

Iraq: Emergency Operation for Development Project (EODP) (P155732)

Environmental and Social Management Framework (ESMF)

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1. Introduction

1.1 Background

Owing to multiple shocks, economic growth is declining in Iraq and also affecting humanitarian outcomes. The impact of the double shock of the ISIS insurgency and the decline in oil prices has affected the economy. The government's recovery strategy is to jump-start the delivery of basic infrastructure and services and rehabilitate critical infrastructure in the liberated areas from the insurgency. In response to the request of the Government of Iraq, the World Bank's support, through the proposed Emergency Infrastructure and Services Restoration Program for Iraq, is aimed at supporting the Republic of Iraq in the reconstruction of damaged infrastructure and restoration of public services delivery in Targeted Municipal Areas.

The Project will be implemented in urban agglomerations of Tikrit, Al- Dour, Al-Alam and Al Dhalooeya located in the Salah Al-Din Governorate as well as urban agglomerations of Jallawla, As-Sadiya and Al-Azeem located in Diyala Governorate. In addition, suburban areas, villages and infrastructure across open range land may also be included for project-financed activities.

The common feature for all project interventions is the strict adherence to pre-existing footprints of buildings, structures and linear infrastructure, which was damaged or destroyed during combat activities when ISIS moved into the areas, and was pushed out again, and vandalism, sabotage, and retribution acts during ISISs occupation.

1.2 Project Development Objective

The Project development objective is to support the Republic of Iraq in the reconstruction of damaged infrastructure and the restoration of public services delivery in Targeted Municipal Areas.

1.3 Environmental and Social Management Framework (ESMF)

As the Iraq - Emergency Operation for Development Project (EODP) is prepared under the provisions of paragraph 12 of OP10 for projects in situations of urgent need for assistance or capacity constraints, the preparation of safeguards instruments has been deferred to the implementation period, and an Environmental and Social Action Plan (ESAP) was developed as a planning instrument (Annex 1). This ESAP specifies, that after project effectiveness, but before any relevant project activities commence, the Project Owner will prepare an Environmental and Social Management Framework (ESMF) that covers the entire scope of potential investment sub-projects (e.g. housing, road repairs, transmission lines, bridges, energy production facilities, etc.), divides them into typologies along environmental and social criteria and impacts, and for each typology defines the suggested, specific instruments and processes. This will also be the instrument that is disclosed and consulted, before any physical activities start. The ESMF also includes a positive list of likely activities and investments to be financed, and a negative list of activities, equipment, and goods that will not be financed by the project due to their potential, negative environmental impacts.

2. Project Description

2.1 Overview

The project will adopt an integrated and pragmatic approach to the reconstruction and rehabilitation damaged infrastructure and housing in conflict-affected cities in Iraq. For the water, energy and transport sectors, this will be conducted through the repair and reconstruction of damaged infrastructure in the areas of electricity transmission and distribution networks, municipal waste, water, sanitation, roads and bridges, and health.

The project will also support technical assistance towards planning and designing urban development and future infrastructure schemes and will also support project management, sensitization and monitoring and evaluation component. The design of the project components provides flexibility to include newly liberated and secure municipal areas.

2.2 Project Locations and Physical Features

The Project will be implemented in urban agglomerations of Tikrit, Dour, Al-Alam and Al Dalooeyya located in the Salah Al-Din Governorate as well as urban agglomerations of Jalula, As-Sadiya and Al-AAzeem located in Diyala Governorate. In addition, suburban areas, villages and infrastructure across open range land may also be included for project-financed activities.

2.3 Project Components

The individual project components are as follows: (1) Electricity; (2) Municipal Waste, Water and Sanitation; (3) Housing and Transport; (4) Health (5) Technical Assistance; and (6) Project Management, Sensitization and Monitoring and Evaluation.



Figure 1: Republic of Iraq: Emergency Operation for Development

3. LEGAL AND INSTITUTIONAL FRAMEWORK

3.1 National Legislations and Regulations

The project is subject to the following Iraqi laws and regulations:

- Law no. 37 for the year 2008: The Ministry of Environment
- Law no. 27 for the year 2009: Protection and Improvement of Environment
- Regulations no. 2 for the year 2001: Preservation of Water Resources
- Law on 17 for the year 2010: Protection of Wild Animals and Birds
- Law no. 55 for the year 2002: The Law of Antiquities and Heritage

3.2 World Bank Safeguard Requirements

In addition to the Iraqi laws and regulation the ESMF and subsequent ESMPs should comply with the safeguards policies and procedures of the World Bank–specifically OP/BP 4.01 on Environmental Assessment, Physical Cultural Resources (OP4.11), Involuntary Resettlement (OP/BP 4.12), and International Waterways (OP7.50) are triggered for this Project.

Under the Bank's safeguard requirements, the EODP has been assigned an EA Category "B" given that the nature of the proposed activities which will not have highly significant adverse environmental and social impacts.

In addition, due to the nature of the EODP activities, the General and Industry guidelines on Environmental, Health and Safety Guidelines (EHSGs) in particular the General Guidelines and Sector Guidelines for Construction and Decommissioning should be used as appropriate¹.

¹ See ifc.org/ehsguidelines

4. Baseline Conditions

4.1 Overview

The common feature for all project interventions is the strict adherence to pre-existing footprints of buildings, structures and linear infrastructure, which was damaged or destroyed during combat activities.

The majority of interventions is expected in urbanized areas, which are generally characterized by the nonexistence of environmentally sensitive areas or natural habitats of importance - being in urbanized areas - which require special attention or protection.

4.2 Climate

4.2.1 General

The climate of Iraq is mainly a hot desert climate or a hot semi-arid climate to the northernmost part. Averages high temperatures are generally above 40 °C (104 °F) at low elevations during summer months (June, July and August) while averages low temperatures can drop to below 0 °C (32 °F) during the coldest month of the year during winter. Most of the rainfall occurs from December through April and averages between 100 and 180 millimeters annually.

The wind regime is characterized by the winds prevailing from the western and north- western direction throughout the year. In spring the south of Iraq often occur south-west winds accompanied by dust storm. Mean annual wind velocity reading 2.1-3.9 meter per second, maximum register at Mosul 26 meter per second, 31 meter per second at Kirkuk and 40 meter per second near Basrah, Evaporation varies from 1300 mm in the northern region to 2450 mm. in the central region of which 400-500mm. occurs in both July and August only.

The climate of the Iraqi plains is sub-tropical, continental. Summer is long, hot and dry. Winter is short with mean monthly temperatures above zero and some year's daily temperature falls two to three degree below zero. Intensive cyclonic activity in the atmosphere provoking rainfall, most precipitations occurs between October and May.

4.2.2 Salah Al-Din Climate

Salah Al-din has three different climates and is dominated by BWh.

Classification	Count	Köppen- Geiger	Examples
Hot desert climates	2121	BWh	Qaryat al Haranah, Qaryat Albu Talhah, Qaryat Albu Talhah, Albu Talhah, Qaryat al Kazakazah
Hot semi-arid climates	358	BSh	<u>Amirli, Garmak, Zindana i Pichuk, Takhta Mina,</u> <u>Chala Duana</u>

Table 1: Salah Al-Din Climate Classifications

Classification	Count	Köppen- Geiger	Examples
Hot-summer Mediterranean climate	1	Csa	<u>Aziz Bag</u>

4.2.3 Diyala Climate

Diyala has three different climates and is dominated by BWh.

Classification	Count	Köppen- Geiger	Examples
Hot desert climates	1489	BWh	<u>Husaywat, Mahmud al Khalaf, Badwi al Ali, Abu Bakr, Quraish</u>
Hot semi-arid climates	841	BSh	Chahar Shakh, Chwarshakh, Kani Shirin, Ali Khalah, http://en.climate-data.org/location/947000/
Hot-summer Mediterranean climate	93	Csa	<u>Nawde, Nawday, Saraw, Chuardaran, Darband</u>

Table 2.	Divala	climate	Classifications
I abic 4.	Diyala	cimate	Classifications

4.3 Geographical features

Iraq can be divided into the following five physiographic zones (FAO/UNESCO/WMO, 1962).

- a) Zagros Mountain Region
- b) Foothills Region
- c) Desert Region
- d) Jazeera Region
- e) Mesopotamian Plain Region

Concerning EODP, the expected interventions and activities will take place between **Jazeera Region** and the lower fold of the **Mesopotamian Plain Region** which is mainly composed of flat plateau.

- Jazeera Region: includes the remnant of an old inland sea in which mainly gypsum was deposited. It is a steppe and desert plateau. The area is relatively flat broken by some hills and low mountain ridges which are an extension of the mountain ridges to the east. The mountain ridges go in an east west direction; in between there are level to undulating and at places rolling terrain.
- **Mesopotamian Plain Region**: is a geological depression filled with river sediments which covers the central and southern parts of Iraq. It is a plain of the Tigris and Euphrates rivers.

4.4 Water Resources

4.4.1 Surface Water Resources

Iraq is traversed by two major rivers, the Tigris and the Euphrates, both of which rise in the eastern mountains of Turkey and enter Iraq along its northwestern borders. Before their confluence just north

of Basra, the Euphrates flows for about 1,000 km and the Tigris for some 1,300 km within Iraqi territory. Downstream from this point, the combined rivers form the tidal Shatt al-Arab waterway, which flows 190 km into the Gulf. The southern Shatt al-Arab forms the border between Iraq and Iran.

The Euphrates basin (579,314 km2) embraces parts of Iraq (roughly 49% of the basin), Turkey (21%), Syria (17%) and Saudi Arabia (13%).4 The Euphrates River does not receive water from permanent tributaries within Iraqi territory and is fed only by seasonal runoff from wadis.

The Tigris basin (371,562 km2) covers parts of the territories of Iran (47.2% of the basin), Iraq (38%), Turkey (14%) and Syria (0.3%). Within Iraq, the Tigris River receives water from four main tributaries, the Khabour, Great Zab, Little Zab and Diyala, which rise in the mountains of eastern Turkey and northwestern Iran and flow in a southwesterly direction until they meet the Tigris. A seasonal river, Al Authaim, rising in the highlands of northern Iraq, also flows into the Tigris, and is the only significant tributary entirely within Iraq.

The great alluvial plains of the Tigris and Euphrates Rivers comprise more than a quarter of Iraq's surface area. Topographically, the region is extremely flat, with a fall of only 4 cm/km over the lower 300 km of the Euphrates and 8 cm/km along the Tigris. Under natural conditions, the region was rich in wetlands and subject to annual flooding of up to 3m. In recent years, this seasonal flooding has occurred on a much smaller scale because of dams constructed upstream, particularly on the Euphrates in Turkey and Syria, and due to large scale drainage works in Iraq itself.

The major river flow annual cycle can be divided into three periods:

- a- spring flood period, February to June
- b- summer low flow period, July to October
- c- autumn winter rainfall period, November to February

During spring flood period, Tigris River conveys about 75 % of the annual flow, during low flood period 10 % and 15 % during autumn period. The volume and duration of floods on the Tigris depends greatly on flood flow of the tributaries. The spring flood of Diyala tributary occur before that on the Lesser Zab, while this event precedes the spring flood on Greater Zab, The Euphrates carries 70% of annual flow during spring period, 10% in the summer period, and 20% during autumn period.

The Euphrates peak flows usually occur in the beginning of May, whereas that of the Tigris occurs is March or April. The surface water river flow in Iraq territory is made up of the runoff flowing partly from outside of the Iraqi territory and partly within the Iraqi border. The Tigris and Euphrates basins encompasses mainly parts of Turkey, Syria, Iraq and, to a lesser degree, Iran and Saudi Arabia. The recorded average yearly inflow (Crossing Iraqi Borders) is 84.2 km³. This Includes 35.9 km³ from the Tigris basin, 30.0 km³ from Euphrates basin, 18.3 km³ from Shatt Al Arab, in addition to 26.5 km3 which is generated within Iraqi territory. Total water resources of Iraq are therefore 110.7 km³.

Water quality in the Euphrates is affected by return flows from irrigation projects in Turkey and Syria, and is expected worsen as irrigated land is added. Within Iraq, much of the return flow is now drained into the Persian Gulf through the Main Outfall Drain, but considerable saline return flow enters the river system. On the Tigris River, the quality is further degraded with flood flows diverted into off-stream storage in the highly saline Tharthar Lake, and later returned to the river system carrying salts washed from the lake.

4.4.2 Groundwater

According to the hydrological map as shown in the figure below, there are no specific aquifer in the area, and according to the water table contour lines in the map the nearest water table is more than 100m away from the surface. Therefore, the interaction between the project activities and the water aquifer is not expected.

4.5 Biodiversity

4.5.1 Ecosystem in Iraq

The combination of rain shortage and extreme heat makes much of Iraq a desert. Because of very high rates of evaporation, soil and plants rapidly lose the little moisture obtained from the rain, and vegetation could not survive without extensive irrigation. Some areas, however, although arid, do have natural vegetation in contrast to the desert. The majority of sites important for biodiversity conservation have no protected area status, although many have been recommended for designation.

4.5.2 Mesopotamian Marshlands

The Mesopotamian marshlands are unique ecological features at the confluence of the Tigris and Euphrates. They fall into three distinct areas: Hawizeh Marsh in the north, fed by the Tigris and Karkheh rivers, the Central (Qurnah) Marsh, which lies between the Tigris and the Euphrates, and the Hammar Marsh to the south, traditionally fed by the Euphrates. These three marshes were once contiguous and covered 20,000 km². The marshes are important economically and ecologically to all peoples of this area and are of global environmental significance.

4.5.3 Biodiversity in EODP Intervention Areas

The ecosystem conditions in the areas where EODP activities will take place in are considered near the "Plateau Area" and is far from the marchlands (which is located in the east-southern part of Iraq) and far from the desert areas (located in the far west of the country). In the EODP intervention areas (plateau), the fauna and flora species are not classified as rare or endangered. These species are common and abandoned in many locations. No significant terrestrial habitats or ecosystems are present in the EODP intervention areas. The only important habitat is mainly the aquatic environment of the rivers which cross through the intervention areas.

4.6 Economic Activities and Land-use

4.6.1 Oil industry

Iraq's economy is dominated by the oil sector, which has typically provided 95% of foreign exchange earnings. Production is concentrated in two main areas, namely northern Iraq in and around Kirkuk, and, in the south, around Basra.

4.6.2 Natural gas

Iraq has 3.114 trillion m3 of proven natural gas reserves, and approximately 4.25 trillion m3 in probable reserves. About 70% of Iraq's natural gas reserves are 'associated' (meaning that the gas occurs with oil reserves). In 2001, Iraq produced 2.75 billion m3 of natural gas, down drastically from peak output levels of 19.82 billion m3 in 1979. Iraq has had a long-term strategy of increasing its domestic consumption of natural gas to free as much oil as possible for export.

The agricultural sector contributes to 35% of Iraq's non-oil GDP and up to about 30% of employment for the rural poor. The development of hydraulic infrastructure, consisting of large dams, reservoirs and distribution networks for water supply and irrigation was central to economic planning. Iraq developed more than 3 million hectares of irrigated-agricultural lands. Traditionally the main crops were wheat, barley, maize, beseem and vegetables. Crop yields for most crops are usually low when compared with other countries and rural poverty is high. Unsustainable water management practices, including construction of large dams and irrigation schemes, have resulted in deterioration of the quality of soil and land productivity.

The desert plateau provides the country's main rangeland grazing, as well as limited dryland cultivation. The uplands and mountains yield acorns, almonds, walnuts and pine nuts, with additional grazing and dryland cultivation. Irrigated agriculture occurs mainly in the alluvial plain. The principal crops include dates, wheat, barley, maize, rice and cotton, as well as a wide variety of fruit and vegetables.

4.7.3.1 Irrigation

Water use in agriculture is currently estimated at about 44 BCM per year constituting 90 percent of total abstractions. With the exception of about 1 BCM groundwater, the irrigation water is abstracted by diversion from rivers and distributed through an extensive system of barrages, irrigation canals, and on-farm channels and approximately half of the diverted water is lost in conveyance. In addition, on-farm water use efficiency is also low. Irrigation of date palms with highly saline water has been practiced since 1977, while the use of brackish groundwater for tomato irrigation has also been reported in the south of the country.

5. Assessment of environmental and social impacts and Impact mitigation framework

Guidance for identification of potential environmental and social impacts of the project components will be presented in addition to proposing general mitigation measures. At later stages and during the preparation of site specific ESMPs/ESIAs, environmental and social impacts should be carefully examined and detailed. Appropriate mitigation measures should also be discussed in relation to each subproject, baseline conditions and capacity of the implementing agency. However, it is important at the beginning to note that some subprojects will have to be excluded from financing under EODP due to their highly anticipated significant negative environmental and/or social impacts.

5.1 Ineligible Subprojects

Some of the activities or subprojects which have significant environmental and/or social impacts have been excluded from implementation under EODP. In all ESMPs or ESIAs which will be prepared prior to construction, the following exclusion list of criteria should be referred to in order to ensure that the proposed subproject is eligible for support under EODP.

•	General Characteristics
a)	Concerning significant conversion or degradation of critical natural habitats.
b)	Damages cultural property, including but not limited to, any activities that affect the following
	sites:
•	Archaeological and historical sites; and
•	Religious monuments, structures and cemeteries.
c)	Requiring pesticides that fall in WHO classes IA, IB, or II.
•	Sanitation
•	New wastewater treatment plants to serve 10,000 or more households.
•	Solid Waste
•	New disposal site or significant expansion of an existing disposal site.
•	Irrigation
•	New irrigation and drainage schemes.
•	Dams
•	Construction of dams more than 5 meters high. Rehabilitation of dams more than 15 meters
	high.
•	Power
•	New power generating capacity of more than 10 MW.
•	Income Generating Activities
•	Activities involving the use of fuelwood, including trees and bush.
•	Activities involving the use of hazardous substances.

Table 3: Criteria for Ineligible Subprojects

Note on Unexploded Ordnance (UXO):

An important precondition to infrastructure repair and reconstruction will be the removal of debris and rubble, as well as structures which have been damaged beyond economic repair in order to clear space for subsequent reconstruction works. Due to the risks of explosive war remnants (EWR) concealed in

and under the rubble (both unexploded ordnance - UXO, and deliberately planted explosives) an extensive explosive ordnance disposal (EOD) would have to be an integral part of rubble removal. The Gol with assistance from the European Union, and the rest of the international community including specialized agencies such as the United Nations Mine Action Service (UNMAS) will ensure that improvised explosive devices (IEDs) and UXOs are properly detected and removed prior to works activities begin especially where rubble is accumulated. Any rubble removal, repairs or reconstruction financed by the Bank will only apply to those areas that have been declared safe of EWRs. <u>Confirmation that sub-Project locations have been cleared of EWR, IEDs and UXOs will be sought from the relevant authorities (the Ministries of Interior and Defense). No sub-project activities will be undertaken without this assurance. In a similar manner as the completion of the required safeguards documents, the declaration of absence of ERW will be a criterion to allow any Bank-financed works to proceed.</u>

5.2 Preliminary Assessment of Environmental Impacts of EODP

In general following is the list of broad positive and negative impacts that are very likely to arise from the sub-projects funded under the EOPD.

5.2.1 Overall positive impacts of the project

The proposed project and its subcomponents are expected to have major positive environmental and social benefits which will contribute to the improvement of the living conditions of the Iraqi people in addition to improvement in the overall environmental status in the liberated lands. The following is a list of key economic, environmental and social benefits which will result from EODP activities:

- Economic and social development of the liberated lands;
- Improved environmental conditions due to management of solid and liquid wastes;
- Reduced air pollution and traffic congestions
- Improved accessibility of people, goods and services;
- Improved public health due to provision of clean drinking water, reliable sanitation systems and municipal waste management;
- Improved safety conditions due to provision of reliable electricity service;
- Job creation and local economic development

5.2.2 Overall positive impacts of the project

The preliminary assessment of impacts that can be linked to the EODP can be generalized under (i) typical construction/rehabilitation impacts which can be mitigated with good construction practices and (ii) specific impacts that can arise due to engineering interventions proposed for some sub-projects and hence require more detailed analysis at a later stage.

In general, the following is the list of broad negative impacts that are very likely to arise from the subprojects funded by the EODP. These impacts though occurring in most of the sub-projects will vary in extent and significance **hence individual assessment for each subproject is of utmost importance**. However for ease of presentation and reference typical construction impacts related to the project have been discussed under the following thematic categories.

Table 4: Preliminary Identification of Potential Impacts dur	ng Construction
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EODP Component(s)	Activities	Receptor/EHS Aspects	Related Potential Impacts			
		Air	 Emission of pollutants from engines of construction machinery and equipment. Dust "lifting" due to earthwork and movement of construction trucks and equipment on unpaved roads. 			
		Noise	 Noise emission from engines of construction machinery and equipment 			
1,2, 3	General construction activities	Soil, subsoil and land	 Land occupation due to the installations in the working areas Soil/subsoil contamination due to accidental spills and leaks from construction equipment Improper discharge of domestic sewage from construction camps/offices. Improper disposal of wastes from construction camps/offices. 			
		Solid and hazardous waste	 Production of construction wastes/demolition debris Solid wastes from construction camps/offices Improper disposal of fuel barrels, removed asphalt, paint containers, asbestos materialsetc. 			
		Water resources	 Improper disposal of debris or construction wastes on river banks Improper discharge of domestic sewage from construction camps/offices into surface or subsurface water bodies Water consumption for construction works 			
		Biodiversity and sensitive habitats	 Removal of trees or green cover for rehabilitation or construction purposes may result in loss of habitats Pollution of rivers or waterways may negatively affect the aquatic ecosystem, 			
		Cultural heritage	• During rehabilitation, sites or structures of cultur significance may be negatively affected from construction works.			
		Socio- economic environment	 Temporary nuisance and inconvenience as a result of construction activities including noise, emissions. Influx of workers and the potential implications communities' privacy. Employment, working conditions and safety of worker the construction site Disturbance of public health and quietness due construction/rehabilitation activities; Land acquisition or obstructing access to amenities du construction/rehabilitation activities. 			

EODP Component(s)	Activities	Receptor/EHS Aspects	Related Potential Impacts		
		Traffic Congestion and Detours	 Traffic impacts due road blockages for construction purposes and detours. This may be associated with traffic congestions, increasing commuting time and creating inconvenience to roads users. 		
Health and Safety		Health and Safety	 Falling from moderate heights; Vehicle/pedestrian accidents; Falling into trenches; Being buried in tunnels/excavations; Breathing dust and other air pollutants; Back aches caused by handling heavy material; Suffering hearing loss from noise 		

Table 5: Preliminary Identification of Potential Impacts during Operation

EODP Component(s)	Receptor/EHS Aspects	Related Potential Impacts			
1, 2 & 3	Air	 Emission of pollutants due to increased traffic and mobility on the rehabilitated roads Emissions from landfill operations Increased emissions due to increase in electricity consumption 			
3	Noise	 Increase in noise emission due to increased traffic and mobility on the rehabilitated roads 			
2	Soil, subsoil and land	 Improper management of landfills may result in contamination of soil and land Improper disposal of sewage Leakages in sewage networks 			
2 & 4	Solid and hazardous waste	 Improper management of waste disposal sites and untreated sludge Disposal of empty chemical containers used in water/wastewater treatment Medical wastes from mobile clinics and hospitals 			
2	Water resources	 Increase in fresh water consumption Leakages in water network 			
2	Biodiversity and sensitive habitats	 Improper disposal of sewage and wastes 			
1, 2 & 3	Cultural heritage	Not applicable			
1, 2 & 3	Socio-economic	Positive Social amenities and social benefits			

6. Environmental Management & Monitoring Framework

6.1 Objectives of the ESMMF

The objectives of this Environmental and Social Management and Monitoring Framework, is to outline a mechanism for analyzing and mitigating potential negative impacts and for monitoring the application and performance of mitigation measures. The ESMMF identifies roles and responsibilities for different stakeholders for implementation and monitoring of mitigations.

As explained previously, the proposed project is to be implemented in 2 governorates. Institutional and technical capacities, as well as physical and social environments may vary between them. Identical mitigation measures for all governorates may not provide the flexibility required for dealing effectively with some of the negative impacts which require taking the local context into account. Wherever applicable, the ESMMF is designed to accommodate alternative context-specific mitigations.

6.2 General Mitigation Measures

The following are general mitigation measures that need to be detailed according to each subproject and in relation to the site specific baseline conditions.

6.2.1 During Construction

With the purpose to reduce the impacts related to emissions of gaseous pollutants from construction equipment, the following mitigation measures and good practice are to be taken into account:

Air

- Employ construction machines with low emissions to reduce pollution, arranging sources of emission far from people's houses and public places
- All construction machines and vehicles should meet the standard on emissions and have passed the emission test
- No burning of wastes on site
- Limit traffic congestion through proper planning and operating of traffic diversions
- Do not let machines idle when not necessary

Concerning dust control methods and measures, the following actions are to be taken into account to reduce the generation of dust:

- Regular watering of roads for dust suppression in urban, residential areas and in areas with sensitive receptors
- Covering of excavated soil temporary stored on site
- Daily cleaning of tires of vehicles
- Covering up any vehicle transporting materials and spoil to and from construction sites
- Daily cleaning of streets and pathways in vicinity of construction site that are affected by soil and dust
- Imposing speed controls for construction vehicles

Noise and vibration

Mitigation measures foreseen to minimize the impact related to the noise emission during the bus corridor construction phase are:

- Apply appropriate schedule to avoid any works that may cause noise and vibration during 10 pm 6 am especially near inhabited areas. Any nighttime activities should be done using noise reducing means or low-noise technologies
- Use vehicles and equipment that meet national standards for noise and vibration.
- Publishing and registering working time of construction machines with local authorities and strictly compliance therewith.
- Restricting use of noisy machines near sensitive receptors such as schools and hospitals, use noise-reducing means for construction machines, if required.

Soil, subsoil and land

- Earthwork should be carried out during dry weather periods;
- Stockpiling of earth should be done a safe distance away from waterways;
- Other construction materials containing small/ fine particles should be stored in a place not subjected to flooding;
- If necessary, silt/sedimentation traps should be used to prevent soil particles from getting into drains and canals.

Solid and hazardous waste

- Work sites should be cleared of residual solid waste and wastewater before work commences;
- Temporary storage of solid wastes shall be done with appropriate containment to avoid spreading of waste, odor and avoid dust;
- Temporary storage of solid waste should be done to avoid interfering with traffic obstacles and aesthetics;
- Sites for collecting solid waste in each sub-project area should be determined prior to commencement of construction. These sites must be suitable with the transport, in order not to obstruct the activities of human beings and the waste must be transported during the day;
- Construction wastes should be removed as much as possible within 24 hours from the site to ensure public safety in urban areas;
- All waste should be collected and disposed in compliance with the local and national laws, in sites identified by the respective local authorities;
- Excavated soil, if suitable, should be used for leveling and backfilling;
- No solid waste should be burned at the site;
- Clean the construction site of solid wastes, wastewater etc. before its closing

Domestic waste

- Construction camps should be sited appropriately with consent from the necessary public authority or the implementing agency,
- Labor camps shall be provided with adequate and appropriate facilities for disposal of sewage and solid waste
- Domestic solid waste shall be collected and disposed of daily at the local authorities designated site or given for collection by the local authorities
- Discharge and disposal domestic waste from worker camps into water sources should be strictly avoided

- Burying and burning domestic waste in the project site should also be strictly avoided
- Avoid construction workers staying overnight in the construction sites

Hazardous wastes

- Wastes identified as "hazardous" will need special handling, transportation and disposal. For contaminated sites, a hazardous waste disposal plan will need to be prepared.
- The contractor should be trained and made aware of the requirements prior to commencement of the sub-project. Special guidelines for handling of contaminated soils or hazardous wastes should be prepared and published.
- Hazardous wastes and contaminated soils should not be dumped on-site but removed to landfill/dumpsite designated by the local authority or the environmental agency as appropriate;
- Oil and lubricant waste should not be buried or burnt in the project site, but collected and stored in proper oil-cans and disposed for re-use or local authority approved designated sites.

Water resources

- Identification of the reliable water resources and obtain necessary approvals from the relevant authorities to extract water prior to commencement of construction work;
- Contractor should not obstruct or prevent water flow when working closer to water bodies;
- Silt traps and erosion control measures should be used where the construction carry out closer proximity to the water bodies to avoid entering of construction materials which cause turbidity and sediments;
- Construction material and stock piles should be covered to avoid wash off to water bodies;
- Water conservation practices should be in place in construction offices and camps;
- Camps should not be located near water ways, human settlements or near drinking water intakes.

Biodiversity and sensitive habitats

- A compensatory tree planting program should be developed to replant native species wherever available space beside the proposed project;
- Workers should be instructed to protect flora and fauna including aquatic life as well as their habitats;
- Hunting and pouching should be strictly prohibited;
- Washing, maintenance and service of vehicles and machinery should not be done closer to the freshwater habitats;
- Solid waste, construction debris should not be dump into wetlands or natural habitats.

Cultural heritage

1. Infrastructure Development

The initial impact assessment on PCRs from infrastructure development interventions under the project will be undertaken as part of the environmental screening. This would involve a site inspection and reference to maps of heritage building, property and landscapes prepared by the competent authority². The goal of environmental screening is to:

• determine the presence or absence of PCR sites within the project boundary and its area of influence

² State Board of Antiquities & Heritage (SBA&H)

- if yes, to describe the extent, character and ownership of the PCR and investigate the significance of it
- evaluate the scope for impacts on each site in the event of project proceeding and document them.

Depending on the significance of the PCR, its ownership and location, EMPs may need to be reviewed and cleared by the SBA&H.

2. Chance finds procedures

Contracts for civil works involving earth moving and excavation activities, especially in known archaeological and heritage areas, should normally incorporate procedures for dealing with situations in which buried PCRs are unexpectedly exposed.

3. Recognition of unknown PCRs

For EODP contracts, an initial consultation with the Department of Antiquities should be held before work commencement to identify the likelihood of such material being uncovered, especially where trenching work is expected for pipe laying etc. Upon discovery of such material during execution of work, the contractor should carry out the following;

- Immediately stop construction activities.
- With the approval of the resident engineer delineate the discovered site area.
- Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remains, a night guard should be present until the responsible authority takes over.
- Through the Resident Engineer, notify the responsible authorities (SBA&H and local authorities) within 24 hours.
- Submit a brief chance find report, within a specified time period, with date and time of discovery, location of discovery, description of finding, estimated weight and dimension of PCR and temporary protection implemented.
- Responsible authorities would be in charge of protecting and preserving the site before deciding on the proper procedures to be carried out.
- An evaluation of the finding will be performed by the SBA&H who may decide to either remove the PCR deemed to be of significance, further excavate within a specified distance of the discovery point and conserve on-site, and/or extend/reduce the areas demarcated by the contractor etc.
- Construction work could resume only when permission is given from the Department of Archaeology after the decision concerning the safeguard of the heritage is fully executed.

Socio-economic

- In case of temporary or permanent land acquisition, apply the Resettlement Policy Framework (RPF)³ and the implement a Resettlement Action Plan (RAP).
- Mobilizing maximum capacity of skilled and unskilled labor force from the surrounding project area;
- Identify location of camps with consultation with the local community and local authority;
- Ensure installation of adequate construction camps and sanitation facilities for construction workers to control of transmission of infectious diseases.

Health and Safety

³ A Resettlement Policy Framework (RPF) is separately prepared which outlines the necessary procedures to be followed in case of involuntary resettlement.

The proposed project interventions will mostly involve small to medium scale construction sites. As such, extreme dangers posed by working in environments such as great heights, deep water and involving dangerous chemicals and radioactive material will not be present. Health and safety of workers and the public should be designed into constructions, before and during and after the building phase. The following safety measures can be used as general guidelines:

Environmental Assessment for each site should mandatorily include a risk assessment as to what are the hazards involved in the work site, who might be harmed and how seriously, how likely this harm might happen and what actions are required to eliminate or reduce the risk and incorporate such measures in the EMP and clearly set out in the tender documents. All sub-projects must observe health and safety regulations, hence during implementation it is important to check if these control measures are put in place and are meeting the legal requirement.

Training

- Ensure constructors carry out suitable training programs on occupational health and safety for workers prior to commencement of construction.
- Ensure only experienced and well trained workers are used for the handling of machinery, equipment and material processing plants
- Ensure all persons, including managers, are trained and able to carry out their work without risk to the safety or health of themselves, other workers or the public

Personal Protective Equipment

- Ensure appropriate safety equipment, tools and protective clothing are provided to workers and that safe working methods are applied. A safety inspection checklist should be prepared taking into consideration what the workers are supposed to be wearing and monitored.
- Any person who works or operates in an area where there is a risk of flying objects, such as splinters, should wear safety goggles at all time. These should be securely fitted to the face. Welders should protect the entire face from hot sparks and bright rays by using a welding mask.
- Any person exposed to high levels of dust or hazardous gases (when working in tunnels) should wear respiratory protection in the form of disposal masks or respiratory masks which fit more snugly around the nose and mouth.
- Any person working in an area where there is the risk of being struck on the head by a falling or flying object should wear a hard hat at all times. These should be well maintained in order to be fully effective, and any helmets or hard hats that are damaged or cracked should immediately be replaced.
- All workers will be required to wear shoes or strong boots to prevent sharp objects from penetrating or crushing the foot. Those working in muddy conditions and in canals with polluted water should avoid hand/foot contact with water and should never wear slippers.
- Road workers should wear reflective vests to avoid being hit by moving vehicular traffic.

Site Delineation and Warning Signs

- Ensure delineation devices such as cones, lights, tubular markers, orange and white strips and barricades are erected to inform oncoming vehicular traffic and pedestrians in the area about work zones.
- Ensure all digging and installing work items that are not accomplished are isolated and warned of by signposts and flash lamps in nighttime.

- Ensure dangerous warning signs are raised to inform public of particular dangers and to keep the public away from such hazards.
- Ensure rehabilitation of trenches progressively once work is completed.
- The safety inspection checklist must look to see that the delineation devices are used, whether they are appropriately positioned, if they are easily identifiable and whether they are reflective.

Equipment safety

• Work zone workers use tools, equipment and machinery that could be dangerous if used incorrectly or if the equipment malfunctions Inspections must be carried out to test the equipment before it is used, so that worker safety can be secured. Inspections should look for evidence of wear and tear, frays, missing parts and mechanical or electrical problems.

Traffic management

- Ensure traffic control plans and procedures are in place when work zone is set up and how to handle full or partial road closure, blocked intersections, sidewalk closure etc
- Ensure installation of transport signs and lighting systems in conspicuous places to assure transport safety. Transport signs should be installed at places where accidents may be easily happened (populated centers, schools, hospitals, commercial areas etc.)

Material management

• Ensure easily flammable materials are not be stored in construction site and that they are transported out of project site

Emergency Procedures

- Ensure an emergency aid service is in place in the work zone.
- Ensure all site staff is properly briefed as to what to do in the event of an emergency, such as who to notify and where to assemble for a head count. This information must be conveyed to employees by the site manager on the first occasion a worker visits the site.

Construction camps

• Ensure installation of adequate construction camps and sanitation facilities for construction workers to control of transmission of infectious diseases.

Information management

- Provide advance notice to local communities by way of information boards about the schedule of construction activities.
- Develop and establish contractor's own procedure for receiving, documenting and addressing complaints that is easily accessible, culturally appropriate and understandable to affected communities.

Worker consultation

Consulting the workforce on health and safety measures is not only a legal requirement, it is an effective way to ensure that workers are committed to health and safety procedures and improvements. Employees should be consulted on health and safety measures and before the introduction of new technology or products.

6.2.2 During Operation

During operation, each of the EODP subprojects should follow the requirements of the national environmental legislations and maintain records to ensure continuous environmental compliance.

7. Institutional Framework for Safeguards Management

It is necessary to have a well-defined institutional and implementation mechanism for identifying, appraising, managing and monitoring safeguards at all levels. The focus of this section is to lay out the roles, responsibilities of various parties and the due diligence process that will need to take place from the preparation of an investment through implementation completion.

7.1 Overall project implementation arrangements

The overall responsibility for Project coordination lies with Iraqi Council of Ministers through a Project Coordination Unit (PCU) under the Reconstruction Fund for Areas Affected by Terroristic Operations. In turn Project Management Teams (PMTs) established within counterpart Ministries will be responsible for sectoral (energy, transport, water and sanitation, municipal solid waste management, housing, health) project implementation. During implementation, additional sectors may be added to the Project, subject to these fulfilling the basic selection criteria. Furthermore, it is possible, that additional ministries and PMTs would be added to the overall implementation structure. At each of the municipalities (project sites), the PMTs will be supported by Technical staff from the Ministries' regional offices.



To identify and prioritize the subprojects, the Ministries and their PMTs will coordinate closely with the local Governorate staff and authorities, to ensure the identified subprojects are in line with local expectations.

7.2 Implementation Arrangements for Environmental and Social Safeguards

Planning, implementation and supervision of environmental safeguards will take place at three levels;

7.2.1 PCU Level

Among its key tasks, the PCU will be responsible for providing the overall policy direction, technical assistance, review and endorsement of screening reports, environmental and social assessment and management plans, capacity building for effective safeguards management to the implementing agencies, monitoring of environmental compliance and progress reporting to the World Bank.

7.2.2 Project Management Teams (PMTs)

The responsibility of day to day planning, implementation and supervision of environmental/social safeguards specific to sub-projects will be borne by the PMTs. Each agency will assign focal point(s) for environmental and social safeguards who will ensure timely and sound application of the ESMPs to the planned investments. The environmental/social focal points will work closely with the PCU environmental/social consultants to ensure harmonization and coordination of activities according to the ESMMF requirements. The focal points for environmental and social affairs should have sufficient background to support the implementation of the ESMPs. In case of need for additional capacity, the PMTs may recruit external consultants who have sufficient expertise to support PMTs' focal points.

At the field level, it is expected that the PMTs environmental and social focal points will conduct regular field supervision to ensure compliance of contractors, their workers and practices, to the ESMPs. PMTs will also require the engineering and technical firms to recruit specialized staff in environment, social development and health and safety to conduct daily supervision on field activities and prepare non-compliance reports on which the PMT will investigate and take action accordingly.

7.2.3 Contractors

Implementation of the ESMPs will largely be the contractors' responsibility and for this the contractor will have to nominate qualified environmental, health and safety consultant and a social development consultant (if needed) in order to ensure compliance with the ESMPs during construction.

7.3 Environmental Monitoring

The EODP will focus on effective environmental monitoring. As majority of the anticipated environmental impacts from the project are general in nature and related to construction and civil works, site management, worker/public safety etc, monitoring will be largely carried out in the form of compliance monitoring through regular site supervision by the responsible officers. A general monitoring checklist and a specific construction safety monitoring checklist to be used and filled during site supervision is provided in Annexes 3 and 4. These lists should be updated and expanded to include impacts which are mostly case-specific and other site-specific environmental impacts based on actions agreed in the EMPs.

Monitoring of environmental parameters (such as air, water, salinity, sediment quality, etc.) will be conducted based on the requirements specified in the individual ESMPs. However, given the ambient levels of noise and emissions in the surroundings, pollution in the waterways...etc., no significant impacts on the surroundings' environmental quality are anticipated as a result of project activities.

As such, the need for regular and systematic measuring of air, noise and water quality to monitor contribution to environmental degradation from the project per se is not considered essential except in few cases.

The overall project impacts will be monitored during project implementation through a number of selected indicators which reflect the positive environmental contribution from the project to the overall environment. As such, no additional environmental indicators are proposed.

Most importantly, the project will support independent environmental audits on an annual basis throughout project implementation.

7.4 Progress Reporting

Progress reporting on safeguards compliance will take place as indicated below.

- Contractor's environmental compliance reports to the PMTs on a monthly basis;
- PMTs environmental/social progress reports to the PCU on a quarterly basis
- PCU environmental/social progress reports to the WB, Council of Ministers on a quarterly basis (this will be part of the quarterly project progress report produced by the PCU)

7.5 Capacity Development Requirements

For effective environmental/social safeguards management, the project agencies will require implementation support in three main areas; (i) dedicated staff and resources (ii) technical assistance and (ii) training and awareness.

7.6 Estimation of Environmental Safeguards implementation cost

Activity	Unit	Unit Rate in US\$	Quantity	Total in US\$
1. ESMP preparation				
- Simple checklist	Checklist	5000	100	1,000,000
- Extensive ESMP/ESIA	Report	20000	25	
2. Personnel	Man Month (MM)			
PCU Level				
- Environmental/social Consultant		3000	30	90,000
PMT Level				
 Environmental Officer/Consultant 		3000	48	144,000
 Social development officer/consultant 		3000	30	90,000
Contractor Level		In almala di Su		la alcoda al ta
- Environmental Officer/Consultant		Included In		Included In
 Social development officer/consultant 		construction		construction
		CUSIS		
Sub-total (2)	Γ		l.	324,000
3. Training and awareness				
- Training and awareness programs (short-				
term and long-term)				
- Training on sector environmental/social				
management issues	Lump-sum	Lump-sum	Lump-sum	
- Training programs on environmental				
safeguards, monitoring for project staff,				
contractorsetc.				
Sub-total (3)	ſ			100,000
4. Environmental monitoring (through				Included in
independent third party institutions) to be				construction
covered in construction contracts				costs
5. Contingencies (approx. 7% of total costs)				26,000
Total Cost				US\$
				1,450,000

Table 6: Estimated Cost of Environmental Monitoring

8. Determination of E&S Instruments

This section will provide clear guidance on

- 1. which types of safeguards instruments will be required;
- 2. examples for damage patterns and related project typologies, ranging from simple, routine civil reconstruction works (e.g. road repair) to more complex repairs of e.g. bridges and larger structures;
- 3. reference to the entire anticipated scope of management, mitigation and monitoring measures (as shown in Annex 3).

8.1 Types of Safeguards Instruments

The types of safeguards instruments anticipated for the project range from abbreviated, checklist type ESMPs for simple, routine repair works, over more elaborate and comprehensive ESMPs to ESIAs within clearly defined project boundaries. All project activities involving civil works on any scale will require some type of environmental / social management instrument, which will be determined and defined by the methodology presented in this section.

Most typologies within the expected scope of subprojects are expected to involve routine, simple civil works pertaining only to existing structures and footprints, where conflict-related damage was incurred. All of the expected types of interventions and civil works, e.g. repair / reconstruction of roads, transmission lines, municipal infrastructure, as well as the restoration of public services, will require safeguards instruments in form of ESMPs (E&S management plans) that would become part of the works contracts, set the E&S standards and compliance mechanisms, and serve as contractual basis for supervision and enforcement of good E&S practice during the works. However, considering the mostly simple nature of such repair and reconstruction works, for these typologies abbreviated, "checklist type" ESMPs (see Annex 4 for a template) will be prepared as appropriate safeguards instrument.

For some larger projects, e.g. reconstruction of bridges or wastewater treatment plants (WWTP), a limited ESIA (meaning within clear project boundaries) may be required (see Annex 5), as the works would be more substantial in scale, and rivers are more sensitive and vulnerable to environmental impacts. Also the ESMPs produced with input from the ESIAs would be more specific on measures to protect water quality, riverine / aquatic ecosystems, and retain the hydrological regime around the bridge. Additional social considerations, such as continued access to the river for fishing and water abstraction, may become relevant. Similar principles would apply to projects that are located close to, or affecting natural habitats, including wetlands or forests.

The majority of projects, namely roads repair and reconstruction, water and energy infrastructure, and large buildings in urban and rural settings will only require the "checklist type" ESMP as appropriate due diligence instrument (see Annex 4 for template). If only minor repairs are planned for bridges and WWTP, even if in sensitive settings, that same principle applies.

The following table allocates to each component the likely type(s) of E&S instruments:

Table 7: Anticipated E&S Instruments by Component

Component / Activities	Anticipated E&S Instruments		
Component 1: acquisition of equipment for the repair and reconstruction of damaged electricity distribution and transmission infrastructure; through technical assistance, supervision of the implementation of Electricity Subprojects, which will include engineering and civil works.	 No E&S instruments for sourcing for equipment Checklist ESMPs for most planned repair and reconstruction works Possibly specific ESMPs when encountering sensitive baseline conditions 		
Component 2: (Year 1) urgent restoration of water, wastewater and solid waste services, repair, reconstruction and rehabilitation of damaged infrastructure; including water intakes, pipelines, treatment / purification plants, pumping stations, storage tanks, distribution networks, house connections, sewers and trunk lines, wastewater treatment plants, and storm water drains, reservoirs and outfalls.	 Checklist ESMPs for most planned repair and reconstruction works Site-specific ESMPs for larger reconstruction works (WWTP, pumping stations) combined with <i>less sensitive baseline conditions</i> ESIA + ESMPs for larger reconstruction works (e.g. WWTP, pumping stations) in combination with more sensitive baseline conditions 		
(Years 2 - 5) (i) additional water and sanitation damage and needs assessment, identification of further water and sanitation subprojects; (ii) preparation of detailed plans and designs; and (iii) provision of TA for implementation of water and sanitation subprojects.	• E&S assessments and management systems will be mainstreamed into identification of further subprojects, as well as planning / design works and the TOR for supervision.		
Component 3 improvement of road assets, repairing and rehabilitating highly damaged segments of primary road network	 Checklist ESMPs for most planned road repair and reconstruction works, site-specific ESMPs for road works in combination with more sensitive baseline conditions 		
Repairing and reconstructing critical bridges and major culverts	 Checklist ESMPs for minor bridge repair works, such as repairing the deck and surface. site-specific ESMPs for more extensive reconstruction works (e.g. involving abutments and pylons, requiring access to river) combined with <i>less sensitive baseline conditions</i> ESIA + ESMPs for more extensive reconstruction works (e.g. involving abutments and pylons, requiring access to river) in combination with <i>more sensitive baseline conditions</i> 		
Component 4: Supply of mobile hospitals, mobile clinics, medical equipment and ambulances.	 Checklist ESMPs for erection of clinics Medical Waste Management Plans (MWMP) for operation of clinics and mobile hospitals 		

9. Grievance Redress Mechanism

The Bank's OP 4.12 on Involuntary Land Acquisition and Resettlement requires that affordable and accessible procedures for third party settlement of disputes arising from resettlement (i.e., grievance redress mechanisms) would be available. This GRM should take into account the availability of judicial recourse as well as traditional and community dispute resolution mechanisms.

In Iraq, the official channel is through court to hand the complaints involved in land acquisition. When the land (either owned by an individual or a government institute) cannot be purchased based on mutual agreement (through a willing buyer-willing seller approach), and there are not alternative sites for the project, the land has to be acquired by using eminent domain. In such case, the project entity or the responsible ministry will go to court and buy the land based on the value decided by the court. The land owners can appeal if they do not satisfy the court decision. The second court decision will be the final.

In addition to the official channel, it is encouraged to establish a Grievance Redress Mechanism at the project level to ensure any grievance can be addressed in an amicable manner. Resolving complaints at community level is always encouraged as it could address the problem of distance and cost the PAP may have to face in pursing grievance redress.

While the details of the project grievance redressed system will be developed during the course of RAP preparation, and also in consultation with communities, its broad steps to be refined based on further consultations might include the following for written complaints:

- First, the affected person sends his/her grievance in writing to the communities/community leaders. The grievance note should be signed and dated by the aggrieved person. Where the affected person is unable to write, s/he should obtain assistance from the community to write the note and mark the letter with his/her thumbprint. The community should respond within 14 days.
- Second, if the aggrieved person does not receive a response or is not satisfied with the solution provided by the community, s/he lodges her or his grievance to PCU/PMTs which should respond within 14 days.
- Third, if the aggrieved person does not satisfied with the solution of PCU/PMT, s/he can go to the court.

In any case, the PCU/PMTs must maintain records of grievances and complaints, including minutes of discussions, recommendations and resolutions made.

10. Disclosure and Consultation Activities

For all types of environmental analyses conducted under the EODP (including screening), communities in the project sites will be consulted within a structured and culturally appropriate manner but taking into utmost consideration the safety of people as public meetings may be targeted by terrorists. Further, environmental assessment documentation and EMPs should be made available to the public (in accordance with the World Bank's policy on Access to Information) by the PCU/PMTs prior to tendering of works contracts through the website of the project and notices through media, as appropriate.

In addition, it will be necessary to conduct discussions with the regulatory agencies on relevant issues and other implementing agencies who would have a stake in the project due to various reasons. Consultation will enable the project implementing agency to understand the stakeholder's requirements and for the stakeholders to develop an understanding of the project so that potential conflicts could be eliminated or minimized.

The process of consultation should be documented and account taken of the results of consultation, including any actions agreed resulting from the consultation. Public disclosure of the relevant safeguards documentation will be a pre-requisite for tendering civil works contracts.

The contract documents for each contract package will mandatorily include the relevant environmental mitigation provisions stipulated in the ESMPs (which would have community concerns reflected, if any) for the given sub-projects in order to ensure contractor compliance with safeguards requirements.

The Draft Final ESMF has been discussed with a number of stakeholders starting with a meeting with representatives from the participating ministries in a meeting that was held on September 22, 2015 at the Reconstruction Fund headquarters in Baghdad (please see Annex 1). A similar consultation meeting was held with representatives of nine (9) Nongovernmental Organizations (NGOs) and Civil Society Organizations (CSOs) on May 16, 2016 also at the RF headquarters in Baghdad (please see Annex 2). The participants support the RF's efforts and the EODP's objectives and the speedy repairs and reconstruction of damages and reinstatement of essential services as soon as possible. The participant expressed ready to support and activity participate to ensure a successful implementation of EODP. It was agreed that the consultation with the participants as well as others from additional NGOs and CSOs to be invited in the future will be on regular basis especially once the Citizen Engagement and community participation and consultation activities are launched.

Annex 1: Minutes of Meeting with representatives from the Ministries to discuss the ESMF

On Tuesday, September 22, 2015, a meeting was held at the Reconstruction Fund headquarters with representatives from the MoE, MoCH, MoMPW, MoH to discuss EODP's ESMP and RAP, which will be presented to the IBRD. Details of this plan were discussed and it was agreed that competent ministry would issue reports on the environmental effect of the expected reconstruction projects and report to the environmental stakeholders to agree upon and ratify.

It was ensured that there is no legal impediment regarding owning land on which the reconstruction projects will be implemented. In case of purchasing lands of private ownership, they will be compensated according to Iraqi Laws, if the competent ministries have no objections on the ESMP and RAP.

Taghreed Ahmad Saleh	Ministry of Environment Representative		
Riyam Amir Ali	MoCH representative/MPW/ Roads and Bridges		
Issam Samir Ramadan	MoCH representative/MPW/ Roads and Bridges		
Aseel Ma'rib Khalil	MoE representative		
Riyad Ali Mohammad	MoCH representative/MPW/ Roads and Bridges		
Qusai Al-Hafith	MoCH representative/MPW/ Roads and Bridges		
Dr. Ra'ed Mohammad Ali	Ministry of Environment Coordinator		
Dr. Mohammad Abdul Jalil	MoMPW Coordinator		
Mazin Kamil Alwan	MoH Coordinator		
Azar Sabah	MoE Coordinator		
Dr. Haidar Sabah	MoCH Coordinator		
Sura Khalid Mohammad	Follow-up Officer		
Ghayda' Abdul Qader	Executive Assistant		

محضر اجتماع

تم عقد اجتماع صباح يوم الثلاثاء المصادف ٢٠١٥/٩/٢٢ في مقر صندوق اعادة الاعمار بحضور ممثلي وزارة الكهرباء ووزارة الاعمار والاسكان والبلديات والاشغال العامة ووزارة الصحة والبيئة لبحث خطة العمل البيئية والاجتماعية وسياسة اعادة التوطين التي ستقدم الى البنك الدولي لإعادة الاعمار والتنمية المتعلقة بمشروع العمليات الطارئة للتنمية حيث تمت مناقشة تفاصيل هذه الخطة وجرى التأكيد على ان تقوم الوزارات ذات الصلة باعداد تقارير عن الاثر البيئي لمشاريع اعادة الاعمار التي يراد انجازها وترفع للجهات البيئية المعنية لغرض ابداء الرأي بشانها والمصادقة عليها.

وتم التأكيد على عدم وجود اي عارض قانوني فيما يخص استملاك الاراضىي التي سوف يتم تنفيذ مشاريع اعادة الاعمار عليها، وفي حالة استملاك اي اراضي تعود للمواطنين يتم مرمم لديتها رمن مع موديد عن البنه، المعنى تعويضهم وفقا للقوانين العراقية النافذة ولم يكن لدى ممثلي الوزارات المعنية اي اعتراض على خطة العمل البيئية والاجتماعية وسياسة اعادة التوطين، وبهذا ختم المحضر.

Ale مير رمضان

ممثل وزارة الاعمار والاسكان البلديات والاشغال العامة/ طرق وجسور

قصى الحافظ

ممثل وزارة الاعمار والاسكان

والبلديات والاشغال العامة/ البلديات 2/ 9/se

م.ق . مازين كامل علوان منسق وزارة الصحة

سرى خالد محمد مسؤول المتابعة

ريام امير

ممثل وزارة الاعمار والاسكان البلديات والاشغال العامة/ طرق وجسور

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(ce) اسيل مأرب ممثل الكهرباء

تغريد احمد صالح

ممثل البيئة

ممثل وزارة الاعمار والاسكان

د. محمد عبد الجليل

منسق وزارة البلديات

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والبلديات والاشغال العامة/ البلديات 10/

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د. رائد محمد على منسق وزارة البيئة

م. ق . آراز صباح

منسق وزارة الكهرباء

منسق وزارة الاعمار

د. حيدر صباح

غيداء عبد القادر مساعد تنفيذي



Annex 2: Minutes of Meeting with Representatives from the NGOs and CSOs

Dr. Abdul Basit Turki Saeed, head of the Reconstruction Fund of Terrorist Activities in the Affected Areas on Monday May 16, 2016, with the work team at the Reconstruction Fund headquarters with representatives of Civil Society Organizations working in Saladin and Diyala governorates. Details of the projects were discussed in the framework of the EODP which the Bank is granting to the GoI to reconstruct 4 sectors in 7 areas of the aforementioned governorates. During the meeting, comments and suggestions from participant were presented regarding the projects and their S&E effects in the areas covered by the fund, and how these projects helped with the resettlement of the displaced. The preparation and implementation mechanism were explained, in addition to the Bank's conditions which ensure maintaining S&E condition when implementing the project. It was stressed on the participation of the civil society, its citizens and organizations to support implementing the projects justly and transparently.

H.E. Dr. Abdul Basit Turki Saeed	Head of the Reconstruction Fund		
Dr. Abdul Haq Nayef Mahmoud	Sustainable Development Organization		
Dr. No'man Hussein Attieh	University of Tikrit		
Ali Mansour Hamad	Jinan Al Rahma Organization		
Saher Abdullah Jasim	Justice Center		
Miqdad Jasim Mahdi	Al-Intelaq Development Organization		
Basim Aziz Kate'	Himreen Relief		
Omar Jasim Mohammad	Al-Intelaq Development Organization		
Ahmad Ali Ahmad	Jinan Al Rahma Organization		
Ibrahim Ali Ahmad	Jinan Al Rahma Organization		
Ammar Lafta Khaza'l	Al-Salam Humanitarian Organization		
Zahra' Adnan Ali	Kanz Humanitarian Organization		
Jasim Mohammad Mubarak	Kanz Humanitarian Organization		
Eng. Qais Malik Ahmad	Al-Kheir Organization		
Ghayda' Abdul Qader	Head of the Fund Office		
Sura Khalid	Follow-up Officer		
Haidar Sabah	Roads and Bridges follow-up		
Araz Sabah	Electricity follow-up		
Ra'ed Mohammad Ali	Diyala Governorate follow-up		
Muthher Ahmad	MoMPW follow-up		
Mohammad Abdul Jalil	Saladin Governorate follow-up		
Naji Dawoud Khalid	Al-Intelaq Development Organization		

محضر اجتماع

اجتمع د. عبد الباسط تركي سعيد رئيس صندوق اعادة اعمار المناطق المتضررة من العمليات الإرهابية ظهر يوم الاثنين المصادف ٢٠١٦/٥/١٦ وفريق العمل في مقر الصندوق مع ممثلي منظمات المجتمع المدني العاملة في محافظتي صلاح الدين وديالى وجرى خلال الاجتماع مناقشة تفاصيل المشاريع التي ستنفذ في اطار قرض مشروع التنمية الطارئة الذي قدمه البنك الدولي لحكومة العراق لاعادة تأهيل (٤) قطاعات في (٧) مناطق في المحافظتين اعلاه، كما جرى الاستماع الى ملاحظات ومقترحات المشاركين في الاجتماع بشأن المشاريع واثرها البيئي والاجتماعي في المناطق المشمولة بالقرض ومدى مساهمة تلك المشاريع بعودة النازحين الى مناطقهم، وتم شرح آلية الاعداد والتنفيذ لهذه المشاريع وشروط البنك الدولي التي تضمن المحافظة على الظروف البيئية والاجتماعية خلال تنفيذ المشاريع، وكذلك اهمية مشاركة المجتمع المدني بمواطنيه ومنظامته بدعم تنفيذ تلك المشاريع، وكذلك اهمية

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د.عبد الباسط ترعي سعيد	حسين عطية	ا، د. نعمان	د عبد الحق نايف محمود
ربيل المستوى باسم عزيز كاطع حمرين للاغاثة	معریت مقداد جامم مهدی منظمة الانطلاق للتنمیة	جامعه ساهر عبدالله جاسم مرکز العدالة	منظمه التعبه المستدامه على منصور حمد منظمة جنان الرحمة
عمار لفتة خزعل منظمة السلام الانسانية	ابراهيم علي احمد منظمة جنان الرحمة	احمد علي احمد منظمة جنان الرحمة	عمر جاسم محمد منظمة الانطلاق للتنمية
غيداء عبد القادر مكتب رئيس الصندوق	م من مالك الحمد م و قيس مالك الحمد م و سسة الخير	جاسم محمد مبارك منظمة كنز الإنسانية	زهراء عنتان علي منظمة كنز الانسانية
راند محمد على متابعة محافظة ديدال	اراز صباح متاريق الكورياء	حيدر صباح	سری خالد
NGODE	محمد عبد الجليل محمد عبد الجليل تابعة محافظة صلاح الدين	المسبعة مترق وجسور المة	مشوول متابعة مظهر التمد متابعة بلديات واشغال ع
Quail Merri apere	2		

