elazig municipal water system. A 150 liters/day per capita consumption rate was selected yielding a daily water requirement of 300 m³/day assuming 2,000 workers. Water will be required for other construction-related activities such as dust suppression, spraying concrete, site clean-up, etc. An additional 210 m³/day water consumption rate has been assigned for construction activities. During the operation phase, there will be water uses related to general domestic and sanitary use, food preparation, sterilizers and autoclaves, etc. The water consumption rate for the Elazig IHC was estimated to fluctuate between 1,297 and 1,661 m³/day. Municipal water supply has been deemed adequate to fulfill these estimated requirements.

The estimated energy requirement for the hospital operation is 30 MW. A trigeneration plant, with total rated capacity of 5.5 MW, and a three boiler system with rated capacity of 10 MW each will be constructed on site to supply all energy, heating, and cooling needs during the hospital operation. Diesel fueled emergency generators located within central energy plant will be used to provide 100% backup power supply for the hospital buildings. Each generator will be equipped with a day fuel tank that will be sized to operate the engine for a minimum of 2 hours continuous operation at full load. During construction, the main energy source during construction will be diesel fuel for construction equipment and vehicles. Thus, a procedure will be developed to safely handle and store diesel fuel on site.

Energy efficiency will be considered in the design and operation of the Project. Energy and water resources management plans have been recommended as part of the ESMS, in conformance with PS3, to optimize resources use.

PS4: Community Health, Safety & Security

The Project site is vacant, except for the prefabricated facility at the construction site that has been installed by ELZ during excavation activities. The area is located within Elazig central district, where urban development is advancing to the west and southwest of the site. The site is nearby individual houses located to the south, north, and west, and residential areas of Ulukent and Dogukent neighborhoods. There are three schools in the close vicinity of the Project area and a minibus station located to the south. These features are within the Project's study area. The site has been declared a "medical infrastructure area" according to the municipal zoning plan.

The risks and impacts of the Project, in the context of health and safety of off-site communities, will be managed through a Community Health and Safety Management Plan to be developed and implemented by ELZ. The Project could pose risks to the surrounding communities, typically during construction activities caused particularly by increased traffic of heavy machinery; noise and dust levels exacerbated during construction; increased traffic flows; and fire and life safety related issues. An interim traffic study has been completed and the results included in the ESIA. This study will need to be finalized prior to date on which construction permit is obtained.

Per the ESIA, traffic is expected to increase and have impacts related to air emissions and traffic safety to neighboring communities. The ESMP outlines mitigation measures to reduce potential impacts from construction activities and increased vehicular traffic. A traffic management plan has been developed to control times and routing of vehicles during the construction phase. A Community Health and Safety Management Plan has also been developed per PS4 requirements and WBG EHS Guidelines as outlined in the ESMP. These procedures contain traffic safety measures for the residents and mitigation measures for noise, vibration and dust in the community in accordance with national and applicable international standards.

The Project is being designed and constructed in accordance with Turkish Regulation on the Protection of Buildings from Fire (issued on: 19.12.2007, Official Gazette ("OG") No: 26735). Relevant technical requirements, including those delineated in applicable international standards, were integrated into the Elazig IHN design and construction tender documents, e.g. fire suppression systems will be available throughout the hospital and a fire alarm system will be designed and installed in accordance with the requirements of U.S. National Fire Protection Agency (NFPA) Code 72. Fire control and mitigation measures for the construction phase of the Project are contained in the Emergency Preparedness and Response Plan prepared by ELZ. During the operation, the Project will comply with Turkish regulations on worker health and safety and fire signage and provisions for life and fire safety under PS4 and the WBG EHS Guidelines.

A Life and Fire Safety Master Plan will be developed for the Project in accordance with WBG EHS Guidelines. A third party audit will be conducted to assess gaps in local life and fire safety requirements and identify acceptable international standards to furnish such gaps. Per WBG EHS Guidelines, the Project will obtain the design and post-construction life and fire safety certifications from a professional acceptable to MIGA confirming that the designs are in accordance with internationally recognized LFS standards. This will

include special measures taken for the forensic psychiatric hospital in order to avoid additional risks that can be posed by enforced security in case of fire.

The project is located in 2nd degree earthquake zone per local classification. Necessary criteria (e.g. appropriate standards, regulations, etc.) will be taken into account in the design of the facilities to address the seismic risks considering the specific parameters defined for the design of structures located in seismic zones. The Hospital will be constructed in line with such criteria presented in the Geotechnical Survey Report² within the ESIA, Turkish Regulation on the Structures to be Constructed in Disaster Areas, and the Turkish Regulation on the Buildings to be Constructed on Earthquake Zones (14.07.2007 O.G. No: 26582). The EPRP will be required to include management procedures for issues related to natural disasters, including earthquakes. It is indicated that the pendulum system resist earthquakes up to 10 points in Richter scale while the most significant earthquake was 6.8 in Elazig center district up to date. Final project designs have been approved by MoH.

Per the ESAP, ELZ will make available the construction inspection records to MIGA certifying that the designs comply with local or internationally recognized seismic building codes. Similarly, before the commissioning of the facilities, the company shall submit a letter certifying that constructions have followed the approved designs and necessary approvals were obtained from the municipality.

Security for the hospital will consist of an access control system of electronic card readers and electronic identification cards for employees, alarms, telecommunication devices and closed-circuit television cameras. The high security psychiatric unit will be enhanced with security guards to be managed directly by the gendarme, a branch of the Turkish armed forces, in accordance with a triple protocol between the Turkish Ministry of Justice, Ministry of Interior, and the MoH. Site Security Security and Risk Assessment procedures were developed as part of the ESMS as described in the ESMP. Updated procedures will be required during the operation phase, as per the ESAP.

F. Environmental Permitting Process and Community Engagement

Turkish EIA Regulation stipulates that hospitals with a capacity of 500 beds or more are listed in Annex I of EIA Regulation and hospitals with a capacity of 50 – 500 beds are listed in Annex II of the same regulation. The Elazig IHC Project has a bed capacity of 1,038 beds and was evaluated as an Annex I Project under the 16th Article of the EIA Regulation. The Project was submitted to the Ministry of Environment and Urban Planning for evaluation. Per Turkish regulations operational permits will be required for wastewater connection and discharge, air, noise, and temporary hazardous waste storage. Annual environmental audits are also required under the same regulation. A construction permit is also required, which the project company is in the process of obtaining.

Stakeholder engagement activities for the Project started during the scoping stage and continued during the preparation of the ESIA report. A public consultation meeting was held on 18th December 2014 in Elazig Central District, where 52 people attended. The

² Report prepared by Kilci Mühendislik, Müşavirlik Proje İnşaat Taahhüt Sanayi ve Ticaret Ltd Şti., August 2014

meeting was announced via various advertisements in two newspapers and through handouts. Face-to-face meetings were also held with community leaders in 20 neighborhoods within the project area. Project details, ESHS risks and impacts, project delays, and other relevant topics were discussed during the meetings. Additionally, public participation was requested through the distribution of feedback forms. No grievances or negative concerns were expressed by attendees. In general, local stakeholders are aware of public benefit of the Project.

A Stakeholder Engagement Plan (SEP) has been developed for the Project. The SEP clearly identifies all project stakeholders including government agencies, NGOs, neighboring communities, and the general public. It includes a grievance mechanism that provides an open channel for continuous and structured communication between management and the general public and describes a detailed strategy to place, investigate, respond, and file a given complaint and the expected timeline associated with these actions. Through this process, the public can express individual and collective concerns and issues regarding the construction and operation of the facility. The SEP also outlines communication methods appropriate for each Project phase, including publications through a corporate website.

G. Availability of Documentation

The following documentation is available electronically as PDF attachments to this ESRS at www.MIGA.org.

- Environmental and Social Impact Assessment: Elazig Integrated Health Campus, August 2015
- Environmental and Social Action Plan: Elazig Integrated Health Campus, August 2015
- Stakeholder Engagement Plan: Elazig Integrated Health Campus, June 2015

It is also available for viewing at the following locations:

- www.pppelazighastanesi.com

MIGA supports its clients (as defined in MIGA Policy on Environmental and Social Sustainability) in addressing environmental and social issues arising from their business activities by requiring them to set up and administer appropriate grievance mechanisms and/or procedures to address complaints from Affected Communities.

In addition, Affected Communities have unrestricted access to the Compliance Advisor/Ombudsman (CAO), the independent accountability mechanism for MIGA. The CAO is mandated to address complaints from people affected by MIGA-guaranteed business activities in a manner that is fair, objective, and constructive, with the goal of

improving environmental and social project outcomes and fostering greater public accountability of MIGA.

Independent of MIGA management and reporting directly to the World Bank Group President, the CAO works to resolve complaints using a flexible, problem-solving approach through its dispute resolution arm and oversees project-level audits of MIGA's environmental and social performance through its compliance arm.

Complaints may relate to any aspect of MIGA-guaranteed business activities that is within the mandate of the CAO. They can be made by any individual, group, community, entity, or other party affected or likely to be affected by the environmental or social impacts of a MIGA-guaranteed business activity. Complaints can be submitted to the CAO in writing to the address below:

*Compliance Advisor/Ombudsman
International Finance Corporation
2121 Pennsylvania Avenue NW Room F11K-232
Washington, DC 20433 USA
Tel: 1 202 458 1973 Fax: 1 202 522 7400
E-mail: cao-compliance@ifc.org*