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475 BEDS YOZGAT EDUCATION AND RESEARCH HOSPITAL

Environmental and Social Management Plan (ESMP)

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REPORT



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Table of Contents

1.0 INTRODUCTION	4
1.1 Objectives of ESMP	4
1.2 Project Description	4
1.3 Location of the Project	5
1.4 ESIA Approach and EIA Process	5
1.4.1 Environmental and Social Impact Assessment (“ESIA”)	5
1.4.2 Environmental and Social Impact Assessment	6
2.0 REGULATORY FRAMEWORK	6
2.1 National Legislation	7
2.2 International Standards	8
Equator Principles	8
IFC Performance Standards	8
3.0 IMPACT ASSESSMENT AND MITIGATION PLAN	9
3.1 Construction Period	9
3.2 Operating Period	10
3.3 Decommissioning	10
4.0 MONITORING	11
4.1 Construction Period	11
4.2 Operating Period	17
4.3 Decommissioning	21
4.4 Health and Safety	22
5.0 STAKEHOLDER ENGAGEMENT PLAN	26
5.1 Methods and Activities	26
5.2 Grievance Mechanism	27
5.3 Monitoring, Evaluation and Reporting	28
6.0 INSTITUTIONAL STRENGTHENING	28
6.1 Training and Employment	28
6.2 Procurement of Goods and Services	30
7.0 INSTITUTIONAL ARRANGEMENTS	31
7.1 Construction Phase	31



ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

7.2	Operation Phase	32
7.3	Decommissioning	32

TABLES

Environmental and Social Mitigation and Monitoring Plan (Construction Phase)	11
Environmental and Social Mitigation and Monitoring Plan (Operating Phase)	17
General Occupational Health and Safety Issues	22
Training Plan	29
Training Plan-Operation	30



1.0 INTRODUCTION

The present Environmental and Social Management Plan (“ESMP”) has been prepared for the 475-Bed Yozgat Education and Research Hospital Project is based on a Public Private Partnership scheme. The construction period (investment) is 2 years whereas the operation will be 25 years.

When the Education and Research Hospital starts to operate at full capacity, it will provide healthcare services in modern facilities with 184 specialist physician, physician associate, practicing physician and 437 auxiliary staff. Commercial areas such as florist shop, conference center, pharmacy, cafeteria, etc. may also be developed at the campus

The purpose of the project is to improve the quality of healthcare services and the number of beds by constructing a new healthcare facility in Yozgat. When the project is completed it will provide high quality healthcare services for Yozgat as well as surrounding cities and residency areas.

1.1 Objectives of ESMP

The ESMP provides assessment of environmental and social impacts of the activities undertaken during the project and suggests mitigation measures, definition of the roles and responsibilities of stakeholders and monitoring of the project operations. The following specific objectives are main results for preparation of ESMP:

- To comply with International Finance Corporation (“IFC”) Performance Standards and European Bank for Reconstruction and Development (“EBRD”) Performance Requirements as well as the National Environmental Laws and Regulations,
- To address the negative environmental and social impacts arising from the construction activities.
- To address the hospital wastes arising from the project operations and ensure its safe disposal as regards to local and international environmental standards.

1.2 Project Description

Yozgat Health Campus is an Education and Research Hospital project which will have a bed capacity of 475 beds. Project will be realized via PPP investment-financing model. The investment period of the project is 2 years and operation period of it is 25 years.

Health Campus will have 128.118,5 m² (not include commercial areas) total with 82.600 m² main hospital area, 41.148 m² car park area and 4.370 m² technical area. Yozgat Education and Research Hospital will satisfy the need for healthcare services of Yozgat province and the surrounding residency areas.

When the Education and Research Hospital starts to operate at full capacity, it will provide healthcare services in modern conditions with 184 specialist physician, physician associate, practicing physician and 437 auxiliary staff.

As a summary,

The following facilities are present within the Yozgat Education and Research Hospital:

- There are 132 policlinic rooms.
- Bed capacity of Newborn Intensive Care unit (ICU) is 27.
- Bed capacity of Intensive Care unit (ICU) is 34 (5 of which are Isolated Intensive Care Units). Thus there are totally 61 intensive care beds.
- There are 20 dialysis units at the project
- There is Extracorporeal shock wave lithotripsy (ESWL)



- There is an Automatic System Center TPN Precipitation Unit at the project.
- Project has an acute bed capacity of 406. There is a discrete unit, having separate entrance, designed for the arrested patients at the ground floor and eight of the acute beds (four for male, four for female) are booked at this unit.
- At the surgery suite; 15 beds patient preparation area and 20 beds patient waking up area are included.
- There are 15 operating rooms. (13 operating room + 2 daily operating room)
- There is an Oncology unit having ten chemotherapy seats.
- There is a Cancer Early Detection, Screening and Education Center.
- There is an advanced pathology unit.
- There are 2 gamma cameras and 1 PET CT reserve area for nuclear medicine unit.
- There are 8 beds LDRP- Labor, delivery, recovery, post partum.
- There is 1 xray, 1 ultrasonography and 1 CT device at the emergency scanning center.
- There are 1MR, 2 CT, 4 x-ray, 4 Ultrasonography, 4 Doppler Ultrasonography, 2 Mammography, 4 EKO, 2 Bone Densitometry at the Radiology Department.
- 41.148 m² area is booked for car park.
- Closed area per bed ratio is 183 m²/bed.

1.3 Location of the Project

The Project Site is located in Yozgat province in the Central Anatolia Region of Turkey. The area of influence of the Education and Research Hospital project is the area in which a direct or indirect impact on the biological, physical and social components might occur. A Study Area (SA) is defined for each environmental and social component.

1.4 ESIA Approach and EIA Process

1.4.1 Environmental and Social Impact Assessment (“ESIA”)

The requirements from IFC and EBRD regarding the Environmental and Social Impact Assessment process and outcomes differ depending on the category of the project. Category A projects require a full Environmental Impact Assessment while for Category B projects IFC's and EBRD's requirements are less stringent.

The Project is evaluated against Project Category B IFC and EBRD Requirements, therefore the scope and content of the ESIA is aligned with the IFC and EBRD expectations for such a project.

A bankable ESIA needs to follow both national legislation and international standards. IFC Performance Standard 1 (IFC 2012) lists overall objectives for an ESIA, including:

- to identify and assess social and environmental impacts, both adverse and beneficial, in the project's area of influence;
- to follow the mitigation hierarchy of avoidance, minimization of impacts, mitigation and if needed compensation, with respect to adverse impacts to workers, other affected people, and the environment;
- to conduct meaningful consultation; and



- to promote improved social and environmental performance of companies through the effective use of management systems.

The ESIA will be prepared in accordance with both Turkish Regulations and International Standards. As described in IFC Performance Standard 1 and EBRD Performance Requirements 1, main components of the assessment will include:

- the potential environmental and social impacts of the Project throughout the full development cycle – construction, operation, closure;
- a public consultation and disclosure plan to ensure that local communities and other key stakeholders are informed of the Project and have an opportunity to express their opinions concerning the Project;
- proposed mitigation activities to minimize adverse environmental impacts;
- the nature and significance of residual impacts (those adverse impacts that occur after mitigation has been applied) and ongoing monitoring and management plans to address them;
- the nature and significance of cumulative impacts; and
- a social management plan to maximize benefits to the local community and promote a sustainable economy.

EBRD's Perspective for Healthcare Organizations

For private healthcare providers, the consequences of poor standards of quality, safety and ethics can be disastrous. Ethical and responsible conduct is not only important for public relations, but also a necessary element in risk management. The reputation of a healthcare organization is critical in influencing patients' choice in seeking services.

Hospitals with good reputations also benefit from high staff retention and recruitment of the most qualified professionals. Quality improvement is linked to better performance as boosting quality tends to reduce costs.

From the EBRD's perspective, when we finance healthcare organizations, we have a stake in the reputation of our clients' commercial performance and their values and standards.

1.4.2 Environmental Impact Assessment ("EIA")

In the Environmental Law, the general scope of the Environmental Impact Assessment (EIA) procedure is set out in Article 10. Within this legal framework the EIA Regulation has been first put into force by its publication in the Official Gazette No. 21489 on February 7, 1993. The EIA Regulation was subsequently revised several times and reissued in Official Gazette on June 23, 1997, June 6, 2002, December 16, 2003, July 17, 2008. The final version was published recently on October 3, 2013 in the Official Gazette No. 28784 and is currently in force.

For the projects listed in Annex-I an Environmental Impact Assessment Report is prepared and submitted to Ministry of Environment and Urbanisation (MoEU) and more comprehensive EIA procedure including Public Participation Meeting will be followed. At the end of the full EIA procedure Environmental Impact Assessment is Positive or Environmental Impact Assessment is Negative decision is obtained.

For the projects listed in Annex-II of the EIA Regulation, a Project Description File (PDF) is prepared according to 16th Article of the EIA Regulation and submitted to the Provincial Directorates of MoEU. The PDF is investigated according to the criteria given in the Annex-IV of the Regulation. At the end of the investigations and evaluations on the PDF the final report is presented and "Environmental Impact Assessment Is Required" or "No Environmental Impact Assessment Is Required" decision is given. This decision is announced by the Governor to the public. For the projects that have "No Environmental Impact Assessment Is Required" decision the investment should be started within 5 years otherwise the decision will be invalid. For the projects that have "Environmental Impact Assessment Is Required" decision, the



reasoned decision is presented to the Ministry. These projects are subjected to Environmental Impact Assessment procedure according the 7th Article of the Regulation. For these projects the Environmental Impact Assessment Procedure is started according to the 8th Article of the Regulation.

According to the EIA Regulation, hospitals with a capacity of 500 beds or more are listed in Annex I of EIA Regulation. Hospitals with a capacity of 50 – 500 beds are listed in Annex II of EIA Regulation.

Yozgat Health Campus is an Education and Research Hospital project which will have a bed capacity of 475 beds is evaluated as Annex II project. A Project Description File was prepared according to 16th Article of the EIA Regulation and submitted to the Yozgat Provincial Directorates of MoEU. At the end of the investigations and evaluations on the PDF the final report is presented and “No Environmental Impact Assessment Is Required” decision was given.

2.0 REGULATORY FRAMEWORK

2.1 National Legislation

The Turkish legal framework for environmental protection was developed in line with national and international initiatives and standards, and some of them have been revised recently to be harmonized with the European Union (“EU”) Directives in the scope of pre-accession efforts of Turkey to the EU. In the following sections, related institutions, legislation, processes and procedures that are related to the environmental and social aspects of the proposed project are described.

The Ministry of Environment and Urbanization (“MoEU”) is the responsible organization for the issuing and implementation of policies and legislation adopted for protection and conservation of the environment, and for sustainable development and management of natural resources.

The Turkish Environmental Law No. 2872, which came into force in 1983, deals with a very broad range of environmental issues. According to the basic principles that govern the application of the Environmental Law, and as stated in the Constitution, citizens as well as the State bear responsibility for the protection of environment. Complementary to the Environmental Law and its regulations, other laws also govern the protection and conservation of the environment, the prevention and control of pollution, and the implementation of measures for the prevention of pollution.

The Environmental Law of 1983 has a comprehensive structure that has a holistic and integrated vision for the environment. “Polluter pays” and “user pays” principles and carrying capacity concepts form the basis of regulatory tools in the Environmental Law. The Law is supported by numerous Regulations and decrees prepared or updated in the process of alignment with EU legislation, thus contributing significantly in filling the gaps in the former legislative system of Turkey.

Other relevant laws in the area of environmental legislation are as follows:

- Healthcare Services Basic Law,
- Expropriation Law,
- Public Settlement Law,
- Resettlement Law,
- Land Deed and Registration Law,
- Law on General Sanitation,
- Law on Energy Efficiency,
- Law on Groundwater.



2.2 International Standards

The Equator Principles Financial Institutions (“EPFIs”) emphasize that they will not provide loans to projects where the borrower will not or is unable to comply with the EPFIs social and environmental policies and procedures that implement the Equator Principles.

In addition, the EPFIs endorse the applicable IFC Performance Standards, IFC General Environmental, Health and Safety (“EHS”) Guidelines and IFC Industry Specific EHS Guidelines. The Performance Standards establish the standards that the project is to meet throughout the life of an investment by IFC or other relevant financial institution. General and Industry Specific EHS Guidelines provide implementation guidelines and environmental quality limits that projects should comply with.

Equator Principles

The EPFIs have ten principles:

- Principle 1: Review and Categorization
- Principle 2: Social and Environmental Assessment
- Principle 3: Applicable Social and Environmental Standards
- Principle 4: Action Plan and Management System
- Principle 5: Consultation and Disclosure
- Principle 6: Grievance Mechanism
- Principle 7: Independent Review
- Principle 8: Covenants
- Principle 9: Independent Monitoring and Reporting
- Principle 10: EPFI Reporting.

IFC Performance Standards

The eight Performance Standards (“PSs”) establish the standards that the project is to meet throughout the life of an investment by IFC or other relevant financial institution:

- PS 1: Assessment and Management of Environmental and Social Risks and Impacts
- PS 2: Labor and Working Conditions (*where applicable*)
- PS 3: Resource Efficiency and Pollution Prevention
- PS 4: Community Health, Safety and Security (*where applicable*)
- PS 5: Land Acquisition and Involuntary Resettlement (*where applicable*)
- PS 6: Biodiversity Conservation and Sustainable Natural Resource Management of Living Natural Resources (*where applicable*)
- PS 7: Indigenous Peoples
- PS 8: Cultural Heritage



EBRD Performance Requirements

Ten Performance Requirements (PRs) establish the standards that the project is to meet throughout the life of an investment by financial institution:

- PR 1: Environmental and Social Appraisal and Management
- PR 2: Labour and Working Conditions
- PR 3: Pollution Prevention and Abatement
- PR 4: Community Health, Safety and Security
- PR 5: Land Acquisition, Involuntary Resettlement and Economic Displacement
- PR 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- PR 7: Indigenous Peoples
- PR 8: Cultural Heritage
- PR 9: Financial Intermediaries
- PR 10: Information Disclosure and Stakeholder Engagement

3.0 IMPACT ASSESSMENT AND MITIGATION PLAN

3.1 Construction Period

During the construction activities of the project, there would be some impacts such as air contamination, soil and water contamination, increased road traffic, disposal of debris, noise and health hazards for the workers.

Dust pollution would be reduced by using sprinkler. Debris would be disposed at municipality dumping sites or reused as filling material. The impact of noise produced during construction period would be reduced by carrying out civil works during day time only. Safety construction barriers would be placed around the construction site for safety of pedestrians.

Opportunities for employment would be created for the local people on qualified or non-qualified jobs in the project activities. Equal opportunities of employment would be provided to men and women, where possible.

During the construction activities, the contractors and its subcontractors shall provide personal protective equipment (“PPE”) like helmets, boots, and gloves to ensure health and safety of workers. A first aid kit shall be provided by the contractor at the construction site. Enough number of first aiders among the workers shall be available. Moreover, firefighting equipment shall be installed in all identified places.

Technical competency and awareness training shall be provided to the workforce for the following topics, but not limited to:

- Hazards of working at height
- Hazards at working at scaffolding
- Working with electricity
- Excavation hazards
- Welding
- Confined space entry



It has to be ensured that the workers have certified trainings as per required by legislation on the tasks they are performing such as lifting, forklift driving and similar.

The site shall be operated under a risk integrated approach; the hazards and associated risks specific to the construction activities at the site shall be identified by the competent personnel as defined by legislation and specific procedures and instructions shall be in place for the management of these identified risks and performing the Occupational, Health and Safety critical jobs.

The construction site shall develop a waste management plan with an attempt to ensure recycling as much as possible and the disposal of the wastes in accordance with the environmental legislation.

As a minimum the construction material and wastes shall be stored with the proper measures for eliminating the possibility of any pollutant leaks to the soil and groundwater.

3.2 Operating Period

There are some environmental and social impacts including health risks for the nearby communities and waste handlers, health and safety risks for the personnel, soil and water contamination during the operation of hospitals. The ESMP provides an assessment of these impacts.

The most common impacts originating from operation and maintenance of hospitals are shown below:

- Safety risk,
- Health hazards associated with medical waste management,
- Sewage, and
- Safe drinking water.

Inappropriate transportation and disposal of infectious and other risk wastes may cause serious health hazards for the waste handlers and communities. Safety hazards in the hospitals are generally related with handling of needles, cutters, gases, autoclaves and other similar equipment. Risk of cuts, gas poisoning and other injuries would be included by health hazards. The hospital personnel as well as patients may be susceptible to these safety hazards. Following the strict procedures for using needles, cutters and other similar equipment is crucial. Proper use of PPE would be important to avoid safety hazards. In addition, a proper and safe drinking water source would be available for such facilities. Water would be tested against World Health Organization (“WHO”) standards periodically. The hospital building will be connected to the municipal sewer system. Nevertheless, domestic wastewater would be collected in leak-proof septic holes and the septic holes would be emptied periodically by a vacuum truck and disposed of at wastewater sewage system if municipal sewer connection does not exist.

3.3 Decommissioning

The hospital will be handed over to government for operation after 25 years. The relevant ESMP activities for decommissioning and closure will be organised by the government authorities.