United Nations Development Programme
Country: Iraq
Project Document

Project Title

UNDAF Outcome(s):
Expected CP Outcome(s):
(Those linked to the project and extracted from the CP)

Expected Output(s):
(Those that will result from the project)

Executing Entity:
Implementing Agencies:

Electricity Sector Reconstruction Project: in Kurdistan Region (stage II)
N/A

Output 1
Testing equipment delivered and commissioned
Output 2
Mobile substations delivered and commissioned
Output 3
Materials and Equipment for Rehabilitation of the Distribution system completed
Output 4
Substation constructed and operation initiated

Regional Ministry of Electricity of Kurdistan (RMEK)
UNDP Iraq (for technical assistance component)

Brief Description

The Project aims to recover the electricity network in the Kurdistan region comprising of three northern governorates of Duhok, Erbil and Sulaimaniyah, through provision of necessary equipment and machinery and rehabilitation for transmission and distribution systems, thereby contributing to improving the levels of reliability and availability of the electricity network and promoting socio-economic stability and expansion. A preparatory project was implemented 2007-2008, operationalising the Partnership Agreement signed between UNDP and Japan International Cooperation Agency (JICA) in October 2007. This Project builds on the success of the preparatory project "Electricity Sector Reconstruction Project in Kurdistan Region." The Project will be implemented through a NEX modality, in which UNDP Iraq's role will be to provide assistance to RMEK in its implementation of the Project with resources made available to the Government by JICA under the Loan Agreement No.IQ-P10, dated June 11, 2008.

Programme Period: _Forty months_

Key Result Area (Strategic Plan):
Strengthening responsive governing institutions

Atlas Award ID:

Start date: __________
End Date __________
PAC Meeting Date __________
Management Arrangements

Total resources required USD 6,449,930
Total allocated resources: USD 6,449,930
• Regular None
• Other:
  ○ Government USD 6,449,930

Unfunded budget: N/A
In-kind Contributions: N/A

Agreed by (Government)

Agreed by (Executing Entity)

Agreed by (UNDP):
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1. AGREEMENT BETWEEN THE REGIONAL MINISTRY OF ELECTRICITY IN KURDISTAN OF THE GOVERNMENT OF REPUBLIC OF IRAQ AND THE UNITED NATIONS DEVELOPMENT PROGRAMME
2. TECHNICAL AND FINANCIAL PROPOSAL
1. **Situation Analysis**

As a result of the First Gulf War in 1991 and the ensuing internal conflicts, the electricity supply system in the three northern governorates suffered severe damage (e.g., several distribution and transmission lines were put out of commission, many substations were destroyed, power stations were ruined by explosives, etc.). In 1994, the governorates of Duhok, Erbil and Sulaimaniyah had been cut off from the national grid and Erbil and Sulaimaniyah had to rely on the hydropower stations of Dokan and Derbandikhan in the Sulaimaniyah governorate for their power supply (Duhok had no power supply at all for almost one year). By early 1998, the electricity generation, substations and transmission and distribution systems became very weak and power cuts of up to about 5 hours were a regular practice. In certain areas, electricity supply was limited to 3 to 5 hours daily, further reduced to about 1 hour per day or no supply in some areas. The generation capacity of these dams, however, was insufficient to meet the demand. Both dams sustained considerable damage and suffer from lack of spare parts and funds to ensure proper maintenance. The result was a combined shortfall in electricity supply for the three northern governorates of about 350 MW.

The situation remains critical given the continuously decreasing power supply from a capacity of around 700 MW in 1991, 300 MW in 1998, and approximately 400 MW in 2006. According to RMEK’s explanation, about 25% of the demand of the households connected to the electricity network is currently being met in the three northern governorates but power cuts remain a fact of life. Much of the population in the Kurdistan region put privately-owned small diesel generators to use in their households and workplace as a stop-gap measure. While still very low, it represents a significant improvement over the last three years when only 15% of the demand of households was being met, due to the impact of the drought on hydro generation.

In the International Compact for Iraq (ICI), the Government of Iraq proclaimed to “develop an Energy Sector Master Plan on the basis of an Energy Balance that will: • Assess the needs of the oil, gas, and electricity sub-sectors as an interdependent energy complex; • Determine the highest national investment priorities based on holistic view of the energy sector; • Lay out a plan for the most effective and efficient development of the energy sector; • Quantify financing requirements and identifies public and private sources including domestic and foreign investors; • Develop policies and supporting legislation for management of energy demand including improving energy efficiency.

The Economic Reform and Diversification (ERD) Sector Assistance Strategy in the UN Assistance Strategy for Iraq 2008-2010 also acknowledges the electricity sector as a key priority area for economic development and transition to a knowledge-based and market economy. The ERD Strategy identifies “Strengthened electricity and transportation sector plans for rapid economic growth” as one of its three Outcomes, and commits to engage in targeted technical assistance and capacity development to realize the Output “National capacities and institutions strengthened for rapid recovery of the electricity sector.”

The Government of Japan’s announcement to provide a loan of a total of 14,747 million Yen for Electricity Sector Reconstruction Project in Kurdistan Region (KRG) meets the timely needs and contributes to the enhancement of the efforts of the sector. Proceedings of the loan will be utilized by KRG to procure electrical plant and equipment for rehabilitation and development of the Electricity Distribution and Transmission sectors in the 3 northern Governorates (Dohuk, Erbil and Sulaimaniyah) of Iraq and the technical assistance (consulting services) described in this Project Document to be provided by UNDP.

RMEK of KRG identified several projects in the Distribution and Transmission sectors to address urgent and critical needs of the power distribution system, based on the plan for the period 2006-2015 to use its own resources to increase generation capacity. (See the “Proceedings Report of the Conference in Support of Electricity Mater Plan held November 2006”). To improve the
availability of electricity to end users in the Kurdish Region, it is required to assist RMEK to implement these projects successfully. The beneficiaries will be both the RMEK staff, whose capacity will be built, and the people of Northern Iraq, who will profit from the improvement of their access to electricity. Through provision of UNDP’s assistance services, it is expected that RMEK’s capacity to implement future projects will be built as well.

II. Strategy

UNDP Iraq has been supporting Iraq’s electricity sector through the implementation of major projects since the mid-90s and especially since 1997. UNDP implemented Electricity Network Rehabilitation Program (ENRP) in the 3 northern Governorates from 1997. Under this program UNDP implemented approximately USD 450 million worth projects in electricity generation, transmission, substations and distribution sectors. Generation covered rehabilitation of 2 major hydro power stations, construction of 3 power plants with total capacity of about 90 MW and provision of more than 1000 diesel generators for operation of essential services. Backbone 132kV transmission system and the substations were reinforced with new constructions and rehabilitated assets. Reliability and capacity of the distribution networks were improved by adding a large number of new transformers and distribution lines and equipment.

In addition, through UNDP, a variety of other areas were supported, including generation rehabilitation (1 unit in Musaib, 3 in Taji, 2 in Hartha and 2 in Mosul); emergency interventions (supply of emergency power to critical humanitarian infrastructure); training/capacity building; support to development plan preparation and discussion (such as workshops and conferences); project assessment/definition; and preparation of budgets.

During the discussions with RMEK of KRG, it was observed that the Ministry of Electricity (MoE) and KRG did not possess comprehensive technical specifications for electrical plant & equipment required for international competitive bidding. They also observed that they use various standards and specifications (old Iraqi, IEEE, and others) for their current procurement, and requested UNDP of assistance. MoE themselves also recognized their need to improve their qualified staff’s capacity, as raised in the recommendations of the November 2006 Conference in Support of Electricity Master Plan. UNDP Iraq’s loan management preparatory project of 2007-2008, based on the Partnership Agreement with JICA, successfully assisted in the equipment procurement and enhancement of RMEK staff capacity. The existing standards/specifications were reviewed and technical specifications were prepared using international best practices, essential and critical for international competitive bidding. RMEK staff were provided with on-the-job training, ensuring their sustainable capacity enhancement for even more Iraqi-led investment efforts in the future.

UNDP Iraq is thus best placed to build on the preparatory project and assist to recover the electricity network in the Kurdistan region, comprising three northern governorates of Duhok, Erbil and Sulaimaniyah. The project will provide necessary equipment and machinery and rehabilitate transmission and distribution systems, thereby contributing to improving the levels of reliability and availability of the electricity network and promoting socio-economic stability and expansion.

The Project consists of the following four subprojects in order to achieve the project objectives:

<table>
<thead>
<tr>
<th>Subproject 1</th>
<th>Procurement, delivery, commissioning and acceptance of Testing Equipment for Substation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subproject 2</td>
<td>Procurement, delivery, installation, commissioning and acceptance of Mobile Substations (132/33kV, 132/11kV and 33/11kV)</td>
</tr>
<tr>
<td>Subproject 3</td>
<td>Procurement, delivery, installation, commissioning and acceptance of Materials and Equipment for Rehabilitation of the Distribution System</td>
</tr>
<tr>
<td>Subproject 4</td>
<td>Site survey, detailed design, specification, procurement and construction of 132/33/11kV Substation</td>
</tr>
</tbody>
</table>
The detailed methodology of the Project is described in the attached Technical Proposal.

The responsibilities of the partners will be as follows:

Regional Ministry of Electricity in Kurdistan (RMEK)
RMEK is in charge of implementation, operation and maintenance (O&M) of the electricity networks in Kurdistan region (Governorates of Duhok, Erbil and Sulaimaniyah). The Project Management Committee (PMC) established in RMEK in 2007 and headed by the Directorate General of Planning will support project management activities with the assistance of UNDP Iraq. Directorate General of Distribution and Directorate General of Transmission of the Headquarter in Erbil will manage the implementation of the project across the three Governorates. RMEK as a whole shall maintain overall responsibility, with the assistance of UNDP Iraq, for all the activities in the Project including: overall project coordination, procurement management, asset management (including tracing and reporting of each item to be procured under JICA ODA Loan), financial management (including checking of all accounts and preparation of disbursement requests to JICA), arrangement of audit, monitoring and evaluation, and preparation of reports such as Progress Reports (P/R), in collaboration with the related office of RMEK.

UNDP Iraq
UNDP Iraq will maintain the Team engaged in the JICA partnership loan management project as the Project Management Team (PMT) of this Project and immediately start working for RMEK based on the TOR attached to the invitation letter, dated July 20th, 2008, Ref. No.:5783 (attached as Annex 3). The PMT based in Amman is to provide overall technical and administrative services for the implementation and management of each sub-project in order to meet the expected completion dates described in the project schedule and assuring the overall quality of works. It will consist of technical and administrative/financial management supports and act as a coordinator between RMEK and JICA, which would surely contribute to accelerating the JICA procedures. The Project Manager will be stationed in Erbil and will overall be responsible for the supervision of all UNDP project staff at the site and the project activities. UNDP Iraq will assign suitably qualified personnel, in consultation with RMEK, to fully comply with the TOR. The responsibilities of the PMT and each personnel are described in Annex 2.

UNDP is to act as a faithful adviser to RMEK. RMEK may delegate to UNDP more or less authority to act on its behalf, from full responsibility to make final decisions as an independent engineer, to that of advisor to RMEK with little authority to make decisions. The nature of and the limits to such delegation of authority to UNDP, as well as the nature of the responsibilities which UNDP is to assume, are defined in the TOR (attached as Annex 3).

UNDP fully understands the following requirements:

- To report to RMEK and JICA promptly the occurrence of any event or condition which might delay or prevent completion of any significant part of the project in accordance with the schedules and to indicate what steps shall be taken to meet the situation. Where RMEK receives such a report from UNDP, RMEK shall immediately forward a copy of it to JICA, together with its comments on the report and an outline of the steps the report proposes shall be taken (in case of serious hindrances).
- To confirm or revise the number of staff required and the professional staff-months necessary, based on the appreciation of the project schedule.
- To provide the services by suitably qualified and experienced personnel as required by the work involved and approved by RMEK, which approval shall not be unreasonably withheld or delayed.
- To submit CVs of the personnel proposed as soon as they may reasonably be required by the progress of the contracts for works executed by RMEK.
- To make allowances to cover absences of staff on leave by rotating staff assigned to the project.
- The equipment to be purchased will be transferred to RMEK after the project.
UNDP Iraq will work for RMEK to meet the expected completion dates of the project schedule and to conduct the following services in general (the details of which is provided in the Detailed Work Program and Methodology in Section 3 of the Technical Proposal):

(1) Project implementation: To assist in design review, procurement process, contract and project management and execution, incorporating supervision of construction and commissioning, including the warranty (defect liability) period in the following
- Carrying out site reconnaissance to analyze and understand the site situation and security situation in order to finalize the scope, cost, etc
- Assistance with preparation of technical specifications and bid documents
- Assistance with preparation of necessary documents related to procurement to be submitted to JICA in accordance with the Loan Agreement
- Assistance with bid process of advertisement, pre-tender meeting, response to bidders, evaluation, and award of contract
- Design review and approvals
- Inspection, testing and delivery control during manufacture
- Construction supervision
- Review and check on works progress for certification of progress payments
- Assistance with preparation of necessary documents related to disbursement to be submitted to JICA in accordance with the Loan Agreement
- Supervision of commissioning and acceptance tests
- Assistance during defects liability period

(2) Transfer of technology and Operation and Maintenance: To develop and arrange adequate training programs for RMEK in order to ensure proper operation and maintenance
- Transfer of technology to RMEK personnel
- Establishment of inventory control system at warehouses for materials and equipment

(3) Reporting: To prepare the following required reports
- Monthly progress reports
- Quarterly progress reports
- Sub-project completion reports
- Project completion report

(4) Co-ordination: To assist RMEK to maintain proper co-ordination and communication between RMEK and JICA
- Preparation of necessary documents related to procurement and disbursement to be submitted to JICA
- Coordination with JICA on behalf of RMEK to accelerate obtaining JICA’s concurrence on necessary documents

Difference of opinion
In the case of a difference of opinion between RMEK and UNDP on any important matters involving professional judgement that might affect the proper evaluation or execution of the project, RMEK shall allow UNDP to submit promptly to RMEK a written report and, simultaneously, to submit a copy to JICA. RMEK shall forward the report to JICA with its comments in time to allow JICA to study it and communicate with RMEK before any irreversible steps are taken in the matter.
In cases of urgency, UNDP has the right to request RMEK and/or JICA that the matter discussed immediately between RMEK and JICA.

RMEK and UNDP understand the following conditions of JICA:
- JICA may monitor the Services as necessary to ensure compliance with appropriate standards and acceptable data. As appropriate, JICA may take part in discussions between RMEK and UNDP. However, JICA shall not be liable in any way for the performance of the Services by reason of such monitoring or participation in discussions. Neither RMEK nor UNDP shall evade
any responsibility for this Project Document by reason of JICA's monitoring or participation in discussions.

- The commencement conditions of the Services are the following:
  - Review and concurrence of this Project Document and the related agreement by JICA
  - Receipt by UNDP of the first payment described in the payment schedule
- RMEK shall obtain JICA's concurrence before making any substantial changes in this Project Document, such as its objectives, activities, implementation agreements, budget, etc. **Such changes in the Project Document must be made in writing.**
### III. RESULTS AND RESOURCES FRAMEWORK

**Intended Outcome as stated in the Country Programme Results and Resource Framework:** Refer to I. Situation Analysis

**Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets:** Refer to I. Situation Analysis

**Applicable Key Result Area (from 2008-11 Strategic Plan):** 2.2 Strengthening responsive governing institutions; 4. National, regional and local levels of governance expand their capacities to reduce conflict and manage the equitable delivery of public services

**Partnership Strategy:** N.A.

**Project title and ID (ATLAS Award ID):**

<table>
<thead>
<tr>
<th>INTENDED OUTPUTS</th>
<th>OUTPUT TARGETS FOR (YEARS)</th>
<th>INDICATIVE ACTIVITIES</th>
<th>RESPONSIBLE PARTIES</th>
<th>INPUTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output 1</strong></td>
<td>Testing equipment delivered and commissioned</td>
<td>1. A supplier selected and the contract initiated</td>
<td>Directorate General of Planning, Directorate General of Transmission and General of Distribution</td>
<td>Consulting services 89,000 USD</td>
</tr>
<tr>
<td></td>
<td>Baseline: NA</td>
<td>• Prepare a draft bidding document</td>
<td></td>
<td>• International engineer (3M/M)</td>
</tr>
<tr>
<td></td>
<td>Indicators: 19 items of testing Equipment procured</td>
<td>• Prepare a draft evaluation report for the bid</td>
<td></td>
<td>• National engineer (4M/M)</td>
</tr>
<tr>
<td></td>
<td>Targets (year 1)</td>
<td>• Prepare a draft contract</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Procurement process to select a supplier completed</td>
<td>• Prepare all the necessary requests to be submitted to JICA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Targets (year 2)</td>
<td>2. Testing Equipment procured</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Procurement, delivery, commissioning and acceptance of the Testing Equipment completed</td>
<td>• Delivery of Testing Equipment to the warehouses</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• Complete testing and commissioning at site</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Output 2</strong></td>
<td>Mobile substations delivered and commissioned</td>
<td>1. A supplier selected and the contract initiated</td>
<td>Directorate General of Planning and Directorate General of Transmission</td>
<td>Consulting services 321,000 USD</td>
</tr>
<tr>
<td></td>
<td>Baseline: NA</td>
<td>• Prepare a draft bidding document</td>
<td></td>
<td>• International engineer (12M/M)</td>
</tr>
<tr>
<td></td>
<td>Indicators: 13 Mobile Substations procured</td>
<td>• Prepare a draft evaluation report for the bid</td>
<td></td>
<td>• National engineer (6M/M)</td>
</tr>
<tr>
<td></td>
<td>Targets (year 1)</td>
<td>• Prepare a draft contract</td>
<td></td>
<td>• National Commissioning Engineer (3M/M)</td>
</tr>
<tr>
<td></td>
<td>- Procurement process to select a supplier completed</td>
<td>• Prepare all the necessary requests to be submitted to JICA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Targets (year 2)</td>
<td>2. Mobile Substations procured</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Procurement, delivery, installation, commissioning and acceptance of the Mobile Substations completed</td>
<td>• Delivery of MSS to the warehouses</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Complete testing, installation and commissioning at site</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Output 3
Materials and Equipment for Rehabilitation of the Distribution system completed

Baseline: NA
Indicators: 9 items of the Materials and Equipment for rehabilitation of the distribution system procured
15 engineers trained for distribution planning system
6 months OJT training for health & safety provided

Targets (year 1)
- Procurement process to select a supplier completed
- Trainings provided

Targets (year 2)
- Procurement, delivery, installation, commissioning and acceptance of the Materials and Equipment for Rehabilitation of the Distribution system completed

1. A supplier selected and the contract initiated
   - Prepare a draft bidding document
   - Prepare a draft evaluation report for the bid
   - Prepare a draft contract
   - Prepare all the necessary requests to be submitted to JICA

2. Trainings provided
   - Select a system vendor to provide the training for distribution planning system
   - Purchase distribution system planning software
   - Provide the training course to 15 engineers by the selected system vendor in Amman
   - Select a training expert to provide the OJT training for health & safety in three governorates
   - Provide OJT training for 6 months

3. Materials and Equipment for rehabilitation of the distribution system procured
   - Delivery of Materials and Equipment for rehabilitation of the distribution to the warehouses
   - Complete testing, installation and commissioning at site

Directorate General of Planning and Directorate General of Distribution
Consulting services and capacity building 939,600 USD
- International engineer (12M/M)
- International Planning Engineer (6M/M)
- National engineers (3 engineers X 4M/M)
- Trainings (261,600USD)
- Purchase of distribution system planning software (204,000USD)

Output 4
Substation constructed and operation initiated

Baseline: NA
Indicators: Construction of one new 33/11kV Substation in Sulaimaniyah completed

Targets (year 1)
- Site survey, detailed design, specification and the procurement process to select a supplier including a prequalification process completed

Targets (year 2 and 3)
- Construction commissioning and acceptance of the new Substation (132/33/11kV)

1. A supplier selected and the contract initiated
   - Prepare a draft bidding document
   - Prepare a draft evaluation report for the bid
   - Prepare a draft contract
   - Prepare all the necessary requests to be submitted to JICA

2. Construction of a new Substation completed
   - Delivery and Completion of construction works

Directorate General of Transmission
Consulting services 741,000 USD
- International engineer (24M/M)
- International commissioning engineer (3M/M)
- National Civil engineer (8M/M)
- National Electrical
### Output 5
Project completed as scheduled
Baseline: NA
Indicators: Project completed in 36 months
Baseline survey on the Electricity Sector in Kurdistan Region completed before and after the project implementation

<table>
<thead>
<tr>
<th>Targets (year 1)</th>
<th>Complete testing, installation and commissioning at site</th>
<th>Engineer (16M/M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- All procurement processes for all subprojects completed</td>
<td>1. Contractors for all subprojects selected and the contracts initiated</td>
<td>Consulting services and capacity building 3,578,050 USD</td>
</tr>
<tr>
<td>- Baseline survey completed before the project implementation</td>
<td>- Complete all the procurement processes to meet the estimated schedule</td>
<td>The main components are in the following:</td>
</tr>
<tr>
<td>- Provide all trainings</td>
<td>2. All subprojects completed</td>
<td>- Project Management Team (internationals) (60M/M)</td>
</tr>
<tr>
<td>Targets (year 2)</td>
<td>- Delivery of equipments to the warehouses</td>
<td>- International Project Manager (30M/M)</td>
</tr>
<tr>
<td>- Three subprojects completed (subproject 1, 2 and 3)</td>
<td>- Completion of construction works</td>
<td>- International Procurement Specialist (8M/M)</td>
</tr>
<tr>
<td>Targets (year 3)</td>
<td>- Complete testing, installation and commissioning at site</td>
<td>- International Economist (7M/M)</td>
</tr>
<tr>
<td>- Construction of a new Substation (132/33/11kV) completed</td>
<td>- Prepare a project completion report</td>
<td>- International Environmental Specialist (6M/M)</td>
</tr>
<tr>
<td>- Baseline survey completed after the project implementation</td>
<td>3. Trainings provided to RMEK officials</td>
<td>- Travel Expenses (337,910 USD)</td>
</tr>
<tr>
<td></td>
<td>- Select appropriate trainers/venue for the trainings</td>
<td>- Miscellaneous (616,540 USD)</td>
</tr>
<tr>
<td></td>
<td>- Organize and supervise the training courses</td>
<td></td>
</tr>
</tbody>
</table>
## IV. ANNUAL WORK PLAN

### Year: 2008

<table>
<thead>
<tr>
<th>EXPECTED OUTPUTS</th>
<th>PLANNED ACTIVITIES</th>
<th>TIMEFRAME</th>
<th>RESPONSIBLE PARTY</th>
<th>PLANNED BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>And baseline, indicators including annual targets</td>
<td>List activity results and associated actions</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
</tbody>
</table>
| Output 1 | Testing equipment delivered and commissioned | 1. Activity Result: Procurement process to select a supplier initiated.  
- Activity action: Prepare draft bidding document.  
- Activity action: Advertise the bid. | X | | | Directorate General of Planning,  
Directorate General of Transmission, and  
Directorate General of Distribution  
UNDP Iraq PMT | RMEK | NA | NA |
| Baseline: N/A | Indicators: | | | | | | |
| Targets: | | | | | | | |
| Output 2 | Mobile substations delivered and commissioned | 1. Activity Result: Procurement process to select a supplier initiated.  
- Activity action: Prepare draft bidding document.  
- Activity action: Advertise the bid. | X | | | Directorate General of Planning and  
Directorate General of Transmission  
UNDP Iraq PMT | RMEK | NA | NA |
| Baseline: N/A | Indicators: | | | | | | |
| Targets: | | | | | | | |
| Output 3 | Materials and Equipment for Rehabilitation of the Distribution system completed | 1. Activity Result: Procurement process to select a supplier initiated.  
- Activity action: Prepare draft bidding document.  
- Activity action: Advertise the bid. | X | | | Directorate General of Planning and  
Directorate General of Distribution  
UNDP Iraq PMT | RMEK | NA | NA |
### Year: 2009

#### EXPECTED OUTPUTS

<table>
<thead>
<tr>
<th>Output 1</th>
<th>Testing equipment delivered and commissioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline: N/A</td>
<td></td>
</tr>
<tr>
<td>Indicators:</td>
<td></td>
</tr>
<tr>
<td>Targets:</td>
<td></td>
</tr>
</tbody>
</table>

#### PLANNED ACTIVITIES

<table>
<thead>
<tr>
<th>Activity</th>
<th>Timeframe</th>
<th>Responsible Party</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Activity Result: A supplier selected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Activity Result: The contract initiated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### TIMEFRAME

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

#### RESPONSIBLE PARTY

| Directorate General of Planning, Directorate General of Transmission |
| UNDP Iraq PMT |

#### PLANNED BUDGET

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Budget Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMEK</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>RMEK</td>
<td>Personnel</td>
<td>159,000</td>
</tr>
</tbody>
</table>

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### Zealand

- Activity Result: Prequalification process to select a supplier initiated.
- Activity action: Prepare draft PQ bidding document.
- Activity action: Advertise the bid.

#### Output 5

- Activity Result: Recruiting Project Management Team, Project Manager and International specialists and the technical assistance initiated.
- Activity action: Start Recruiting process of project personnel.
- Activity action: Assist RMEK in project implementation

| Directorate General of Planning and Directorate General of Transmission |
| UNDP Iraq PMT |

#### Total

<table>
<thead>
<tr>
<th>RMEK</th>
<th>NA</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>78,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Output 3 | Materials and Equipment for Rehabilitation of the Distribution system completed | 1. Activity Result: A supplier selected and the contract initiated  
- Prepare a draft bidding document  
- Prepare a draft evaluation report for the bid  
- Prepare a draft contract  
- Prepare all the necessary requests to be submitted to JICA | X | X | Directorate General of Planning and  
Directorate General of Distribution  
UNDP Iraq PMT | RMEK | Personnel | 347,500 |
| Target: | 2. Activity Result: The contract initiated | X | X | | | |
| 3. Activity Result: Trainings provided  
- Select a system vendor to provide the training for distribution planning system  
- Provide the training course to 15 engineers by the selected system vendor in Amman  
- Select a training expert to provide the OJT training for health & safety in three governorates  
- Provide OJT training for 6 months | X | X | X | Directorate General of Planning and  
Directorate General of Distribution  
UNDP Iraq PMT | RMEK | Training (travel & service contract) | 465,600 |

| Output 4 | Substation constructed and operation initiated | 1. Activity Result: A supplier selected and the contract initiated  
- Short list companies through PQ  
- Prepare a draft bidding document and advertise the bid  
- Prepare a draft evaluation report for the bid  
- Prepare a draft contract  
- Prepare all the necessary requests to be submitted to JICA | X | X | X | Directorate General of Planning and  
Directorate General of Transmission  
UNDP Iraq PMT | RMEK | Personnel | NA |
### Output 5
Project completed as scheduled and baseline survey completed

**Baseline:** N/A  
**Indicators:**  
**Targets:**  

<table>
<thead>
<tr>
<th>Activity Result</th>
<th>Timeframe</th>
<th>Responsible Party</th>
<th>Planned Budget</th>
</tr>
</thead>
</table>
| 1. Activity Result: Project personnel recruited and technical assistance in progress  
- Assist RMEK in project implementation | X X X X | UNDP Iraq PMT | RMEK Personnel | 891,000 |
| 2. Activity Result: Trainings provided to RMEK officials  
- Select appropriate trainers/venue for the trainings  
- Organize the training courses | | | | |
| 3. Activity Result: Baseline survey completed before the project implementation  
- Recruit an economist  
- Conduct baseline survey before the project implementation | X X | UNDP Iraq PMT | RMEK Personnel | 60,000 |

**TOTAL:** 1,956,700

### Year: 2010

<table>
<thead>
<tr>
<th>Expected Outputs</th>
<th>Planned Activities</th>
<th>TIMEFRAME</th>
<th>Responsible Party</th>
<th>Planned Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>And baseline, indicators including annual targets</td>
<td>List activity results and associated actions</td>
<td>Q1 Q2 Q3 Q4</td>
<td>Funding Source</td>
<td>Amount</td>
</tr>
</tbody>
</table>
| Output 1  
Testing equipment delivered and commissioned | 1. Activity Result: Testing Equipment procured  
- Deliver Testing Equipment to the warehouses  
- Complete testing and commissioning at site | X X | Directorate General of Planning,  
Directorate General of Transmission and Directorate General of Distribution  
UNDP Iraq PMT | RMEK Personnel | 89,000 |
<table>
<thead>
<tr>
<th>Output 2</th>
<th>Mobile substations delivered and commissioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline: N/A</td>
<td></td>
</tr>
<tr>
<td>Indicators:</td>
<td></td>
</tr>
<tr>
<td>Targets:</td>
<td></td>
</tr>
<tr>
<td>1. Activity Result: Mobile Substations procured</td>
<td></td>
</tr>
<tr>
<td>• Delivery of MSS to the warehouses</td>
<td></td>
</tr>
<tr>
<td>• Complete testing, installation and commissioning at site</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Directorate General of Planning and Directorate General of Transmission UNDP Iraq PMT</td>
<td></td>
</tr>
<tr>
<td>RMEK</td>
<td>Personnel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 3</th>
<th>Materials and Equipment for Rehabilitation of the Distribution system completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline: N/A</td>
<td></td>
</tr>
<tr>
<td>Indicators:</td>
<td></td>
</tr>
<tr>
<td>Targets:</td>
<td></td>
</tr>
<tr>
<td>1. Activity Result: Materials and Equipment for rehabilitation of the distribution system procured</td>
<td></td>
</tr>
<tr>
<td>• Delivery of Materials and Equipment for rehabilitation of the distribution to the warehouses</td>
<td></td>
</tr>
<tr>
<td>• Complete testing, installation and commissioning at site</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Directorate General of Planning and Directorate General of Distribution UNDP Iraq PMT</td>
<td></td>
</tr>
<tr>
<td>RMEK</td>
<td>Personnel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 4</th>
<th>Substation constructed and operation initiated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline: N/A</td>
<td></td>
</tr>
<tr>
<td>Indicators:</td>
<td></td>
</tr>
<tr>
<td>Targets:</td>
<td></td>
</tr>
<tr>
<td>1. Activity Result: Construction of a new Substation in progress</td>
<td></td>
</tr>
<tr>
<td>• Delivery of construction works</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Directorate General of Planning and Directorate General of Transmission UNDP Iraq PMT</td>
<td></td>
</tr>
<tr>
<td>RMEK</td>
<td>Personnel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Output 5</th>
<th>Project completed as scheduled and baseline survey completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline: N/A</td>
<td></td>
</tr>
<tr>
<td>Indicators:</td>
<td></td>
</tr>
<tr>
<td>Targets:</td>
<td></td>
</tr>
<tr>
<td>1. Activity Result: 3 subprojects completed (subproject 1, 2 and 3)</td>
<td></td>
</tr>
<tr>
<td>• Delivery of equipments to the warehouses</td>
<td></td>
</tr>
<tr>
<td>• Complete testing, installation and commissioning at site</td>
<td></td>
</tr>
<tr>
<td>• Assist RMEK in project implementation</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Directorate General of Planning and Directorate General of Distribution and Directorate General of Transmission UNDP Iraq PMT</td>
<td></td>
</tr>
<tr>
<td>RMEK</td>
<td>Personnel</td>
</tr>
</tbody>
</table>

**TOTAL** | 1,359,500 |
### Year: 2011

<table>
<thead>
<tr>
<th>EXPECTED OUTPUTS</th>
<th>PLANNED ACTIVITIES</th>
<th>TIMEFRAME</th>
<th>RESPONSIBLE PARTY</th>
<th>PLANNED BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>And baseline, indicators including annual targets</td>
<td>List activity results and associated actions</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td><strong>Output 4</strong></td>
<td>Substation constructed and operation initiated</td>
<td>1. Activity Result: Construction and testing of the new Substation completed</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Baseline: N/A</td>
<td>Delivery and Completion of construction works</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicators:</td>
<td>Complete testing, installation and commissioning at site</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Targets:</td>
<td><strong>Output 5</strong></td>
<td>Project completed as scheduled and baseline survey completed</td>
<td>1. Activity Result: Construction and testing of the new Substation completed (subproject 4)</td>
<td>X</td>
</tr>
<tr>
<td>Baseline: N/A</td>
<td>Delivery and Completion of construction works</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicators:</td>
<td>Complete testing, installation and commissioning at site</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Targets:</td>
<td>Assist RMEK in project implementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Activity Result: Baseline survey after the project implementation initiated</td>
<td>X</td>
<td>UNDP Iraq PMT</td>
<td>RMEK</td>
<td>Personnel</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1,212,000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Year: 2012

<table>
<thead>
<tr>
<th>EXPECTED OUTPUTS</th>
<th>PLANNED ACTIVITIES</th>
<th>TIMEFRAME</th>
<th>RESPONSIBLE PARTY</th>
<th>PLANNED BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>And baseline, indicators including annual targets</td>
<td>List activity results and associated actions</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
</tr>
<tr>
<td><strong>Output 5</strong></td>
<td>Project completed as scheduled and baseline survey completed</td>
<td>1. Activity Result: Project completion report prepared</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Indicators:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Targets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Activity Result: Baseline survey after the project implementation completed</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNDP Iraq PMT Directorate of Planning</th>
<th>RMEK</th>
<th>Personnel</th>
<th>40,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td></td>
<td>108,000</td>
<td></td>
</tr>
</tbody>
</table>

Travel Expenses: 337,910
Indirect Cost Miscellaneous: 616,540
Security (2% of Project budget excluding indirect cost): 101,042
Agency Management Support Cost (7% of Project budget): 396,806
Contingency (Project budget): 283,433

Total budget: 6,449,930. The detailed of the Total Budget is described in the attached Financial Proposal.
See Section II. Strategy as well as the ToRs attached in the Annex 2 for the roles and responsibilities of the parties involved in managing the project.
VI. Monitoring Framework And Evaluation

In accordance with the programming policies and procedures outlined in the UNDP User Guide, the project will be monitored through the following:

Within the annual cycle

➢ On a quarterly basis, a quality assessment shall record progress towards the completion of key results, based on quality criteria and methods captured in the Quality Management table below.

➢ An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.

➢ Based on the initial risk analysis submitted (see annex 1), a risk log shall be activated in Atlas and regularly updated by reviewing the external environment that may affect the project implementation.

➢ Based on the above information recorded in Atlas, a Project Progress Reports (PPR) shall be submitted by the Project Manager to the Project Board through Project Assurance, using the standard report format available in the Executive Snapshot.

➢ A project Lesson-learned log shall be activated and regularly updated to ensure on-going learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project.

➢ A Monitoring Schedule Plan shall be activated in Atlas and updated to track key management actions/events such as site visits and supervision of construction and tests.

Annually

➢ **Annual Review Report.** An Annual Review Report shall be prepared by the Project Manager and shared with the Project Board and the Outcome Board. As minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the QPR covering the whole year with updated information for each above element of the QPR as well as a summary of results achieved against pre-defined annual targets at the output level.

➢ **Annual Project Review.** Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. In the last year, this review will be a final assessment. This review is driven by the Project Board and may involve other stakeholders as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.
Quality Management for Project Activity Results

Replicate the table for each activity result of the AWP to provide information on monitoring actions based on quality criteria. To be completed during the process "Defining a Project" if the information is available. This table shall be further refined during the process "Initiating a Project".

<table>
<thead>
<tr>
<th>OUTPUT 1:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activity Result 1</strong></td>
</tr>
<tr>
<td><em>(Atlas Activity ID)</em></td>
</tr>
<tr>
<td><strong>Short title to be used for Atlas Activity ID</strong></td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
</tr>
<tr>
<td>What is the purpose of the activity?</td>
</tr>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td>Planned actions to produce the activity result.</td>
</tr>
<tr>
<td><strong>Quality Criteria</strong></td>
</tr>
<tr>
<td>how/with what indicators the quality of the activity result will be measured?</td>
</tr>
<tr>
<td><strong>Quality Method</strong></td>
</tr>
<tr>
<td>Means of verification. what method will be used to determine if quality criteria has been met?</td>
</tr>
<tr>
<td><strong>Date of Assessment</strong></td>
</tr>
<tr>
<td>When will the assessment of quality be performed?</td>
</tr>
</tbody>
</table>
VII. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Iraq and UNDP, signed on 20 October 1976. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the executing agency and its personnel and property, and of UNDP’s property in the executing agency’s custody, rests with the executing agency.

The executing agency shall:

a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;

b) assume all risks and liabilities related to the executing agency’s security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The executing agency agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/comitees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.
### Annex 1. RISK LOG

**Project Title:** Electricity Sector Reconstruction Project in Kurdistan Region (stage II)  
**Award ID:**  
**Date:** October 2008

<table>
<thead>
<tr>
<th>#</th>
<th>Description</th>
<th>Date Identified</th>
<th>Type</th>
<th>Impact &amp; Probability</th>
<th>Countermeasures / Mgmt response</th>
<th>Owner</th>
<th>Submitted, updated by</th>
<th>Last Update</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Commencement of this service and procurement processes are subject to the conditions required by JICA</td>
<td>September, 2008</td>
<td>Operational</td>
<td>Could affect the project implementation schedule. Enter probability on a scale from 1 (low) to 5 (high) ( P = 3 ) Enter impact on a scale from 1 (low) to 5 (high) ( I = 3 )</td>
<td>UNDP will coordinate with JICA on a weekly basis to follow up on the issue.</td>
<td>Project Management Team</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RMEK has limited knowledge of the JICA guidelines since this is the first project funded by JICA</td>
<td>February, 2008</td>
<td>Operational</td>
<td>Could delay the project implementation Enter probability on a scale from 1 (low) to 5 (high) ( P = 3 ) Enter impact on a scale from 1 (low) to 5 (high) ( I = 2 )</td>
<td>The UNDP project team will have an ex-JICA officer who has solid knowledge of the guidelines. RMEK and UNDP project team will have regular meetings (every three months at the high level) to closely coordinate to minimize the time (while following the JICA procedures).</td>
<td>Project Management Team</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Fluctuation of market prices may not complete procurement of equipment as expected</td>
<td>January, 2008</td>
<td>Financial</td>
<td>Could reduce the quantities of equipment to be procured ( P = 4 ) ( I = 2 )</td>
<td>Since this project funded by JICA is a sector loan, RMEK and UNDP will utilize the available funds as much as possible (e.g. by reallocating budgets among subprojects).</td>
<td>Project Management Team</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Annex 2. TORs and expected qualifications of experts and project management

1. Project Management Team in Amman

The Project Management Team is to provide overall technical and administrative services for the implementation and management of each sub-project in order to meet the expected completion dates described in the project schedule by assuring the overall quality of works to be provided by the Consultant. It will consist of technical and administrative/financial management supports and act as a coordinator between RMEK and JICA, which would surely contribute to accelerating the JICA procedures. PMT will support RMEK in the following:

- To establish the basic overall project construction schedule, budget and cash disbursement schedules of each sub-project
- To prepare a project integrated management plan before proceeding with actual procurement and construction
- To prepare necessary documents related to procurement to be submitted to JICA in accordance with Loan Agreement, JICA's procurement guidelines and sample documents
- To establish and implement a project management system and procedures, to monitor and control the cost and time schedules and to provide timely corrective measures
- To ensure that all support, coordination, supervision, decision making actions, including engineering and design activities, related to the construction activities, are managed in a manner, to ensure that effective quality control and required engineering standards are maintained throughout the Project within cost and time constraints
- To evaluate and approve the Contractor's quality assurance/control program
- To monitor and control progress of works and initiate corrective measures if necessary
- To issue instructions to the Contractor on behalf of RMEK
- To carry out the final inspection for all the works executed and to be handed over by the Contractors, and to issue certificates of completion for acceptance of the work
- To prepare necessary documents related to disbursement to be submitted to JICA in accordance with Loan Agreement, JICA's disbursement guidelines and sample documents
- To assist in opening L/C and L/COM of each Subproject
- To certify progress payment by reviewing, checking and approving works progress
- To maintain records of payments made by RMEK to the Contractors
- To establish overall training program for RMEK engineers and RMEK personnel as counterparts seconded to the Consultant
- To examine, review and ensure the adequacy of training programs for the RMEK engineers and technicians assigned to the line works of the operation and maintenance as specified in the contract
- To prepare the draft required progress reports with the quality assurance and submit to RMEK

Qualification:

The Project Management team will consist of the members who have been engaged in the JICA partnership program with UNDP.

The technical management team manager shall have not only expertise in the electricity sector but also solid knowledge and experiences in the electricity sector in Kurdistan region. The administrative/financial management team manager shall have not only comprehensive project management experience in various fields but also have solid knowledge on JICA procedures, guidelines and previous experiences working with JICA.

2. Project Manager in Erbil

The Project Manager will be stationed in Erbil and will be overall responsible for the supervision of all project staff at the site and the project activities. Project Manager will be responsible for following:

- To maintain close coordination with relevant project staff of RMEK form Duhok, Erbil and Sulaimaniyah.
- To work in close coordination with Project management team in Amman
- To closely monitor the implementation of the procurement contracts of 3 sub-projects in consultation with RMEK
- To Assist RMEK in providing all necessary inputs for required approvals and clearances for manufacturing and delivery of the equipment
To organize and participate in conducting training courses for the RMEK technical staff at manufacturers facilities and at site as appropriate
To assist RMEK in commissioning and acceptance of the equipment
To recruit local consultants to assist implementation of all the sub-projects
To entrust and guide International engineers and national consultants in implementation of sub-projects 1-3 as agreed with the RMEK in achieving the agreed time targets
To develop and prepare a comprehensive training programme for RMEK technical staff for familiarization of installation and O&M of the equipment at site by International engineers and equipment suppliers
To assist the International Substation Project Engineer in Sulaimaniyah starting from tendering stage through to construction, commissioning and acceptance for the new 132/33/11kV substation in Sulaimaniyah Governorate
To address issues related to warranty/defect liability of the equipment supplied and installed
To prepare progress and milestone reports as required by the ToR
To make necessary arrangements to ensure safety security of the project staff and the project assets
To arrange and participate in meetings with RMEK and contractors to ensure successful and timely implementation of the project scope
To attend to matters related to invoice submissions to RMEK
To visit project management team in Amman as required to ensure the timely implementation of the project

3. Procurement specialist:
The Procurement Specialist will be responsible for supporting RMEK in procurement and financial issues in tendering stage, including Pre-Qualification, for Subprojects and in contract supervision stage including the following:

[Tendering stage]
- To prepare draft tender documents including PQ requirements in accordance with the Loan Agreement, JICA’s procurement guidelines and sample documents and RMEK’s practice;
- To assist RMEK in advertising and invitation for tendering
- To organize and attend pre-tender meetings
- To prepare draft response to questions concerning commercial issues from tenderer
- To attend tender opening meetings
- To carry out tender evaluations and make draft financial evaluation report
- To support negotiation of contracts with successful tenderers and prepare the contract documents

[Contract supervision stage]
- To assist in organizing various documents, customs waivers, etc for the entry of the equipment into Iraq
- To resolve procurement and warranty issues of the equipment with the supply contractors

Qualification:
University degree in Science, Business Administration, Public Administration, Finance, Economics or related field with relevant work experience in procurement management for more than ten (10) years. Procurement management experience should include the preparation of bidding documents for international competitive bidding in the international field. Knowledge of Iraqi regulation and international procurement exercise, especially JICA or equivalent financial institutions (World Bank, Asian Development Bank).

4. Economist specialist:
The Economist will be responsible for supporting RMEK in the following in order to assess the project outputs:
- To review and select “Operation and Effect Indicators” and set their target figures from the stand points of significance and traceability of data
- To conduct sample survey to review and select “Operation and Effect Indicators” and set their target figures, if required
• To set up the monitoring plan for obtaining data on selected “Operation and Effect Indicators”
• To obtain data on selected “Operation and Effect Indicators” on a routine basis (PMT support)
• To assist in submission of data on selected “Operation and Effect Indicators” to JICA whenever required (PMT support)
• To review and set the method for calculation of Internal Rate of Return (IRR)
• To calculate IRR and provide recommendations for the future projects if any

Qualification:
Post graduate university degree in economics or related field with relevant work experience for more than ten (10) years. Knowledge of economic indicators, especially in electricity sector. Work experiences should include field survey of gathering data, establishment of information gathering and monitoring mechanism and calculation of economic indicators, especially in international field.

5. Environmental Specialist
The Environmental Specialist will be responsible for supporting RMEK in the following environmental issues:
• To review the EIA reports, if required, especially Subproject 4
• To assist RMEK in obtaining environmental clearance from the related authority to proceed with the project implementation

Qualification:
Post graduate university degree in environment related field with relevant work experience for more than ten (10) years. Knowledge of Environmental Impact Assessment, especially in the electricity sector. Work experiences should include conducting and reviewing EIA reports and developing environmental monitoring system in collaboration with engineers, especially in the international field.

6. Project Engineer Testing Equipment for Substations
The Project Engineer Testing Equipment for Substations will be responsible for the following activities:

- To maintain close coordination with relevant project staff of RMEK from Duhok, Erbil and Sulaimaniyah
- To follow up of the procurement activities of the contract for the sub-project-1 in consultation with RMEK
- To organize and participate in conducting training courses for the RMEK technical staff at site in settings, installation and commissioning of the testing equipment
- To assist the Project Manager in recruiting National Engineer to assist implementation of the sub-project
- To assist the Project Manager in resolving issues related warranty, defect liability, commissioning, etc
- To assist RMEK with O&M procedures for the testing equipment and develop spare parts lists for smooth operation of the equipment as required by RMEK

7. Project Engineer – Mobile Substations
The Project Engineer Mobile Substations will be responsible for the following activities:

- To maintain close coordination with relevant project staff of RMEK from Duhok, Erbil and Sulaimaniyah
- To follow up of the procurement activities of the contract for the sub-project-2 in consultation with RMEK
- To organize and participate in conducting training courses for the RMEK technical staff at manufacturer’s facilities and at site in settings, installation and commissioning of the mobile substations
- To assist the Project Manager in recruiting National Site Engineer and National Commissioning Engineer to assist implementation of the sub-project
- To develop detailed programme, including requirements for road/bridges reinforcements for transporting of mobile substations to sites in consultation with the civil engineer nominated by RMEK
- To monitor civil work involved with the site works for the installation of the mobile substations
- To liaise with RMEK in getting required network connections (33kV and 132kV) for energizing and delivering of electricity to associated 11kV and 33kV networks
- To assist the Project Manager in resolving issues related to warranty, defect liability, commissioning, etc
- To assist RMEK with O&M procedures for the mobile substations and develop spare parts lists for smooth operation of the equipment as required by RMEK
- To prepare various reports as required by the Project Manager

8 Project Engineer – Distribution

The Project Engineer Distribution will be responsible for the following activities:

- To maintain close coordination with relevant project staff of RMEK from Duhok, Erbil and Sulaimaniyah
- To follow up of the procurement activities of the contract for the sub-project-3 in consultation with RMEK
- To organize and participate in conducting training courses for the RMEK technical staff at manufacturer’s facilities and at site in testing, installation and commissioning of distribution equipment
- To assist the Project Manager in recruiting 3 National Site Engineers in implementation of the sub-project 3 equipment
- To review construction standards available with RMEK and suggest any improvements if required
- To review the proposals and locations for installation of the distribution equipment and finalize them in consultation with RMEK distribution planning units
- To prepare a comprehensive and cost effective implementation programme for distribution equipment, particularly for the distribution transformers in consultation with planning staff
- To develop optimum implementation modality for installation of distribution equipment with RMEK/Private sector participation in close coordination and agreement with Project Manager and RMEK
- To assist RMEK in implementation of the Sub-project 3
- To assist the Project Manager in resolving issues related to warranty, defect liability, commissioning, etc
- To assist RMEK with O&M procedures for the mobile substations and develop spare parts lists for smooth operation of the equipment as required by RMEK

9 Project Engineer – Distribution Planning

The Project Engineer Distribution Planning will be responsible for the following activities:

- To maintain close coordination with project staff of RMEK’s relevant distribution planning units from Duhok, Erbil and Sulaimaniyah
- To assist RMEK to procure computer hardware, accessories and peripherals and engineering software to reinforce the existing 3 distribution planning units of the 3 Governorates and at the Ministry in Erbil.
- To organize and participate in conducting training courses for the RMEK distribution planning engineers at 3 Governorates and by the software vendor in Amman
- To assist the planning units of the 3 Governorates and Ministry to re-establish distribution network databases utilizing GIS information/mapping
- To assist the planning units in developing medium-term to long-term development proposal plans to meet the power demand of KRG for next 10-15 years.
- To assist RMEK to develop investment plan in line with the above development plans
10 Project Engineer – Substation
The Project Engineer Substation (Sulaimaniyah) will be responsible for the following activities:

- To review and finalize the scope of new 132/33/11kV substation at Sulaimaniyah in consultation with RMEK
- To assist preparation of technical specification for civil work and electrical work for the construction of the substation
- To assist RMEK in preparation of tender documents for the construction of the substation on turn-key basis
- To assist RMEK in bidding process for award of contract to a turn-key contractor
- To construction supervision of the substation work by the contractor
- To witness tests, commissioning and acceptance of the substation work
- To assist project Manager in verifying and certifying contractor's invoices for RMEK payments
- To assist the Project Manager in resolving issues related to warranty, defect liability, commissioning, etc
- To assist RMEK with O&M procedures for the mobile substations and develop spare parts lists for smooth operation of the equipment as required by RMEK
- To prepare various reports as required by the Project Manager
- To assist RMEK in developing technical specification
IX. SPECIAL CLAUSES

1. The schedule of payments and UNDP bank account details.

The schedule of payments is described in the Agreement attached hereto.

RMEK shall cause the payment of UNDP's statements within sixty (60) days after the receipt by RMEK of such statements with supporting documents. The advance payment will be set off by RMEK in a manner to be agreed on by RMEK and UNDP for the months of the Services until the advance payment has been fully set off.

2. The value of the payment, if made in a currency other than United States dollars, shall be determined by applying the United Nations operational rate of exchange in effect on the date of payment. Should there be a change in the United Nations operational rate of exchange prior to the full utilization by the UNDP of the payment, the value of the balance of funds still held at that time will be adjusted accordingly. If, in such a case, a loss in the value of the balance of funds is recorded, UNDP shall inform the Government with a view to determining whether any further financing could be provided by the Government. Should such further financing not be available, the assistance to be provided to the project may be reduced, suspended or terminated by UNDP.

3. The above schedule of payments takes into account the requirement that the payments shall be made in advance of the implementation of planned activities. It may be amended to be consistent with the progress of project delivery.

4. UNDP shall receive and administer the payment in accordance with the regulations, rules and directives of UNDP.

5. All financial accounts and statements shall be expressed in United States dollars.

6. If unforeseen increases in expenditures or commitments are expected or realized (whether owing to inflationary factors, fluctuation in exchange rates or unforeseen contingencies), UNDP shall submit to the government on a timely basis a supplementary estimate showing the further financing that will be necessary. The Government shall use its best endeavors to obtain the additional funds required.

7. If the payments referred above are not received in accordance with the payment schedule, or if the additional financing required in accordance with paragraph 6 above is not forthcoming from the Government or other sources, the assistance to be provided to the project under this Agreement may be reduced, suspended or terminated by UNDP.

8. Any interest income attributable to the contribution shall be credited to UNDP Account and shall be utilized in accordance with established UNDP procedures.

In accordance with the decisions and directives of UNDP's Executive Board:

The contribution shall be charged:

(a) 7% cost recovery for the provision of general management support (GMS) by UN headquarters and country offices and 2% cost recovery for the provision of security support

(b) Direct cost for implementation support services (ISS) provided by UNDP and/or an executing entity/implementing partner.

9. Ownership of equipment, supplies and other properties financed from the contribution shall vest in UNDP. Matters relating to the transfer of ownership by UNDP shall be determined in accordance with the relevant policies and procedures of UNDP. On completion of the Project, all equipment, goods, supplies and/or properties purchased by UNDP with the contribution shall be transferred to RMEK in accordance with relevant policies and procedures of UNDP.

10. The contribution shall be subject exclusively to the internal and external auditing procedures provided for in the financial regulations, rules and directives of UNDP.

11. This Project Document has been executed in the language of English which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this document.