



TWINNING PROJECT FICHE

Strengthening the Institutional Capacity of the Egyptian Electric Utility and Consumer Protection Agency (EGYPTERA)

Under the

Support to the implementation of the action plan and the Association Agreement Programme (SAAP III) Ministry of International Cooperation Egypt

TABLE OF CONTENTS

Contents

LIST O	F ACRONYMS	2
1. B/	ASIC INFORMATION	4
1.1.	PROGRAM:	4
1.2.	TWINNING NUMBER:	4
1.3.	TITLE:	4
1.4.	SECTOR:	4
1.5.	BENEFICIARY COUNTRY:	4
2. OI	BJECTIVES	4
2.1.		4
2.2.	PROJECT PURPOSE	4
2.3.	CONTRIBUTION TO NATIONAL DEVELOPMENT PLAN/COOPERATION	
AGREE	MENT/ASSOCIATION AGREEMENT/ACTION PLAN	4
3. DI	ESCRIPTION	7
3.1.	BACKGROUND AND JUSTIFICATION	
3.2.		
3.3.	RESULTS	
3.4.	ACTIVITIES	
3.5.	MEANS/INPUT FROM THE PARTNER MEMBER STATE ADMINISTRAT	ION 16
4. IN	ISTITUTIONAL FRAMEWORK	24
	ISTITUTIONAL FRAMEWORK	
5. Bl	JDGET	25
5. Bl	JDGET IPLEMENTATION ARRANGEMENTS	25
5. Bl 6. IM 6.1	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND	25 25
5. BU 6. IM 6.1 Accou	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JNTING:	25 25 25
5. BU 6. IM 6.1 Accou 6.2	JDGET IPLEMENTATION ARRANGEMENTS Implementing Agency Responsible For Tendering, Contracting and JNTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY	
5. BU 6. IM 6.1 Accou	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JNTING:	
5. BU 6. IM 6.1 Accou 6.2 6.3	JDGET IPLEMENTATION ARRANGEMENTS Implementing Agency Responsible For Tendering, Contracting and JNTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY	25 25 25 26 27
5. BU 6. IM 6.1 Accou 6.2 6.3	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JNTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY CONTRACTS	
 5. BU 6. IM 6.1 Accou 6.2 6.3 7. IM 	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JNTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY CONTRACTS IPLEMENTATION SCHEDULE (INDICATIVE)	
 5. BU 6. IM 6.1 Accou 6.2 6.3 7. IM 7.1 	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JNTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY CONTRACTS IPLEMENTATION SCHEDULE (INDICATIVE) LAUNCHING OF THE CALL FOR PROPOSALS: JANUARY 2013	
 5. BU 6. IM 6.1 Accou 6.2 6.3 7. IM 7.1 7.2 	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JINTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY CONTRACTS IPLEMENTATION SCHEDULE (INDICATIVE) LAUNCHING OF THE CALL FOR PROPOSALS: JANUARY 2013 START OF PROJECT ACTIVITIES: OCTOBER 2013	25 25 25 26 27 27 27 27 27 27
 5. BU 6. IM 6.1 Accou 6.2 6.3 7. IM 7.1 7.2 7.3 7.4 	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JNTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY CONTRACTS IPLEMENTATION SCHEDULE (INDICATIVE) LAUNCHING OF THE CALL FOR PROPOSALS: JANUARY 2013 START OF PROJECT ACTIVITIES: OCTOBER 2013 PROJECT COMPLETION: JANUARY 2015	25 25 25 26 27 27 27 27 27 27 27 27
 5. BU 6. IM 6.1 Accou 6.2 6.3 7. IM 7.1 7.2 7.3 7.4 8. SU 	JDGET IPLEMENTATION ARRANGEMENTS Implementing Agency Responsible For Tendering, Contracting and JINTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY CONTRACTS. IPLEMENTATION SCHEDULE (INDICATIVE) LAUNCHING OF THE CALL FOR PROPOSALS: JANUARY 2013 START OF PROJECT ACTIVITIES: OCTOBER 2013 PROJECT COMPLETION: JANUARY 2015 DURATION OF THE EXECUTION PERIOD:	
 5. BU 6. IM 6.1 Accouding 6.2 6.3 7. IM 7.1 7.2 7.3 7.4 8. SU 9. CF 	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JINTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY CONTRACTS IPLEMENTATION SCHEDULE (INDICATIVE) LAUNCHING OF THE CALL FOR PROPOSALS: JANUARY 2013 START OF PROJECT ACTIVITIES: OCTOBER 2013. PROJECT COMPLETION: JANUARY 2015. DURATION OF THE EXECUTION PERIOD: JSTAINABILITY	
 5. BU 6. IM 6.1 Accouding 6.2 6.3 7. IM 7.1 7.2 7.3 7.4 8. SU 9. CF 10. 0 	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JNTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY CONTRACTS IPLEMENTATION SCHEDULE (INDICATIVE) LAUNCHING OF THE CALL FOR PROPOSALS: JANUARY 2013 START OF PROJECT ACTIVITIES: OCTOBER 2013. PROJECT COMPLETION: JANUARY 2015. DURATION OF THE EXECUTION PERIOD: JSTAINABILITY ROSS CUTTING ISSUES	
 5. BU 6. IM 6.1 Accouding 6.2 6.3 7. IM 7.1 7.2 7.3 7.4 8. SU 9. CF 	JDGET IPLEMENTATION ARRANGEMENTS IMPLEMENTING AGENCY RESPONSIBLE FOR TENDERING, CONTRACTING AND JINTING: MAIN COUNTERPART IN THE BENEFICIARY COUNTRY CONTRACTS IPLEMENTATION SCHEDULE (INDICATIVE) LAUNCHING OF THE CALL FOR PROPOSALS: JANUARY 2013 START OF PROJECT ACTIVITIES: OCTOBER 2013. PROJECT COMPLETION: JANUARY 2015. DURATION OF THE EXECUTION PERIOD: JSTAINABILITY	

LIST OF ACRONYMS

AA	Association Agreement
AFD	Agence Française de Développement (French Agency for Development)
AP	Action Plan
BC	Beneficiary Country
воот	build-own-operate-transfer
EAPP	Eastern Africa Power Pool
EC	European Union
EE	Energy Efficiency
EEA	Egyptian Electricity Authority
EEHC	Egyptian Electricity Holding Company, renamed from the former EEA
EETC	Egyptian Electricity Transmission Company
EGYPTERA	Egyptian Electric Utility and Consumer Protection Regulatory Authority
EHV	Extra High Voltage
EIB	Egyptian Investment Bank
ENP	European Neighbourhood Policy
ENPI	European Neighbourhood and Partnership Instrument
ESI	Electricity Supply Industry
EU	European Union
EUD	Delegation of the European Union to Egypt
EuroMed	Euro-Mediterranean
GoE	Government of Egypt
GW	GigaWatt
GWh	GigaWatt hour
HV	High Voltage
KE	Key Expert
KFW	Kreditanstalt für Wiederaufbau (Reconstruction Credit Institute)
L.E	Egyptian Pound
LV	Low Voltage
MED – EMIP	Support for the Enhanced Integration and the Improved Security of the Euro- Mediterranean Energy Market
MEDA	Mediterranean Economic Development Assistance
MEDREG	Support to cooperation between the EuroMed Energy Regulators
MENA	Middle East and North Africa Countries
MMBTU	Million Metric British Thermal Units
MOs	Market Operators
MPC	Mediterranean Partner Countries
MS	Member State
MSP	Mediterranean Solar Plan

MW	MegaWatt
NERC	North American Electric Reliability Corporation
NIF	Neighbourhood Investment Facility
PAO	Program Administration Office
PL	Project Leader
PSC	Project's steering committee
RE	Renewable Energies
RECREE	Regional Centre for Renewable Energy Efficiency
RES	Renewable Energy Sources
RTA	Resident Twinning Advisor
SAAP	Support to the EU-Egypt Association Agreement Programme
STE	Short Term Expert
ТА	Technical Assistance
TAPS	Technical assistance to the Power sector
ToR	Terms of Reference
TSO	Transmission System Operator
UfM	Union for the Mediterranean
USAID	United States Agency for International Development
WACC	Weighted Average Cost of Capital
WEM	Wholesale Electricity Market

TWINNING PROJECT FICHE

1. BASIC INFORMATION

- **1.1. PROGRAM**: Support to the Implementation of the Action Plan and Association Agreement (SAAP III)
- **1.2. TWINNING NUMBER:** EG/12/ENP/EY/21
- **1.3. TITLE:** Strengthening the Institutional Capacity of the Egyptian Electric Utility and Consumer Protection Agency (EGYPTERA)
- **1.4. SECTOR:** Energy
- 1.5. BENEFICIARY COUNTRY: Arab Republic of Egypt

2. OBJECTIVES

2.1. OVERALL OBJECTIVES

To contribute to strengthening the capacities of the EGYPTERA to become an efficient and reliable regulatory authority so the regulatory functions and the power sector reform process are implemented in accordance with EU and international best practices.

2.2. PROJECT PURPOSE

To assist the EGYPTERA in initiating the first market stage of the power sector reform process and continue implementing the reform process in accordance with EU best practices.

2.3. Contribution to National Development Plan/Cooperation agreement/Association Agreement/Action Plan

Until 2006, EU-Egypt bilateral relations developed almost exclusively through the financial cooperation provided by the Mediterranean Economic Development Assistance (MEDA) programme. After the Association Agreement (AA) had been put in force on June 1, 2004 EU-Egypt relations entered into a new and more intense phase, through which the Barcelona process is now addressing a much wider spectrum of fields. Based on respect for democratic principles and fundamental human rights, the AA aims at furthering regional integration, with a view to creating an area of shared prosperity, as well as providing a framework for political dialogue and closer economic, social and cultural relations between the two parties. Economic cooperation includes the liberalization of trade in goods and services, as well as capital movement. It also proposes the completion of a Free Trade Area by 2015 (2018 for a very limited number of industrial goods). In addition, the AA aims at supporting Egypt's economic and political reform efforts through approximating the laws, regulations and standards applied in Egypt to those of the EU.

Articles 48 and 53 of the AA on energy, stipulated cooperation in approximating laws and promoting renewable energies, energy saving and energy efficiency, applied research into data back networks in the economic and social sectors, linking community and Egyptian operators in particular, as well as supporting the modernization and development of energy networks and for their liking to European Community Networks.

In the meantime, the European Neighbourhood Policy (ENP) Action Plan (AP) helps Egypt fulfil the provision and aims of the AA and encourages and supports Egypt's national development, modernization and reform objectives. The AP is also helping further integration into European Union economic, social and technological structures and significantly increases the possibility to advance the approximation of Egyptian legislation, norms and standards to those of the EU.

Section 2.3 b of the AP on energy covers a number of aspects, including the gradual legal and regulatory convergence towards the principles of the EU power sector and the cooperation to build the capacity of the EGYPTERA including its development towards an electricity regulator independent from market operators; and cooperate to study the different models of electricity market for establishing a local and regional electricity market and setting the rules and procedures in cooperation with the electricity sector.

In the field of energy, the relevant EU directives and best practices are found in the following documents:

- EU Directives from the Third Energy Package
- Directive 2009/72/EC Directive on common rules for the internal market in electricity.
- Directive 2009/73/EC Directive on common rules for the internal market in natural gas.
- Energy Networks
- Communication 677/4 Energy infrastructure priorities for 2020 and beyond A Blueprint for an integrated European energy network
- Directive 2005/89/EC Concerning measures to safeguard security of electricity supply and infrastructure investment.
- Energy Efficiency / Renewable
- Communication 639 Energy 2020 A strategy for competitive, sustainable and secure energy
- Communication 5174 National RE Action Plans under Directive 2009/28/EC of the European Parliament and of the Council.
- Directive 2009/28/EC On the promotion of the use of energy from renewable sources.
- Communication 105 Green paper A European Strategy for Sustainable, Competitive and Secure Energy.
- Communication 105 (Annex) Green paper Annex What is at stake, a background document.
- Communication 30 20 20 by 2020 Europe's climate change opportunity.
- Communication 6817 Establishing harmonised efficiency reference values for separate production of electricity and heat.
- Directive 2004/8/EC On the promotion of cogeneration based on a useful heat demand in the internal energy market.
- Directive 2006/32/EC On energy end-use efficiency and energy services.
- Fossil Fuels
- Directive 2003/55/EC Concerning common rules for the internal market in natural gas.
- Directive 2004/67/EC Concerning measures to safeguard security of natural gas supply.
- Competition
- Regulation 1228/2003 On conditions for access to the network for cross-border exchanges in electricity.
- Communication 192 Progress in creating the internal gas and electricity market.

At the national level, the Government of Egypt's strategy includes adopting market reform towards a competitive electricity market based on a transitional plan. The plan starts with large consumers (above 20 MW of contacted capacity) and progressive switching for other consumers. On the other hand cost reflected electricity prices will be adopted for the regulated market. However subsidy will be kept offered to life line consumers through a more transparent approach and through the public trader, which will be responsible for satisfying the demand of the regulated market. It is expected that the aforementioned setup will encourage the private investments participating in the market,

providing the suitable framework for investment is in place. The framework will provide the necessary state guarantee for the investment till suitable market liquidity as well as track record are achieved.

In line with the strategy, a new electricity law has been prepared to provide the necessary framework for achieving these reforms. The law requests ownership unbundling for the Transmission Company and establishment of the transmission system operator, which will be responsible for system asset management and operation, market operation and system planning. Third party access will be allowed. Also transparent subsidy mechanism will be adopted through the whole sale public trader. The electricity regulator will have the power to set regulated electricity tariffs instead of the current practice which gives this to the cabinet of the ministers. Furthermore the law is adopting defined mechanisms for supporting renewable energy including competitive bidding, feed in tariff, priority in dispatching and establishment of the renewable energy fund. For energy efficiency the law is requests the grid to support cogeneration and electricity generated from waste energy. Also it requests expanding the current activities of label and standards for energy efficiency as well as executing programs for phasing out inefficient equipment. Furthermore it emphasizes on the role of service providers in providing energy efficiency services to their customers.

The law is expected to be adopted by the parliament in the 2013/2014 session.

This twinning project is fully in line with the objectives of AA, the ENP AP and, the Egyptian national plan, and will contribute to the implementation of these objectives by:

1- Implementing the reform process and the regulator functions

2- Developing the Egyptian power sector, opening it to private investment following best practices

3- Strengthening the regulatory authority to become efficient in performing its activities according to best practises

4- Improving transparency of the Egyptian power sector,

5- Contributing to institutional reform and modernization of the Egyptian public administration,

6- Improving the business climate for investment in the sector and thus reducing the risk perceived by investors.

7- Paving the way for the strategic objective of interconnecting the Egyptian Power System with neighbouring countries and ultimately with the European network.

3. DESCRIPTION

3.1. BACKGROUND AND JUSTIFICATION

3.1.1.General Background

The Support to the EU-Egypt Association Agreement Programme (SAAP) was launched by the European Union (EU) to support the Egyptian administrations in implementing the AA and the ENP, and assist the GoE's in upgrading the public administration capacity in line with EU and international best practice.

The SAAP makes available to the Egyptian Government institution's the expertise of the European Member States so as to harmonize their institutional and administrative framework and to create a competitive climate for economic growth, with the help of the EU Acquis. The instrument of institutional twinning is given particular importance as it is perceived to be an efficient and appropriate vehicle for technical expertise and knowledge transfer for the achievement of institutional strengthening and legislative harmonization.

This project will contribute to all three of the core areas mentioned above. A sound and careful implementation of the reform process as well as the regulatory functions and tools developed in the Institutional Capacity Building of the EGYPTERA project will contribute to the development of the Egyptian power sector, opening it to private investment and following best practises.

At present, the Egyptian Electricity Holding Company (EEHC) owns 90% of the installed generation capacity. Three private BOOT projects contribute with 9% of the installed generation capacity. The remaining 1% is generated out of wind farms and small isolated units.

The electricity market is organized in the single buyer form. The Egyptian Electricity Transmission Company (EETC), which is the only company licensed for EHV and HV electricity transmission, purchases electrical energy from generation companies. EETC in its turns sells the electrical energy to the nine distribution companies, the 82 EHV and HV consumers.

Furthermore EETC is exchanging energy with neighbouring countries over the present interconnections.

The electrical energy is sold to more than 22 million consumers on both the medium voltage and low voltage by EEHC and privately owned companies. At present, there are seven private distribution companies however their share does not exceed 1% of the market.

The aim of the ministry of electricity and EGYPTERA is to create a liberalized electricity market in Egypt, and to develop the Transmission System Operator (TSO) and the Market Operator (MO) in accordance with national as well as EU Standards and Regulations, as a preparation for the Egyptian Electricity Market integrating into the international Energy Market.

The existing legal framework in Egypt does not contain legal norms that regulate generation, transmission, distribution and supply of electricity as an integrated process.

A new draft Electricity Law is ready and will be submitted to the Parliament. Also, secondary legislation, which is a vital component of the opening of the market, has been prepared but not still enacted.

The Egyptian Electricity Utility and Consumer Protection Regulatory Agency was established by Presidential Decree 329 in the year 2000 as a legal entity affiliated to the Ministry of Electricity and Energy and given the following mandate:

- Ensuring that all activities of electric power generation, transmission, distribution, and sale are carried out in compliance with the laws and regulations in effect in the Arab Republic of Egypt, especially those relating to environmental protection
- Reviewing regularly the plans prepared for electric power consumption, production, transmission and distribution, including the investments necessary for such plans, in order to ensure availability of power for various usages in conformity with government policy.
- Setting regulation that ensures lawful competition in the field of electric power production and distribution in the best interests of the consumer.
- Making sure that the costs of power production, transmission, distribution guarantee the interests of all parties involved in these activities.
- Ensuring the realization of a fair return for electric utilities to ensure the continuity of their activities and sound financial position thereof
- Reviewing the policies and procedures of the National Electricity Control Centre to ensure compliance with the optimum operation standards and technical performance levels in coordination with the Egyptian Electricity Holding Company and in the best interest of all parties.
- Following up on the availability of technical, financial and economic capabilities for the Electric Utilities.
- Ensuring the quality of the technical and administrative services provided by the Electric Utilities to consumers.
- Publishing such information, reports, and recommendations that assists the Electric Utilities and consumers to be aware of their rights and responsibilities and of the role played by EGYPTERA with full transparency.
- Investigating consumer's complaints lo ensure protection of their interests and settlements of any disputes that may arise among the parties involved the activity.
- Issuing licenses for the construction, management, operation and maintenance of electric power generation, transmission, distribution, and sales projects.

3.1.2.Justification

The power sector in Egypt has been developed substantially over the last 10 years. It succeeded to double its capacity over this period. Also it succeeded in enabling access to electricity for more than 99% of Egypt population, with reasonable supply quality. On the other hand it started a restructuring process represented by legal unbundling of the electricity businesses into generation transmission and distribution as well as corporatizing these businesses. Also this restructuring process included establishment of electricity regulatory agency to regulate as well as lead the reform process toward more competitive, transparent as well as sustainable businesse.

Yet, the power sector in Egypt is being challenged by excessive increase in demand, subsidized electricity tariff, substantial investment needs, shortage in fuel supply and slows down in the reform process. These challenges led to a shortage in supply, which usually is experienced during summer. The subsidy to electricity supply has reached a total of 30 billion L.E. in 2011. This includes; 10 billion L.E. to the electricity business chain, 1 billion L.E. in customers related cost such as; billing and collection as well as customers service centers and 19 billions L.E. for the fuel used for electricity generation. The fuel subsidy is based on a benchmark price of 3 US\$/MMBTU. Subsidy does not appear explicitly in the national budget. It is provided indirectly in a form of reduced fuel prices, delayed payments for fuel supply and local loans as well as guarantees offered by the government to the electricity to consumers. On the other hand an aggressive expansion plan is needed to satisfy the increasing gross in demand. The system capacity requested to be doubled by 2020 and tripled by 2027, based on 2011 installed capacities. On the other hand, shortage of fuel supplies necessitates increasing role for renewable energy and energy efficiency.

A reliable regulatory authority, efficient in performing its activities and according to best practises is a key element for the development of the power sector with participation of the private sector. The proposals in the twinning fiche for the strengthening of EGYPTERA's regulatory capacities will also improve transparency of the Egyptian power sector, contribute to institutional reform and modernization of the Egyptian public administration, improving the business climate for investment in the sector and thus reducing the risk perceived by investors.

Moreover, a sound regulatory function in the country is indispensable for the strategic objective of interconnecting the Egyptian Power System with neighbouring countries and ultimately with the European network.

It is generally accepted that there are conceptual and operational aspects that make a regulatory authority successful.

Conceptual aspects refer to:

- Independence of the institution
- Adequate and capable staff and systems
- Technical (design) and quality standards
- Transparency and fairness

Operational aspects refer to:

- Efficiency of the regulatory agency as a decision-maker
- Procedures: for market regulation supervision and enforcement, for tariff setting, for licensing, etc
- Procedures for dispute resolution, appeal and decision making to guarantee fairness, accountability and transparency
- Financial autonomy

The efficiency, fairness and transparency of the regulator is a basic requirement for the development of a power sector with the participation of the private sector and to fulfil the strategic objective of inserting Egypt in a wider and regional context.

This aspect of regional insertion is key for the future development of Egypt's power sector since the country, from the geographical point of view is in a privileged location. Egypt is member of the EAPP which gives access to important hydro resources from Ethiopia; although there is not yet physical interconnection there are studies and projects for future lines connecting these countries. Egypt is also in a geographical position which can benefit from connections to the Middle East, Maghreb and Europe.

The project "Technical Assistance for the Institutional Capacity Building of the EGYPTERA - Europeaid/129712/D/SER/EG (2011-2012)" has provided the main tools and procedures that enhance the capacity of the institution: market design, market rules, grid code, templates for licenses, pricing methodologies for tariff setting, calculation of tariffs, procedures for implementing different regulatory functions, etc

EGYPTERA has met some of the requirements to become a reliable and qualified regulatory authority, however, it is still a young institution and so needs to develop practical know how regarding the regulatory function.

This twining project builds on the TA "Institutional Capacity Building of the EGYPTERA" carried out during 2011 / 2012 developed a series of tools, instruments and procedures to improve the capacities of the EGYPTERA for the development of its mandate. The work carried out in the frame of this project was structured in 4 areas:

- The Market Reform
- Pricing and Tariffs
- Organisation and Human Resources
- Communication Strategy

It is necessary to begin implementing the different functions and using the tools developed for which a twining with an institutions that has faced similar challenges as EGYPTERA is considered to be beneficial and the most appropriate manner of achieving the objective of a smooth, efficient and reliable manner of transforming the current young institution in a mature, reliable and good quality regulatory agency.

A "*Transition to Market Environment Component*" points at ensuring that all conditions for the first market phase implementation phase are met, this involves decisions that need to be taken in terms of which will be the participants in the non regulated market and which will be the participants of the regulated market. It is also necessary to ensure that the instruments necessary for the power system to function according to the market rules are fine tunes and that in this situation the power sector will be sustainable.

The legal requirements in terms of licensing, license monitoring, public hearings and dispute resolution are covered by the "*Legal Component*".

A permanent monitoring of companies performance, market performance, generation system adequacy, tariff calculations / revisions, and plans for design and implementation of RES / EE programs and co generation issues is needed to ensure the power sector develops in the foreseen and desired terms. This is provided by the "*Standards, Performance Assessment and Benchmarking Component*".

It is considered that the best manner to achieve these objectives and namely the achievement of the required experience and technical capacity of the EGYPERA staff is through a twinning program. Twinning programs have the advantage those professionals from similar institutions with hands – on experience on similar issues "help" the local professionals to carry out their activities and solve the problems that arise in the first steps, when new functions or procedures are implemented. EGYPTERA is just in a moment when this kind of support is needed; most of the tools and instruments have been developed, the focus now should be making the final adjustments to tools, instruments, regulations and implement them. This is exactly where the concept of "twinning" is best applicable instead of a traditional TA.

Finally, in Europe there are institutions that can provide this type of service and had already done so in the past, so it should not be a difficulty to choose one of them through a competitive and transparent process.

3.2. LINKED ACTIVITIES

The Twinning must be coordinated with the activities of the regional project MEDREG II

3.2.1. MEDREG II (Support to cooperation between the EuroMed Energy Regulators)

Timeframe: 2009-2013; Budget: € 1,100,000. Eligible countries: all ENPI South Countries

Objectives: The project aims at facilitating information exchanges and concerted approaches between EU-MPC gas & electricity regulators. It assists MPC in establishing independent energy regulators within their respective countries, or in empowering those which already exist. It develops the technical capacities of regulatory authorities. It follows up on the first phase MEDREG I project carried out earlier.

Activities: TA. Its main activities are carried out through the General Assembly and ad-hoc groups, comprising officials working within the national regulatory authorities. It organises the training of Mediterranean Regulatory Authorities' staff by the Florence School of Regulation.

Outcome: the project has managed to establish a well-recognised association of EuroMed energy regulators in the region as well as to consolidate their network and to establish a structured dialogue between them."

3.2.2.WEM - TAPS (2003-2005) - The USAID

USAID provided Technical assistance to the Power sector in Egypt (TAPS) benefiting the EEUCPRA in 2003 – 2005. The project involved an assessment of WEM options and the design for the WEM development in a Two Phase project by:

- Advanced Educational Development who supported the development of the current licensing System and Staff Training;
- International Resource Group who supported the development of the market reform plan, cost of service programme, benchmarking programme and staff training.

3.2.3 Egypt Sector policy support program in energy - The European Union

The Energy Sector Policy Support Programme aims to assist Egypt in implementing its far-reaching programme of energy reforms and to foster implementation of its strategic energy partnership with the EU to improve energy security and sustainable development.

3.2.4 Institutional Capacity Building (4 phases) - The European Union

EGYPTERA is benefitting from a programmed a 4 phase technical assistance from the EU involving **Phase I**: a framework contract for Institutional Capacity Building of the EEUCPRA. The project assisted EEUCPRA to develop further draft Electricity Act, assessed transmission system operations and detailed transitional market plan, assessed cost of service analysis and tariffs with special focus on subsidies and provided recommendations for improvement, assessed EEUCPRA capacity to carry out its functions in the reformed WEM and supported EEUCPRA to prepare the ToRs for a long term TA project: "Institutional Capacity Building of the EGYPTERA".

Phase II: The project "Institutional Capacity Building of the EGYPTERA Europeaid/129712/D/SER/EG" has been successfully executed during 2011 – 2012 which developed a series of tools, instruments and procedures to improve the capacities of the EGYPTERA for the development of its mandate. The work carried out in the frame of this project was structured in 4 areas:

- The Market Reform
- Pricing and Tariffs
- Organisation and Human Resources
- Communication Strategy

The product of this TA constitutes the basis for the implementation of the reform process and the improvement of the regulatory function.

Phase III: EGYPTERA will be also receiving a short term technical assistance aiming at assessing the potential behaviour of the envisaged market in the power sector and contribute to communicate and make aware the different stakeholders of the new future situation. This project built on the market design and market rules produced with the TA and will be an input for the component B of the twinning project.

Phase IV: the twinning project

3.2.5: Transparency and social accountability in the Egyptian power sector (2012-2013) - The World Bank

In 2012 - 2013 the EGYPTERA will also be receiving support from the World Bank to carry out the project: "Transparency and social accountability in the Egyptian power sector". The objective of this study is to strengthen institutional, regulatory, and communication environment for improved performance monitoring of the power sector, stronger interaction of the sector companies and agencies with consumers and general public, and to identify actionable measures to improve customer satisfaction, service quality, transparency, and social accountability in the sector. The study will also support some of EGYPTERA's specific mandates including: (i) ensuring the quality of the technical and administrative services provided by the power sector companies to the consumers; (ii) publishing such information, reports, and recommendations that assist the sector companies and the consumers to be aware of their rights and responsibilities and of the role played by EGYPTERA with full transparency; (iii) investigating consumer's complaints to ensure protection of their interests and settlements of any disputes that may arise among the parties involved in the activity.

The EGYPTERA is also actively involved in several international and regional associations such as the MEDREG (Mediterranean Regulators) and AFER (Arab Forum for Electricity Regulators).

3.2.6 RE master plan

The European Union conducts a Combined Renewable Energy Master plan for Egypt and co-finances a 200 MW wind farm in Egypt.

Egypt is progressing with its ambitious plans to increase substantially the share of wind and other renewable energies. The European Union signed recently with the Government of Egypt two important agreements:

• A grant agreement of € 3 million to develop a Renewable Energy Framework for wind and solar power generation in Egypt will serve as the basis for future investments contributing to

the goal of global climate change protection. The lead financial institution for the plan is the German KFW and the consortium includes the European Investment Bank (EIB) and the French AFD.

Egypt also signed a 3 billion pounds (€340 million contracts) for a 200 MW wind farm in Gabal El Zeit. The new wind farm will be the largest ever in Egypt comprising of 100 turbines, with a capacity of 2 MW each. The project encompasses 3 contracts, one for the turbines and controls, another for the civil and electromechanical works and the third for the substations. The Project is funded through the EU Neighbourhood Investment Facility (NIF) that includes grants €30 million from the European Union and €310 million soft loans from the European Investment Bank (EIB), the German KFW and the French AFD, besides funding from the government of Egypt for the local content. The project is expected to operate in 2014 and deliver 741 GWh per year saving the oil equivalent of 160'000 tons annually.

3.2.7. MED – EMIP Energy Cooperation

MED – EMIP was a platform for energy policy dialogue and exchange of experiences, leading to enhanced Euro-Med cooperation, integration of the energy markets and improved security and sustainability. The countries participating in this initiative were Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Occupied Palestinian Territory, Syria (currently suspended due to the political situation), Tunisia and Turkey.

This initiative aimed at enhancing the integration of the energy markets in the Euro-Med region and promoted improved security and sustainability. It supported the transfer of knowledge on renewable energy related issues, encouraging its use in the Mediterranean Partner Countries.

The project MED-EMIP was hosted in the same premises as the Cairo-based Regional Centre for Renewable Energy and Energy Efficiency (RCREEE) and has established a close collaboration with it. The Centre also receives direct support from Denmark and Germany.

Timeframe: 2007-2012

Budget: € 4.3 million (MEDA)

3.2.8. The Mediterranean Solar Plan – Union for the Mediterranean

The Mediterranean Solar Plan (MSP) is one of its key priorities of the Union for the Mediterranean (UfM) endorsed both at the Summit in Paris in July 2008 and at the UfM Foreign Affairs Ministerial in Marseilles in November 2008.

The UfM Member States offer a particularly high potential for the large scale deployment of Renewable Energy and Energy Efficiency technologies. Within this context, the Energy Division of the UfM Secretariat in Barcelona coordinates, in close cooperation with the UfM Member States and the European Commission, the elaboration of the MSP Master Plan. The Energy Division also identifies, brands and promotes concrete projects that are promoted by both public and private operators and relies to a large extent on donors' financing (e.g.: EIB). The Master Plan focuses specifically on solar-and wind-based power generation and integrates energy efficiency.

The Mediterranean Solar Plan (MSP) which involves not only Renewable Energy policy, production and transmission, but also the promotion of Energy Efficiency aims at two complementary targets:

• Develop the production of 20 GW of Renewable Energy in the region by 2020 achieving significant energy savings and addressing both supply and the increasing energy demand in the Mediterranean.

• Coordinate the preparation of the Master Plan for the deployment of large scale investments.

The UfM Secretariat (UfMS) is aiming at submitting the Mediterranean Solar Plan Master Plan for adoption at a Ministerial Conference in 2013

3.2.9 Paving the way for the Mediterranean Solar Plan

Timeframe: 2010- 2013

Budget: € 4,6 million

Eligible countries: all ENPI South Countries

Objectives: The project aims at contributing to a significant increase in the deployment of sustainable energy systems based on solar, wind, and other renewable energy sources, as well as on energy efficiency and savings in the ENPI South Countries. This technical assistance support the activities of the UfM for the preparation of the Master Plan

The project works along 4 lines of activity:

- 1. Harmonisation of the Legal and Regulatory Framework;
- 2. Transfer of Knowledge and Capacity Building;
- 3. Development of Sustainable Energy Policy;
- 4. Support to Investment"

3.3. RESULTS

The expected results are as follows:

3.3.1.Component A: Market transition achieved

3.3.2.Component B: Legal and Regulatory framework adapted

3.3.3.Component C: Standards, Performance Assessment and Benchmarking is implemented as a permanent activity in the EGYPTERA

3.4. Activities

The activities below are indicative and inter-alia the following activities:

3.4.0 Component 0: Kick off and Final meetings

- ➢ Kick off meeting
 - Organization of an introductory meeting to present the twinning project to the different players in the sector for visibility and coordination purposes
- ➢ Final meeting
 - ✓ Organization of a final meeting to present the results of the projects

3.4.1.Component A: Market transition

- > Preparatory activities for market initiation
 - Review and establish clearly the conditions precedent for each of the market phases, test and adjust (if necessary) the market rules previous implementation, select market players that will participate in each of the market segments.
- > Simulation of market operation before market initiation
 - Simulate in different scenarios the operation of competitive / regulated market ("shadow running" of the market) assessing the impact in the final consumer and simulating the transactions in the market.
- Market monitoring
 - ✓ Verify market rules provisions regarding market monitoring activities and corrective actions.
 - ✓ Develop a Market Monitoring System, including procedures for data collection, verification and market analysis. Support in the system implementation.
- Training

on the job training and at least 2 workshops on topics to agree with EGYPTERA are carried out during Component A execution.

3.4.2.Component B: Legal and regulatory framework

> Draft required secondary legislation for enforcing the law.

- > Licensing
 - Review if existing licenses meet EU best practises and adjust if necessary to obtain fully implementable licenses, develop any missing license and evelop a procedure to monitor compliance with licenses.
- > Develop a proposal for a green certification system.
- > Develop guidelines for Public Hearing procedures.
- Dispute Resolution
 - Assistance in the preparation of an operative Dispute Resolutions Procedure and support in its implementation including the assistance in solving a specific disputes if it any.
- Training

on the job training and at least 2 workshops on topics to agree with EGYPTERA are carried out during Component B execution.

3.4.3.Component C: Standards, Performance Assessment and Benchmarking

- > Quality Compliance Monitoring System
 - ✓ Review of existing procedures/guidelines companies performance regarding quality and propose a new system or improvements to the existing one including the reporting to which the licensee will be obliged.
- > Performance Assessment & Benchmarking
 - Review of performance indicators system currently used and propose improvements to the indicators themselves and the process of gathering and processing information.
 - ✓ Assist the EGYPTERA to assess the performance of the regulated companies in Egypt, compare them with other comparable companies and identify areas for potential performance improvement proposing the targets of improvement in these areas.
- > Support During the First Regulatory Period
 - Review information submitted by the regulated utilities (including the Regulatory Asset Base and WACC), assist EGYPTERA in the calculations relative to tariff setting, including subsidies management and transition to a cost reflective tariff.
- Investment Planning
 - ✓ Review the investment plans submitted by the regulated entities; review and comment on system adequacy reports and provide recommendations.
 - Support the EGYPTERA in the development of RES,EE and cogeneration programs including: planning the program (program targets, program execution, resources needed, etc), incentives that need to be implemented according to the plan, program monitoring, developing of regulations needed to support the implementation of the plan.
- > Training

on the job training and at least 2 workshops on topics to agree with EGYPTERA are carried out during Component C execution.

3.5. MEANS/INPUT FROM THE PARTNER MEMBER STATE ADMINISTRATION 3.5.1. Profile and tasks of the Project Leader (PL)

The Project Leader (PL) will be responsible for the overall planning and implementation of the thrust of the MS inputs in this twinning project and will ensure the achievement of the mandatory results.

The PL is expected to devote a minimum of 3 days per month from his home country for the progress of the project and 3 days quarterly in Egypt for attending the steering committee meetings.

In cooperation with the BC Project Leader appointed by EGYPTERA, she/he will be responsible to coordinate the Project's steering committee (PSC) which includes the RTA and representative of the PAO and EU Delegation.

Profile

The PL should have a university degree in engineering, economics, law or a related discipline, and should have at least 8 years of management experience in the power sector administration of an MS.

QUALIFICATION AND SKILLS

- Fluent in English
- Good communication skills, both spoken and written

MANAGEMENT CAPACITY

- Inter-personal and leadership skills
- Proven experience in negotiations at the ministerial and intra-EU levels;
- Proven work experience in the MENA region will be advantageous;

GENERAL PROFESSIONAL EXPERIENCE

- Experience in the development and implementation of Electricity Regulatory Projects
- High-ranking official, long-term civil servant from a MS with at least 10 years experience in the field of power sector on implementing strategies, policies and regulations;
- Experience and knowledge of EU legislative and operational activities related to the various components of the project;
- experience and knowledge of capacity building and strengthening of institutions related to the power sector (utilities, TSOs, MOs, Ministry in charge of electricity);
- Experience gained in similar international projects is highly desired

Tasks

- The overall direction of the Project in cooperation with the BC Project Leader;
- The achievement of the mandatory results with the BC Project Leader;
- Oversee project implementation;
- Mediate in the events of conflict;
- Oversee financial management of the project;
- Supervise the Resident Twinning Adviser (RTA) job;
- Prepare with the assistance of the RTA interim quarterly and final reports;
- Moderate the Project Steering Committee meetings.

3.5.2. Profile and tasks of the Resident Twining Adviser (RTA) – 24 Month secondment.

A Resident Twinning Advisor (RTA) on Electricity Regulation will provide advice and technical assistance to the EGYPTERA Directors and staff, coordinated through NERC's Department of International Relations and EU Coordination, on clarifying, defining, improving and helping implement the different regulations, tools and procedures required to fulfil EGYPTERA's mandate.

The RTA will ensure that best European regulatory know-how will be fed into the day to day activities and the decision making process at EGYPTERA.

Profile

The RTA should have a university degree in engineering, economics, law or a related discipline, and should have at least 8 years of experience with at least 4 years at a senior managerial level in a regulatory authority of an EU MS.

QUALIFICATION AND SKILLS

- Excellent English communication skills, both spoken and written.
- PC Computer literacy.

Technical Expertise

- Strong analytical and managerial background
- Inter-personal and communication skills; previous experience of managing multi-disciplinary and multinational team will be an asset;
- Previous Experience in international projects will be an asset;

PREVIOUS PROJECT MANAGEMENT EXPERIENCE

- She/he must be a civil servants or equivalent staff;
- 8 years hands on experience in developing and implementing strategies, policies and regulations in the power sector;
- Experience in planning developing, coordinating and conducting training programmes for a Electricity Regulatory Body in an EU MS would be an asset
- Experience within a European electricity regulatory body;

Tasks

- Make the necessary liaisons with the different parts involved;
- Manage day-to-day operations;
- Manage the Experts;
- Monitor project implementation and achievement of project objectives;
- Provide EGYPTERA with training and advise on regulatory issues;
- Prepare interim quarterly reports and final reports to be submitted to the PL;
- Maintain close contact with the PAO and the EU Delegation;
- Prepare terms of reference (ToR) for all Experts' missions

The RTA will have a full time project assistant for the purposes of translation, interpretation on a daily basis and general project duties at his/her disposal.

3.5.3. Profiles and Tasks of the Short Term Experts 3.5.3.1 Expert number1: Key Expert 1 & Component A Leader

Profile:

The Key Expert 1 should have a university degree in engineering or economics, or a related discipline. She/he should have at least 8 years of experience in the power sector with at least 3 years at a managerial level in a governmental regulatory authority of an EU MS. She/he must be fluent in written and spoken English language. The key Expert 1 will be the leader for Component A.

Specific professional experience:

Minimum Requirements:

- Previous experience in the implementation of power sector reform.
- Previous experience in market liberalisation process in the power sector.
- Previous experience in the regulation and operation of power markets.

Tasks:

The Key Expert 1 will be responsible together with the RTA for the fulfillment of Component A.

- Review final version of market rules and advise if any adjustment is still necessary.
- Advise on the fulfilment of conditions to initiate the market initial phase.
- Advice on the conditions and timing for advancing in the following market phases.
- Work with the RTA and other experts to implement planned activities.
- Submit mission reports to the RTA.
- Organise and participate in the delivering of the training corresponding to Component A.

3.5.3.2 Expert number 2 Short term Expert 1 for Component A

The Short term Expert 1 should have a university degree in engineering or economics, or a related discipline. She/he should have at least 8 years of experience in the power sector with 3 years experience at a managerial level in a governmental regulatory authority of an EU MS. She/he must be fluent in written and spoken English language.

Specific professional experience:

Minimum Requirements:

- Previous experience in the operation of liberalised markets.
- Previous experience in the regulation and operation of power markets.
- Knowledge of system operation and dispatching principles.

Tasks:

- Advise on the selection of the market participants.
- Assist in the simulation of the market environment previous to the market initiation.
- Recommend on a market monitoring system design and implementation.
- Assist in a first exercise of market monitoring.
- Work with the KE1 and the RTA and other experts to implement planned activities.
- Submit mission reports to the RTA.

3.5.3.3 Expert number 3 Key Expert 2 and Component Leader for Component B

Profile:

The Key Expert 2 should have a university degree in law. She/he should have at least 8 years of experience with at least 3 years at a managerial level in a governmental regulatory authority of an EU MS. She/he must be fluent in written and spoken English language. The Key Expert 2 will be the leader for Component B.

Specific professional experience:

Minimum Requirements:

- Previous experience in the design / management of licenses in the power sector
- Previous experience in the process and procedures for awarding licenses

Tasks:

The Key Expert 2 will be responsible together with the RTA for the fulfillment of Component B. Assistance of non key experts may be provided to meet the Component objectives.

- Develop required secondary legislation for enforcing the law.
- Review existing licenses and adjust if necessary to ensure they are totally operative.
- Identify and develop any missing license required by the market design if necessary.
- Recommend on procedures to monitor compliance with the licenses.
- Work with the RTA and other experts to implement planned activities.
- Submit mission reports to the RTA.

3.5.3.4 Expert number 4 Short term expert 2 for Component B

Profile:

The Short term Expert 2 should have a university degree in law. She/he should have at least 8 years of experience with at least 3 years at a managerial level in a governmental regulatory authority of an EU MS. She/he must be fluent in written and spoken English language.

Specific professional experience:

Minimum Requirements:

- Previous experience in developing and implementing procedures for a regulatory authority.
- Previous experience in developing / implementing a green certification system.

Tasks:

- Assist in the design of a green certification system.
- Assist in the design of a procedure for green certification.
- Work with the KE2 and the RTA and other experts to implement planned activities.
- Submit mission reports to the RTA.

3.5.3.5 Expert number 5 Short term expert 3 for Component B

Profile:

The Short term Expert 3 should have a university degree in law. She/he should have at least 8 years of experience with at least 3 years at a managerial level in a governmental regulatory authority of an EU MS. She/he must be fluent in written and spoken English language.

Specific professional experience:

Minimum Requirements:

- Experience in management / administration / chairing of public audiences.
- Previous experience in the process of dispute resolution and solving disputes.

Tasks:

- Develop guidelines for Public Hearing procedures and assist in its implementation.
- Recommend on procedures to monitor compliance with the licenses.

- Assist in the preparation of a procedure for Dispute resolutions and implementation of the procedure.
- Assist in the development of a filing system to ensure references from previous cases are easily available.
- Organise and participate in delivering the training corresponding to Component B.
- Work with the KE2 and the RTA and other experts to implement planned activities.
- Submit mission reports to the RTA.

3.5.3.6 Expert number 6 Key Expert 3 and Component Leader for Component C

Profile:

The Key Expert 3 should have a university degree in engineering or economics, or a related discipline. She/he should have at least 8 years of experience with at least 3 years at a managerial level in a governmental regulatory authority of an EU MS. She/he must be fluent in written and spoken English language. The Key Expert 3 will be the leader for Component C.

Specific professional experience:

Minimum Requirements:

- Previous experience in performance indicators and benchmarking of utilities in the power sector.
- Previous experience in developing information systems for benchmarking / monitoring utilities in the power sector.
- Previous experience in monitoring power sector utilities performance.

Tasks:

The Key Expert 3 will be responsible together with the RTA for the fulfillment of Component C – Quality Compliance Monitoring System, Performance Assessment & Benchmarking and Support during the First Regulatory Period.

- Review the existing procedure for gathering information from utilities and monitor them and propose a comprehensive utilities monitoring system. The monitoring will include quality monitoring as well as other performance aspects.
- Recommend on alternatives to carry out inspections which are responsibility of EGYPTERA.
- Assist in the process of setting up a permanent system of benchmarking of Egyptian utilities and compare them with international standards.
- Assist in the calculation of indicators.
- Recommend on improvement of indicators.
- Recommend on incentives to improve utilities' indicators.
- Work with the RTA and other experts to implement planned activities.
- Submit mission reports to the RTA.

3.5.3.7 Expert number 7 Short term expert4 for Component C

Profile:

The Short term Expert 4 should have a university degree in engineering or economics, or a related discipline. She/he should have at least 8 years of experience with at least 3 years at a managerial

level in a governmental regulatory authority of an EU MS. She/he must be fluent in written and spoken English language.

Specific professional experience:

Minimum Requirements:

- Previous experience in tariff setting process in a regulatory authority.
- Previous experience in tariff calculation in a regulatory authority.
- Previous experience in implementing incentive mechanisms to improve sector efficiency through tariff signals
- Previous experience in managing subsidies.

Tasks:

The Short term Expert 4 will be responsible together with the Key Expert 6 for the fulfillment of Component C – Quality Compliance Monitoring System, Performance Assessment & Benchmarking and Support during the First Regulatory Period.

- Assist during the first regulatory period in the review of the process for setting tariffs.
- Assist during the first regulatory period in the process of calculating tariffs
- Assist during the first regulatory period in identifying and reducing subsidies
- Assist during the first regulatory period in reviewing the tariff structure
- Assist in the review of the transition strategy.
- Recommend on incentives to improve utilities' efficiency.
- Work with the KE3 and other experts to implement planned activities.
- Submit mission reports to the RTA.

3.5.3.8 Expert number 8 Short term expert 5 for Component C

Profile:

The Short term Expert 5 should have a university degree in engineering or economics, or a related discipline. She/he should have at least 8 years of experience with at least 3 years at a managerial level in a governmental regulatory authority of an EU MS. She/he must be fluent in written and spoken English language.

Specific professional experience:

Minimum Requirements:

- Previous experience in developing system expansion plans at generation and transmission level.
- Previous experience in developing and implementing programs of RE connected to the grid.
- Previous experience in developing EE programs and treatment of co generation.
- Experience in cross border trading (regulatory, planning and operational aspects) is an asset

Tasks:

The Short term Expert 5 will be responsible together with the Key Expert 6 for the fulfilment of Component C – Investment Planning.

- Review and make recommendations on the existing planning system and planning regulation.
- Recommend improvements and assist the implementation of a regulation on system expansion planning.

- Review the investment plans submitted by the regulated entities and compare with international investment costs benchmarks.
- Propose the scope, content and frequency of system adequacy reports emerging from the planning activity.
- Assist in the review of produced system adequacy reports and provide recommendations on proposed actions to deal with any issues raised by the reports or found out based on the reports.
- Support the EGYPTERA in the development of RES,EE and cogeneration programs including: planning the program (program targets, program execution, resources needed, etc), incentives that need to be implemented according to the plan, program monitoring, developing of regulations needed to support the implementation of the plan.
- Organise and participate in the delivering of the training corresponding to Component C.
- Work with the KE3 and other experts to implement planned activities.

Summary of activities and assignment of responsibilities

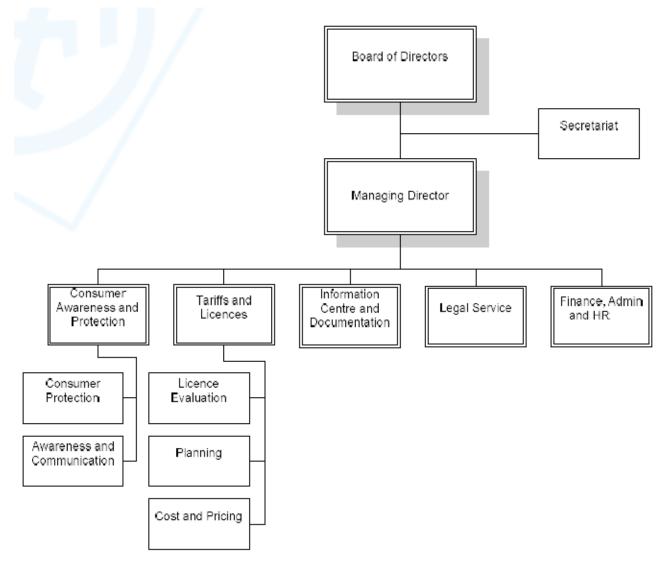
The following table shows the summary of activities, days estimated for each activity, category of the Key and Short term Experts involved in each activity and assignment of activity per professional.

Activity			Comp. A		Comp. B		В	Comp. C		С
		Days	KE1	STE1	KE2	STE2	STE3	KE3	STE4	STE5
COM	IPONENT 0:									
0.1	Kick off meeting									
0.2	Final meeting									
COM	IPONENT A: Market Transition									
A1	Preparatory activities for market initiation	60	х							
A2	Simulation of market operation	30		X						
A3	Market monitoring	60		X						
A4	Training (workshops, roundtables, etc)	10	х							
COM	IPONENT B: Legal and Regulatory framework									
B1	Draft required secondary legislation for enforcing	20			х					
	the law									
B2	Licensing	45			х					
B3	Develop a proposal for a green certification	40				Х				
	system									
B4	Develop guidelines for Public Hearing procedures	40					X			
B5	Dispute Resolution	40					X			
B6	Training (workshops, roundtables, etc)	10					X			
	IPONENT C: Standards, Performance									
C1	essment and Benchmarking Quality Compliance Monitoring System	50						х		
C2	Performance Assessment & Benchmarking	60						х		
C3	Support During the First Regulatory Period	40							x	
C4	Investment Planning	30								X
C5	Training (workshops, roundtables, etc)	10								x

4. INSTITUTIONAL FRAMEWORK

The Egyptian Electricity Utility and Consumer Protection Regulatory Agency is the direct beneficiary of this twinning project.

The EGYPTERA internal organisation is shown in the following picture:



Indirect beneficiaries are the power market stakeholders, namely the Egyptian Electricity Holding Company (EEHC), the Egyptian Electricity Transmission Company (EETC), generation companies, the distribution companies,

The project implementation will result in changes in the structure and working of the power sector in general that although they will be made in stages and little by little will result in deep modifications of the current situation. These changes are, however, necessary to achieve the targeted results, purposes and overall objective of the project which contributes to the global national political objectives.

5. BUDGET

The maximum total budget for the twinning project is 1.225.000 EURO

6. IMPLEMENTATION ARRANGEMENTS

The BC will make available for the project team a smart office and equipment (including desks, internet access, telephone, fax, photocopier, etc.) for the RTA, RTA Counterpart, RTA Assistant, Key Experts and Non Key Experts within EGYPTERA premises and close to the BC Project Leader

6.1 Implementing Agency Responsible For Tendering, Contracting and Accounting:

The Programme Administration Office (PAO) is the Contracting Authority and is in charge of the coordination of all the activities and the administrative management of the Support to the Association Agreement Programme. The PAO will be the responsible institution for the management of this twinning project. It manages the tenders, contracts and payments and this, in accordance with the procedures of ex-ante control defined in the Practical Guide to contract procedures financed from the General Budget of the EC in the context of external actions

Contact persons at the PAO:

Name: Ambassador Gamal Bayoumi Title: Programme Director Address: 9, Abdel Kader Hamza Street, Garden City, Cairo, Egypt Tel: +202 2792 34 38 Fax: +202 2792 05 83 E-mail: gbayoumi@hotmail.com

Name: Ms. Dalia Salem Title: Programme Deputy Director Address: 9, Abdel Kader Hamza Street, Garden City, Cairo, Egypt Tel: +202 2792 34 38 Fax: +202 2792 05 83 E-mail: dalia.salem@ee-aa.net

Name: Ms. Injie Kotb Title: Projects Manager Address: 9, Abdel Kader Hamza Street, Garden City, Cairo, Egypt Tel: +202 2792 34 38 Fax: +202 2792 05 83 E-mail: Injie.kotb@ee-aa.net

6.2 Main Counterpart in the Beneficiary Country

The Egyptian Electric Utility and Consumer Protection Regulatory Authority (EGYPTERA)

Address: 1, Eng. Maher Abaza Street, 4th floor, behind Elseka Elhadid Club, Nasr City Cairo, Egypt. P.O.B: 71 Panorama October 73

The BC Project Leader is:

Name: Mr. Hafez Salmawy Title: Managing Director Tel: + 202 2342 14 75 Fax: + 202 2342 34 80 E-mail: m.director@egyptera.org

The RTA Counterpart is:

Name: Mr. Hatem Wahid Title: Head of Licence & Tariff Central Department Tel: + 202 2342 14 75 Fax: + 202 2342 34 80 E-mail: <u>hatem.waheed@egyptera.org</u>

The Egyptian partner shall contribute to the project by making available furnished and equipped office space (telephone with international connection, fax machine, internet connection, copier, 2 desks computers, printer, scanner and basic daily consumables) within or close enough to the relevant services of the organisation to enable effective performance of the Experts.

The Egyptian counterpart will ensure that the equipment including computers and networks necessary for the implementation of project activities are in place and operational. The necessary local counterparts will also be made available as required for each field of expertise.

A new Financial Regulation applicable to the general budget of the European Union entered into force on 1st January 2013**1**. This implies several changes to the Twinning contract templates. An updated version of the Twinning Manual and of its Annexes, incorporating these changes, is in preparation and shall be published soon on EuropeAid website**2**. The Twinning contract that shall be signed as a result of the present procedure shall follow the templates of the updated Twinning Manual and Annexes.

¹ Financial Regulation: Regulation (EC, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:298:0001:0096:EN:PDF

Rules of Application: Commission Delegated Regulation (EU) No 1268/2012 of 29 October 2012 on the rules of application of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2012:362:FULL:EN:PDF

² <u>http://ec.europa.eu/europeaid/where/neighbourhood/overview/twinning_en.htm</u>

6.3 Contracts

No contracts linked to the twinning contract are foreseen.

7. IMPLEMENTATION SCHEDULE (indicative)

- 7.1 Launching of the call for proposals: January 2013
- 7.2 **Start of project activities:** October 2013
- 7.3 **Project completion:** January 2015
- 7.4 **Duration of the execution period:** 24 months (in addition to a 3-month closure period)

8. SUSTAINABILITY

At governmental level there is an understanding and commitment to ensure that progress is made in the process of reform, modernisation and updating of the Egyptian power sector. This will contribute to the development of the required capacities to perform a regulatory function of quality and efficiently. This will help ensuring the sustainability of the results.

On another hand, the twinning project will work closely with EGYPTERA, in cooperation with the institution's management and staff and the market players to ensure that EGYPTERA and the other players have a clear sense of ownership of the project. This will help ensure the sustainability of the results.

The twinning project will also develop know how and very specific capacities at staff level in EGYPTERA. Dissemination of this knowledge with a philosophy of "train the trainer" will help ensure the sustainability of the results.

in addition, project will ensure sustainability by ensuring the transfer of know how within EGYPTERA, all manuals and technical documents will be prepared in partnership with EGYPTERA professionals and will continue to be used after the project's completion. All materials and technical documents shall be translated into Arabic to maximise and ensure smooth dissemination.

9. CROSS CUTTING ISSUES

Implementation of the project will have no adverse effect on the environment. On the contrary, several aspects of the project will contribute to a better and more stable environment. Among the most relevant it can be mentioned:

- Ensuring a system expansion planning which considers least cost expansion planning and internalise environmental aspects to determine the optimum expansion contributes to minimise the power sector impact in the environment.
- Promotion of renewable energies, energy efficiency and co generation through different plans and regulations strongly reduces environmental impacts.

The project will seek to ensure that there is equal treatment accorded to male and female staff in EGYPTERA and the other stakeholders participating in the project activities and training programmes.

10. CONDITIONALITY AND SEQUENCING 10.1 Conditionality

It is crucial for the success of the twinning project that there is a strong commitment at governmental level, at stakeholders level and specially at EEHC for implementing the recommendations and actions needed to implement the reform process in the Egyptian power sector. It is recognized that the project implementation will result in changes in the structure and working of the power sector in general that although they will be made in stages and little by little will result in deep modifications of the current situation. These changes are, however, necessary to achieve the targeted results, purposes and overall objective of the project which contributes to the global national political objectives.

It is important that EGYPYERA and other beneficiaries and stakeholders recognize that the changes resulting from the twinning project itself are part of a process of continuing improvement toward increasing the operational efficiency and effectiveness of the Egyptian power sector in line with international norms and best practices. This process is also important to ensure that Egypt will be able not only to insert itself in the region allowing the interconnection with other countries and regions but will turn into a key player in this context.

Finally, it is also important that individual staff members at all levels understand that it is their responsibility to ensure the quality of their work. In this regard, the GoE needs to ensure that the staff pay structure is commensurate with the qualifications and skills required of the staff.

10.2 Sequencing

The estimated sequencing of activities is presented in a Gantt diagram in Annex 2. This diagram is indicative but illustrates a reasonable organisation of activities and the moment they should be carried out. Obviously there may be other possible organisations, so this estimation should not be considered as binding; during the inception period the detailed workplan should be prepared where this proposed sequencing can be perfectly reviewed.

Annexes to the project fiche:

1- Logical framework matrix

Annex 1: Logical Framework

Overall Objective	Objectively Verifiable Indicators (OVIs)	Sources of Verification	Assumptions
To contribute to strengthening the capacities of the EGYPTERA to become an efficient and reliable regulatory authority so the regulatory functions and the power sector reform process are implemented in accordance with EU and international best practices.	 The first market stage is implemented Black outs are reduced. The margin of reserve in the system is improved. Subsidies are reduced and made transparent. 	 Power sector statistics. Statistics from the System Operator and distribution companies. Balance sheets of sector utilities. 	 The Law on electricity is approved by the Parliament with no major modifications to the existing draft GoE supports changes to the institutional and regulatory frameworks.
Project Purposes	Objectively Verifiable Indicators (OVIs)	Sources of Verification	• GoE continue supporting the implementation of the power
To assist the EGYPTERA in initiating the first market stage of the power sector reform process and continue implementing the reform process in accordance with EU best practices.	The first market stage initiated by EGYPTERA at the end of year 2 of the project implementation	Ministerial decision declaring the beginning of the new framework	 sector market. Changes to the institutional and regulatory frameworks are adopted by the power sector players EEHC proceeds with the required reforms and adaptation to the new legal / regulatory framework. TSO, MO, Wholesale Public Trader are established.

Results: Component A	Objectively Verifiable Indicators (OVIs)	Sources of Verification	Assumptions
Market Transition achieved	 Conditions precedent to initiate the first market phase are adopted by EGYPTERA Market participants selected by EGYPTERA according to market design Simulation of the market accomplished Market monitoring procedure is approved and implemented by EGYPTERA 	 Approved regulations Signed agreements Publication by EGYPTERA of list of potential participants in each market segment Results of market simulation in different scenarios Final version market rules Market monitoring procedure regulation Publication of results on a first exercise of market monitoring 	 Sufficient eligible consumers choose participating in the non regulated market Active cooperation of EEHC to implement the market mechanisms needed at the TSO No delay in formally approve regulations. Active cooperation of TSO in the calculations needed to simulate the different market scenarios (dispatching) Approval of Ministry on initial scenario chosen for market initiation Non regulated segment of the market begins working Utilities in the sector cooperate to provide on time information required Utilities in the sector cooperate to develop the internal systems necessary to provide the required information on time and with quality Utilities in the sector cooperate to adapt their information systems to produce information that was not available before

Results Component B	Objectively Verifiable Indicators (OVIs)	Sources of Verification	Assumptions
Legal and regulatory framework adapted	 By laws for enforcement of market rules, grid code, supply code. Licenses are adopted by EGYPTERA Green certification system adopted EGYPTERA's team responsible for licensing has awarded the corresponding licences Public hearing procedure in place Procedure to monitor license compliance in place Dispute resolution procedure in place Support in solving disputes and carrying out public hearings 	 Official publications Licenses and list of licensees Publication of license monitoring procedure by EGYPTERA and first report on license monitoring Publication of the green certification procedure by EGYPTERA Publication of the public hearing procedure by EGYPTERA Publication of the dispute resolution procedure by EGYPTERA Publication of the dispute resolution procedure by EGYPTERA 	Availability of the required professionals to deal with the legal activities

Results :	Objectively Vesrifiable Indicators	Sources of	Assumptions
Component C	(OVIs)	Verification	
Standards, Performance Assessment and Benchmarking Implemented as a Permanent Activity in the EGYPTERA	 Monitoring procedure and system to follow up companies' performance implemented by Performance indicators and system to follow up regulated companies' performance and comparison with international benchmarks is operative tariffs calculation for the first regulatory period accomplished by EGYPTERA Least Cost Plan approved by EGYPTERA RES, EE and co generation programs proposed and approved by EGYPTERA 	 Quality compliance regulation Publication of reports on quality from licensees Performance regulation. Database on international performance indicators New tariffs reports from the process of tariff setting including public audience reports if any System adequacy report and recommendations Database on international investment costs 	 Regulation is adopted Utilities in the sector cooperate to provide on time reports required Regulation is adopted Utilities in the sector cooperate to provide on time required information EGYPTERA has resources to access to international information Government supports the procedure for tariff setting Utilities contribute providing the information on time and with the required quality Least cost plan is developed according to the corresponding timeline and according to the technical detail required

Activities Component	0	Assumptions
	g : Organization of an introductory meeting to present the twinning project to the different players including Development partners in the sector for visibility and coordination purposes	Commitment of EGYPTERA
	Organization of a final meeting to present the results of the projects the different players including Development partners in the sector	Commitment of EGYPTERA

Activities	Assumptions
Component A	
 Preparatory activities for market initiation: ✓ Review and establish clearly the conditions precedent for each of the market phases, test and adjust (if necessary) the mark rules previous implementation, select market players that will participate in each of the market segments. 	 The Law on electricity is approved by the Parliament with no major modifications to the existing draft. GoE continue supporting the implementation of the power sector market. EGYPTERA staff sufficiently trained in market simulation
Simulation of market operation:	EGYPTERA staff sufficiently trained in market simulation
 Simulate in different scenarios the operation of competitive / regulated market ("shadow running" of the market) assessing t impact in the final consumer and simulating the transactions in the market. 	he
 Market Monitoring ✓ Verify market rules provisions regarding market monitoring activities and corrective actions. ✓ Develop a Market Monitoring System, including procedures for data collection, verification and market analysis. Support in the system implementation. 	 Market rules adopted All pre conditions for market beginning are fulfilled Market actually begins
Training: ✓ Conduct on the job training and at least 2 workshops on topics to agree with EGYPTERA are carried out during Component A execution 	 Formal commitment of (the same) Egypt era and stakeholders professionals to the implementation of the project Adequate number and profile of participants is secured

Activities Component B	Assumptions
Draft secondary legislation ✓ Draft required secondary legislation for enforcing the law	Electricity law approved
 Licensing: ✓ Review if existing licenses meet EU best practises and adjust if necessary to obtain fully implementable licenses, develop any missing license and develop a procedure to monitor compliance with licenses. 	Licenses developed by the TA "INSTITUTIONAL CAPACITY BUILDING OF THE EGYPTERA" adopted.
Green certification system: ✓ Develop a proposal for a green certification system	
Public Hearing procedures: ✓ Develop guidelines for Public Hearing procedures	
 Dispute Resolution ✓ Assist in the preparation of an operative Dispute Resolutions Procedure and support in its implementation including the assistance in solving a specific disputes if it any. 	Dispute resolution mechanism developed by the TA "INSTITUTIONAL CAPACITY BUILDING OF THE EGYPTERA" accepted.
 Training: ✓ Conduct on the job training and at least 2 workshops on topics to agree with EGYPTERA are carried out during Component B execution. 	 Formal commitment of (the same) Egypt era and stakeholders professionals to the implementation of the project Adequate number and profile of participants is secured

Activities		AA
Compone	nt C	Assumptions
Quality Cor ✓	mpliance Monitoring System: Review of existing procedures/guidelines companies performance regarding quality and propose a new system or improvements to the existing one including the reporting to which the licensee will be obliged.	 Formal commitment of stakeholders (companies in the sector) to provide the required information
Performan ✓	 ce Assessment & Benchmarking Review of performance indicators system currently used and propose improvements to the indicators themselves and the process of gathering and processing information. Assist the EGYPTERA to assess the performance of the regulated companies in Egypt, compare them with other comparable companies and identify areas for potential performance improvement proposing the targets of improvement in these areas. 	 Formal commitment of stakeholders (companies in the sector) to provide the required information
Support Du ✓	uring the First Regulatory Period Review information submitted by the regulated utilities (including the Regulatory Asset Base and WACC), assist EGYPTERA in the calculations relative to tariff setting, including subsidies management and transition to a cost reflective tariff	 Formal commitment of stakeholders (companies in the sector) to provide the required information
Investmen ✓	t Planning Review the investment plans submitted by the regulated entities; review and comment on system adequacy reports and provide recommendations. Support the EGYPTERA in the development of RES,EE and cogeneration programs including: planning the program (program targets, program execution, resources needed, etc), incentives that need to be implemented according to the plan, program monitoring, developing of regulations needed to support the implementation of the plan.	 System expansion plans are provided to the EGYPTERA EGYPTERA staff has an introductory training on least cost planning (result from "project extension) EGYPTERA has available a tool for least cost planning.
Training: ✓	Conduct on the job training and at least 2 workshops on topics to agree with EGYPTERA are carried out during Component C execution.	Formal commitment of (the same) Egypt era and stakeholders professionals to the implementation of the project Adequate number and profile of

participants is secured