Standard Summary Project Fiche
Project Number TR 0202.01
Twinning number TR02-EY-01

1. Basic Information
1.1 Désirée Number:

1.2 Title: Institutional Strengthening of the Energy Market Regulatory Authority (EMRA)

1.3 Sector: AD

1.4 Location: The Republic of Turkey, Energy Market Regulatory Authority with the office located in Ankara

Contact Person:
Mr. Cahit Akinci, Head of International Relations and EU Coordination, Energy Market Regulatory Authority, Yüksel Cad. No 23, Kizilay, Ankara, Turkey. Tel: (90-312) 435-9118. Fax: (90-312) 430-6904. E-mail: cakinci@epdk.org.tr

2. Objectives
2.1 Overall Objective

The overall objective is to improve the regulation of the energy market in compliance with the EU Acquis.

2.2 Project Purpose:

The project purpose is to increase the EMRA’s capacity to ensure proper implementation of the legislation in place and to develop new regulations and practices in line with EU standards.

2.3 AP and NPAA Priority

AP Short term priority

- Establish an independent regulatory authority for the electricity and gas sectors; grant the authority and the means to carry out its tasks efficiently;
- Prepare for the establishment of the internal energy market, notably for the electricity and gas Directives, and the opening up of the markets.

AP Medium term priority

- Restructure energy utilities and open up further the various sectors; strengthen administrative and regulatory structures;
- Complete alignment of national legislation with the EU energy acquis.

NPAA 4.15 (Energy)

II. Comparison of the EU acquis with the corresponding Turkish legislation and the measures to be taken for implementing the necessary amendments and modifications

II.c) Necessary Institutional Changes
“- Establishment of the Electricity Market Regulatory Authority”

II.d) Additional Staff and Training Requirements for the Implementation of Amendments and Modifications

“A need shall arise for qualified staff and training, and for institutional changes”

II.e) Necessary Investments

“Infrastructure, hardware and software requirements will arise”

2.4 Contribution to National Development Plan

Turkey has not yet been invited by the EC to prepare a National Development Plan.

2.5 Cross Border Impact

Not applicable

3. Description

3.1 Background and Justification

The Helsinki European Council at the end of 1999 concluded that “Turkey is a candidate State destined to join the Union on the basis of the same criteria as applied to the other candidate States. Building on the existing European Strategy, Turkey, like other candidate States, will benefit from a pre-accession strategy to stimulate and support its reforms”.

Following In response to the macroeconomic developments in Turkey in 2001, and with support from the IMF, the World Bank and other international donors such as the European Union, the Republic of Turkey has embarked at a sweeping programme of economic reforms and restructuring, which fully extends to the energy sector. Regulatory reforms have been recognised as a crucial support for economic recovery in Turkey.

The Turkish Electricity Market Law became effective on 3 March 2001 (Law 4628). The Law concentrates mainly on defining the sector’s new structure and the status of the power sector actors, including restructuring and unbundling of utilities. This is closely tied to the Constitutional Amendment of August 1999 (Law 4446), which for the first time explicitly permitted privatisation of state enterprises and assets including energy companies. Whilst the state will retain control over power transmission, generation and distribution activities are to be opened to competition and to private companies (the state will retain ownership of the hydropower generation assets). The law also foresaw establishing the Energy Market Regulatory Authority (EMRA).

The Natural Gas Market Law was enacted on 2 May 2001 (law 4646). As the Electricity Market Law it also concentrates on defining the new sector structure and the status of the different actors. As part of the law’s provisions BOTAS shall undergo restructuring following which transmission operations will be separated from importing and commercial activities.

In summary, the adopted electricity and gas laws include the following key elements:

- An autonomous Energy Market Regulatory Authority, governed by the President, in charge of overseeing the electricity and gas market;
• A new licensing framework for market participants;
• An energy market to based on bilateral contracts between market participants;
• Eligible consumer concept, to ensure freedom for eligible consumers to choose their suppliers;
• A transition mechanism to be implemented over a two year program for the electricity market and one and a half year program for the gas market.

The above-mentioned laws were designed as framework legislation and these laws require the completion of a series of secondary regulation (cf. annex 4) during the preparatory period of the Energy Market Regulatory Authority, which started to work immediately after appointment of its Board on 19 November 2001. Drafts of the secondary regulation will be finalised in conjunction with the related public institutions and in consultation with the representatives of the private sector. Secondary legislation will become effective before market opening envisaged for September 2002 (electricity) and November 2002 (gas) respectively. As per market opening EMRA will start operating as a regulator.

The Board has also determined its priorities regarding EMRA’s organisational structure. To this end, core professional staff was selected and since November 2001 the internal administrative procedures of EMRA, including audit, budget and personnel, have been drawn up.

It is expected that shortly EMRA staff - currently seconded from other governmental institutions and state energy companies – will receive tenure positions. In parallel temporary working groups shall be transformed into departments according to the organisational chart (cf. annex 5), which has been recently adopted by EMRA. Before long the authority will be moving to its new office building.

Incorporation of the EU acquis communautaire is helping to shape the reform agenda, and provides a benchmark against which the reform process can be evaluated. This EU-based legislation must also be properly implemented and enforced, which requires effective administrative structures and legal systems, with trained and professional staff.

According to the European Commission’s 2001 Regular Report on Turkey’s Progress towards Accession (dated 13 November 2001) Turkey has achieved substantial progress in the field of electricity and gas sectors. In particular, it advanced in preparing to harmonise with the acquis and to prepare itself to the internal energy market through the adoption of two major framework laws for the electricity and gas sectors. Some important aspects such as market opening, however, require further attention to comply with the acquis. To some extent these are being addressed by the ongoing drafting and reviewing of secondary energy legislation.

It is obvious that the more Turkey is aligned with the energy acquis the more the focus should be shifted on to administrative and institutional strengthening of energy institutions such as EMRA. In so doing it will be warranted that sufficient capacity is available to take account of the acquis communautaire in day-to-day regulatory work, and to carry out duties efficiently. Furthermore, there is a constant need to follow and incorporate ongoing and prospective amendments and further evolutions in the regulatory
and legislative framework of the European electricity and gas markets (e.g. Proposal for amended Electricity and Gas Directives) into Turkish laws and regulations.

### 3.2 Linked Activities

There are a number of activities supported by the European Commission, the World Bank, USTDA and other donors completed, planned or underway, the results of which need to be taken into account and with which close coordination is pertinent to capitalise on findings, to learn lessons and to avoid any overlapping or work in parallel. Among those linked national and regional activities the following have a direct or indirect link:

#### EU Activities

- Euro Mediterranean regional project on “Reform of the legal and institutional energy sector framework” financed by MEDA; In progress;
- Euro Mediterranean regional project on “Restructuring of Energy Companies” financed by MEDA; In progress;
- Euro Mediterranean regional project on “Support to the Ad-hoc Groups” financed by MEDA; In progress;
- Short term technical assistance entitled “Assistance to EMRA in drafting secondary gas legislation” under Administrative Cooperation Programme; In progress;
- Short term technical assistance entitled “Assistance to EMRA in drafting secondary electricity legislation”; In progress;
- Short term technical assistance entitled Energy and Nuclear Safety: Restructuring the Ministry of Energy; Under preparation;

#### World Bank Activities

The World Bank is the key institution supporting energy sector reforms in Turkey. The following activities are in progress, under preparation or have been recently completed:

- National Transmission Grid Project. Financed from IBRD loan in the amount of US$ 270 million. This loan has been now restructured to assist with:
  - (i) The establishment of the Turkish Electricity Transmission Company (TEIAS) as the national transmission company and system and market operator;
  - (ii) Providing funds to the Government to further work with EMRA;
  - (iii) Helping the new trading company and the distribution companies adjust to the new privatised market model.

The institutional part of the National Transmission Grid Project, for which an amount of US$ 20 million has been earmarked, is now called Energy Sector Reform Programme. This project coordinated by EMRA will include a number of elements, which are closely linked to the proposed project, namely the following:

- Electricity distribution restructuring: Consultancy services for the formation of companies; load profiling; separation of entity accounts (wires and supply businesses); retail tariff rebalancing; performance baselines; regulatory accounts; load forecasting systems; training;
- Technical assistance for the electricity trading company: Consultancy services for regulatory accounts; vesting contracts for sector; wholesale tariff computation model and software; financial and accounting management system; training;

- Public information program;

- Regulatory information system: Design and implementation;

- Regulatory training programs: Training for EMRA staff and market participants;

- Market and industry design: Market manual finalisation: BSC guidelines; financial model;

- Legal advisory services;

- Electricity distribution and generation entity grouping for privatization and restructuring: entity definition; debt restructuring plan; restructuring steps and plan;

- International expert panel: experts: (a) power market expert; (b) regulatory practice; (c) privatization; (d) distribution issues; (e) gas market expert. Plus individual experts for special review tasks;

- EMRA regulatory information systems: Databases; financial systems.

- Turkey Renewable Energy Project to be financed by an IBRD loan in the amount of US$ 200 million, which may contain a component on regulatory authority capacity building in the field of renewable energy including distribution company requirements to purchase renewable energy when offered at market prices and any special licensing procedures for small renewable plants (loan agreement under preparation);

- PPIAF (Public Private Infrastructure Advisory Facility) trust fund grant on Power Sector Reform in Turkey including assisting the establishment of EMRA in drafting secondary legislation under the Electric Energy Market Bill covering licensing, tariff setting, balancing and settlement codes, trading contracts, and appeals, Completed in 2002;

- PHRD (Policy and Human Resource Development) trust fund grant for Gas Sector Liberalisation including gas release strategy for BOTAS, regulatory methodology, drafting and reviewing secondary legislation, monitoring/auditing procedures, training on country experience, CNG, methodologies for demand forecast and third party access, To start by autumn 2002;

- JSCTF (Japan Staff and Consultants Trust Fund) grant for Energy and Environment Review (Special studies on energy demand, electricity transmission and distribution loss reduction, petroleum fuel quality, cogeneration potential, environmental impact of coal mining and environmental institutional structures), Completed in 2002.

**Other Donor and Organisation Activities**

- USTDA (United States Trade and Development Agency) grant for BOTAS on “Gas Transportation Fee Study and Development of a Tariff Modelling System”, In progress (budget: € 305,000);
• **OECD Study on Regulatory Reform in Turkey**, Completed in 2002

To avoid overlapping EMRA will have to ensure close coordination between the training and advisory components of the proposed project with the corresponding components of the World Bank Energy Market Reform Project and, if necessary, with the upcoming Renewable Energy Project.

No feasibility study has previously been conducted in the designing of this project.

### 3.3 Results

The activities which shall be carried out under the project and which are described in section 3.4 are expected to lead to the following results:

- EMRA’s management, operational, and regulatory procedures are in place;
- Knowledge and skills of EMRA are brought to the level necessary for acquis implementation (i) on the EU internal energy market and corresponding requirements for regulatory authorities and (ii) on best practice procedures as applied in regulatory authorities in the EU Member States;
- Adequate infrastructure is in place for EMRA to provide training on regulation and competition issues in the energy sector.

### 3.4 Activities

The proposed project will allow for know-how transfer and training in the area of EU internal energy market and regulatory practices through twinning with appropriate European institutions. The proposed project will consist of the following two components:

1) Know-how transfer from EU Member States energy regulatory authorities to Turkey;

2) Development and implementation of EMRA staff training programme.

**Component 1: Know-how transfer from EU Member States energy regulatory authorities to Turkey**

It is anticipated that a Pre-Accession Adviser (PAA) and short-term experts (STE) shall provide advice focussed on but not limited to the following areas:

- Further evolution of market reforms towards competition and removal of obstacles to a functioning market including issues such as level playing field in generation, access to network, different degree of market opening, protecting small and vulnerable customers’ rights, disclosure policies on fuels;
- Good governance, corporate identity, adaptation and modification of organisation structure, revising and streamlining working procedures and human resource development;
- Effective regulations and legally binding methodologies underlying the calculation of transmission and distribution tariffs, publicising policies and non-discriminatory application of methodologies;
- Authorisation including bidding procedures, criteria and specific requirements to obtain distribution licenses for gas and electricity;
- Cross-border trade for electricity and gas including congestion management and capacity allocation procedures, transparency and information provision, cross-border infrastructure capacity development, harmonised cross-border exchange tarification, international agreements (e.g. Energy Charter Treaty);

- Regulatory framework for the utilisation and development of renewable energy sources and embedded generation in line with the EU policies including simplified authorisation procedures, price and quota regulation approaches, network access;

- Monitoring of security of supply including risk and crisis management, public service requirements, environment, energy efficiency, rational use of energy and demand side management, imports and reporting and consultation needs in liberalised electricity and gas markets. Role of regulators, market-based mechanisms and approaches to stimulate capacity development by market players;

- Market monitoring, measurement, assessment and development of competitive activity in the electricity and gas market, including reporting on market dominance, market concentration and predatory and anti-competitive behaviour;

- Market opening, eligible customer concepts and aggregation policies and practices for non-eligible customers;

- Market-based mechanisms for balancing of electricity and gas markets under the condition of sufficient market liquidity, including terms and conditions and tariffs for the provision of balancing services;

- Protection of consumer rights and settlement of dispute mechanisms and procedures, including approaches to circumvent the emergence of lengthy and time-consuming disputes, in line with EU Member States experience

- Concepts, application and timeframe for stranded costs including those in small, isolated systems;

- Specific regulatory issues relating to LNG storage and underground storage of natural gas.

The twinning partner is required to submit within two months after project inception an updated list of advisory priorities based on the initial operating experience made by EMRA after market opening in autumn 2002.

**Component 2: Development and implementation of EMRA staff training programme**

Component 2 dedicated to training will be consisting of four activities.

**Activity 1: Setting-up of a staff training centre at EMRA**

A fully equipped and furnished training centre shall be set up at EMRA’s new offices. EMRA intends to use this facility to comply with its obligation to regularly train assistant energy experts and to upgrade specific skills and qualifications for senior staff. More specifically, the staff training centre shall be used to accomplish all the planned training activities under this component as described below.
To this end EMRA will provide a suitably spacious room, in which the training equipment and furniture will be installed. The training centre will consist of fifteen fully equipped, furnished and interconnected work stations. EMRA will continue to use the training centre also after end of the project.

In close contact with the CFCU, EMRA and the selected supplier the PAA shall coordinate activities regarding the setting up of the training centre.

**Activity 2: Training for EMRA’s assistant energy experts, primarily on the EU internal energy market and management issues;**

According to the Regulation on the Organisation of the Energy Market Regulatory Authority and Working Procedures and Provisions Applicable to its Employees, out of a total of 426 staff there will be some 70 assistant energy experts. For the time being these junior experts have not been recruited yet. Staff regulations require that these experts will have to undergo intensive training over a period of three years before, after having been examined, they may be promoted to the energy expert category. During this time, it is imperative to train them not only on basic regulatory issues but likewise on the EU legislation and regulations relevant to the operation and development of the Turkish electricity and gas markets, as well as on management and corporate culture issues pertaining to the operation of EMRA.

Activity 2 will comprise the following tasks:
- Development of training curriculum and manual;
- Development of bespoke computer-aided training programmes;
- Conducting training sessions.

**Activity 3: Training for EMRA’s senior energy staff on key regulatory issues, notably those with implications on the EU internal energy market, EU regulatory practices and management issues**

Discussions with EMRA’s staff and needs assessments made by the consultant revealed that EMRA’s core staff requires intensive further education to eliminate existing knowledge inadequacies. Almost all contacted working groups confirmed the urgent need to launch formal classroom training concentrating on those topics as indicated under Component 1. Apart from that special focus will be given to issues such as corporate identity, management culture and techniques.

Activity 3 will comprise the following tasks:
- Developing training curriculum and manual;
- Conducting training courses on identified priority topics;

**Activity 4: Study visits to twinning regulatory authority for senior EMRA staff**

Once EMRA will have fully recruited its staff the energy experts and senior managerial staff will consist of a maximum of 221 individuals including 11 heads of department, 10 advisers to Chairman, 6 advisers to the Board, 33 group coordinators and deputy heads of departments, 66 heads of working groups, 90 energy experts and 5 lawyers. These specialists have to carry the principal workload in day-to-day regulatory operations.
EMRA will begin its life as a real regulator by autumn 2002 when the market is expected to be in effect opened up. Among EMRA’s key deficits identified so far is the senior staff’s missing hands-on experience in regulatory affairs and insufficient knowledge on EU regulatory practices.

By the time the proposed twinning project will take off senior staff will have learnt initial own practical lessons and it appears important that these are being measured against benchmarks of other regulatory bodies that now have been operating in the EU for years. Besides, knowledge gaps exist as regards the unfolding EU acquis and on how these are being taken into account in regulatory business. To address these existing shortcomings study visits to twinning regulatory authorities shall be organised for a total of forty senior staff.

As with the know-how transfer component, the twinning partner will be submitting two months after project inception a list of updated training priorities for EMRA.

**Inputs for Components 1 and 2**

**I-Twinning**

A PAA on energy regulation will provide advice and technical assistance to the EMRA President, coordinated through EMRA’s Department of International Relations and EU Coordination, on clarifying, defining and helping implement those requirements of the EU internal energy market, which are relevant for EMRA to comply with the acquis communautaire in its regulatory practice. The PAA will ensure that best European regulatory know-how will be fed into the decision making process at EMRA. Part of the work shall consist of preparing case studies.

The adviser, who at the same time will act as the team leader, will be assisted by a pool of STE who will be called in on an ad hoc basis whenever a need arises, as well as for providing more planned and targeted advice. The PAA coordinates their deployment. The PAA also coordinates all the training activities, including the setting up of the staff training centre and study visits. Both the PAA and STE shall be responsible for conducting all the training activities, be it for senior or junior staff.

Upon availability and in coordination with the President of EMRA, the PAA and STE shall provide advice also to the EMRA’s Board members.

- **Pre-Accession Adviser:** Total of 12 m/m
  
  **1 Long-term twinning expert: senior adviser to the President of EMRA**
  
  - Minimum of three years experience working in an energy regulatory authority or advising energy regulatory authorities in one of the EU Member States at executive level;
  - Profound and updated knowledge on the evolution of the EU internal energy market, relevant EU legislation and energy regulatory fora initiatives, management and corporate culture in public administrations;
  - Strong personality with excellent interpersonal and communication skills;
  - Advanced university degree in economics, business administration or related discipline;
• International advisory or consulting experience;
  • Experience in project management and procurement rules;
  • Good written and oral command of English;
  • Experience in developing, coordinating and conducting training programmes.

• **Short to Medium Term Senior Expert Facility:** International experts with a total of up to 26 m/m, covering the following areas:
  - Gas and Electricity Tariffs
  - Legal Expertise on Licensing
  - Legal Expertise on Dispute Settlement
  - Competition and Trade
  - IT
  - HRD/Training Expertise
  - Auditing/Financial Analysis
  - Institutional Expertise
  - Electricity Transmission
  - Gas System Planning
  - Gas Transport
  - Gas Underground Storage
  - LNG

• **Study Tours**
  Eight study tours to similar body in selected EU Member State(s) over a period of two years with five participants each;

• **II-Supply**
  Supply of necessary equipment and software required for a staff training centre, including:
  - 15 PC’s including extended standard office software packages
  - Furniture for 15 working stations and lecturing (desks, chairs, cupboards)
  - White screen
  - White board
  - Electronic projection devise (beamer)
  - Colour copying and printing machine
  - Video camera
3.5 Lessons Learnt

The past experience of the Member States emphasizes the fact that establishing the necessary regulatory framework towards creating a competitive energy market is inadequate if appropriate implementation can not be ensured. This means effective functioning of the market under the proper regulation of an independent regulator. The previous OECD Study on Regulatory Reform in Turkey underlined the possible need for the strengthening of “regulatory governance” in Turkey. The Report refers to rules for the standards, procedures and principles for the connection to and use of transmission and distribution networks, customer service and the Balancing and Settlement Code (which establishes the detailed procedures and principles related to real time balancing and financial reconciliation of the system), which are prepared by the related public industry participants and approved by EMRA. It is stressed that some care is needed in these arrangements if the EMRA can’t initiate change and can only approve change coming up from industry as industry participants can be expected to resist socially desirable change that may be against their own financial interests. It is essential that the reform program build in mechanisms to implement a transition to the liberalized market to address the emergence of problems in a timely manner, to make changes to market rules and codes and where necessary adopt mitigation measures to address market failures until underlying causes can be corrected.

4. Institutional Framework

The main institution involved in the project is the Energy Market Regulatory Authority.

Energy Market Regulatory Authority

Mr. Cahit Akinci, Head of International Relations and EU Coordination, Energy Market Regulatory Authority, Yüksel Cad. No 23, Kizilay. Ankara, Turkey. Tel: (90-312) 435-9118. Fax: (90-312) 430-6904. E-mail: cakinci@epdk.org.tr

To a limited extent and upon approval by EMRA, some training courses for senior staff may be attended by selected participants from energy companies such as TETAS, TEIAS, TEDAS or BOTAS, and governmental authorities such as the Competition Authority or the Ministry of Energy.

5. Detailed Budget (thousand €)

<table>
<thead>
<tr>
<th></th>
<th>EU Support</th>
<th>National Co-financing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment Support</td>
<td>Institution Building</td>
<td></td>
</tr>
<tr>
<td>Twinning Contract</td>
<td>--</td>
<td>984</td>
<td>--</td>
</tr>
<tr>
<td>Supply Contract</td>
<td>63</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>984</td>
<td>21</td>
</tr>
</tbody>
</table>
Turkish contribution to the Twinning will cover e.g. provision of office equipment and space for the PAA, organizational costs of training (rental fees, accommodation catering as well as local and international travel of trainees) and other costs non-eligible for funding as specified in the "Reference Manual on Twinning Projects".

6. **Implementation Arrangements**

6.1 **Implementing Agency**

The Implementing Agency for the proposed project will be the Central Finance and Contracts Unit (CFCU).

Responsibility for the administration related to the procedural aspects of procurement, contracting and accountancy will rest upon the CFCU. The tendering and contracting will be carried out by the CFCU and shall follow standard DIS rules and provisions of the Twinning manual.

6.2 **Twinning**

The project will be implemented in form of a Twinning covenant between Turkey and one EU Member State, and a supply contract. The twinning partner will manage all aspects of execution in close cooperation with EMRA. The twinning partner will provide a PAA and secure a pool of international and national experts for the purpose of advisory services and training according to the work plan that will be prepared for the covenant.

Member States may form a consortium, which will result in a wide range of qualified senior experts gathered from energy regulatory authorities, different national administrations, universities, energy companies, major specialised consulting and engineering firms or renowned independent experts from more than one Member State, provided that national approaches can be harmonised within the consortium.

The beneficiary institution for the Twinning arrangement will be the EMRA, which will also assume responsibility for the administration related to the preparation, technical control and implementation.

The contact person for the Twinning covenant will be:

Mr. Cahit Akinci, Head of International Relations and EU Coordination, Energy Market Regulatory Authority, Yüksel Cad. No 23, Kizilay. Ankara, Turkey. Tel: (90-312) 435-9118. Fax: (90-312) 430-6904. E-mail: cakinci@epdk.org.tr

6.3 **Contracts**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Twinning covenant</td>
<td>€ 984,000</td>
</tr>
<tr>
<td>Supply contract</td>
<td>€ 84,000</td>
</tr>
</tbody>
</table>

7. **Implementation schedule**

<table>
<thead>
<tr>
<th></th>
<th>Start of Tendering</th>
<th>Start of project activities</th>
<th>Project completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twinning</td>
<td>IV Quarter 2002</td>
<td>II Quarter 2003</td>
<td>I Quarter 2005</td>
</tr>
<tr>
<td>Supply</td>
<td>I Quarter 2003</td>
<td>III Quarter 2003</td>
<td>III Quarter 2003</td>
</tr>
</tbody>
</table>
8. **Equal opportunity**

Equal opportunity principles and practices in ensuring equitable gender participation in the project will be guaranteed. Male and female participation in the project will be based on the relevant standards of the EU and will be assured by official announcements published to recruit staff needed for the project. The main criteria for staff recruitment will be appropriate qualifications and experience in similar projects, not sex or age. Both men and women will have equal opportunities and salaries.

9. **Environment**

Not applicable

10. **Rates of return**

Not applicable

11. **Investment criteria**

Not applicable

12. **Conditionality and sequencing**

The EU financing to this project is conditional upon:
- National co-financing for the equipment part to be ensured;
- Opening of the energy market for electricity and gas as anticipated;
- Timely recruitment of assistant energy experts (junior staff).

**ANNEXES TO THE PROJECT FICHE**

1. Logical framework matrix in standard format
2. Detailed implementation chart
3. Contracting and disbursement schedule by quarter for full duration of programme (including disbursement period)
4. List of relevant laws and regulations
5. Organisational structure of the Energy Market Regulatory Authority of the Republic of Turkey
<table>
<thead>
<tr>
<th>Wider Objective(s)</th>
<th>Indicators of Achievement</th>
<th>Sources of information</th>
<th>Total Budget: 1.068m€</th>
<th>EU support 1.047m€</th>
</tr>
</thead>
</table>
| Improve regulation of the energy market in compliance with the EU *acquis* | • Degree of market opening according the *acquis*.  
• Non-discriminatory access to networks.  
• Other liberalisation constituents according to the *acquis* | • EMRA market development report  
• Competition Authority website and reports  
• EC progress report  
• OECD/IEA reports  
• Energy Charter Treaty reports | | |
| Immediate Objective | Indicators of Achievement | Sources of information | Assumptions and Risks | |
| Increase the EMRA’s capacity in order to ensure proper implementation of the legislation in place | • Network access regulations are applied  
• Stranded costs concepts are applied.  
• Retail licenses issued according to provisions of the law  
• Tariffs are applied and are comparable with international benchmarks  
• Settlement procedures balance the electricity market | • EMRA website, reports and files  
• Electricity system operator (TEIAS) reports and files  
• Official Gazette  
• EC progress report | • Sufficient market opening (at the time only 20% for the electricity market)  
• Sufficient financing available for market actors, financial conditions do not deteriorate  
• Acceptance and adoption of EMRA and market regulations by market actors  
• BOTAS divestiture of gas import contracts | |
<table>
<thead>
<tr>
<th>Results</th>
<th>Indicators of Achievement</th>
<th>Sources of information</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMRA’s management, operational, and regulatory procedures are in place.</td>
<td>• Operational procedures are well described, dispute settlement processes are in place, criteria for tarification are developed and applied, competition assessment methodologies are developed and in place, methods for allocation of congested networks are developed and in place. • 80% of senior energy staff are trained in key regulatory issues by mid 2004 • 90% of assistant energy experts recruited have been trained in relevant areas within 2 years following their recruitment • EMRA assistant energy experts and energy experts transfer this knowledge into the operations of EMRA. • A classroom is set-up fully equipped with EMRA operational handbook; dispute settlement protocols; internal EMRA competition report; tariff codes • Higher EMRA management assessment of the results of training courses and study tours • EMRA training centre commissioning protocol • Interim and final evaluation reports • EC progress report</td>
<td>• EMRA staff is properly following the operational procedures • Trained staff is remaining with EMRA • EMRA has sufficient budget and qualified lecturers/trainers to continue with training and is making continued use of the classroom</td>
<td></td>
</tr>
</tbody>
</table>
provide training on regulation and competition issues in the energy sector.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Inputs</th>
<th>Conditionality</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Know-how transfer from EU Member States energy regulatory authorities to Turkey</td>
<td>• 1 PAA (12 m/m)</td>
<td>- National co-financing for the equipment part to be ensured;</td>
</tr>
<tr>
<td>• Setting-up of a staff training centre at EMRA</td>
<td>• STE (up to 26 m/m)</td>
<td>- Opening of the energy market for electricity and gas as anticipated;</td>
</tr>
<tr>
<td>• Training for EMRA’s assistant energy experts, primarily on the EU internal energy market and management issues</td>
<td>• Study tours</td>
<td>- Timely recruitment of assistant energy experts (junior staff).</td>
</tr>
<tr>
<td>• Training for EMRA’s senior energy staff on key regulatory issues, EU regulatory practices and management issues</td>
<td>• Supply of technical equipments, software and furniture for training centre</td>
<td></td>
</tr>
<tr>
<td>• Study visits to twinning regulatory authority for senior EMRA staff</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## DETAILED IMPLEMENTATION SCHEDULE OF ACTIVITIES

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>O</td>
<td>N</td>
<td>D</td>
<td>J</td>
</tr>
<tr>
<td>Twinning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Know-how transfer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Inception – preparation work plan</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Pre-accession adviser</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Senior expert facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Staff training programme</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Re-specification of technical supply for training purposes</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Updated list of training priorities submitted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Development of training manual and programme</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>- Development of training programmes</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>- Conducting training sessions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Preparation of study tours</td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Study tours for senior EMRA Staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Technical supply</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

### Design
- x x x

### Tendering and contracting
- 

### Implementation and Payments
-
### Annex 3 Commitment and Disbursement Schedule (€)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Contracted</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twinning</td>
<td>984.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td></td>
<td>84.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual</td>
<td>984.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulated</td>
<td>984.000</td>
<td>1.068.000</td>
<td>1.068.000</td>
<td>1.068.000</td>
<td>1.068.000</td>
<td>1.068.000</td>
<td>1.068.000</td>
<td>1.068.000</td>
<td>1.068.000</td>
<td>1.068.000</td>
</tr>
<tr>
<td><strong>Disbursed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply</td>
<td>50.400</td>
<td></td>
<td>33.600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cumulated</td>
<td>325.875</td>
<td>499.236</td>
<td>545.796</td>
<td>608.757</td>
<td>671.718</td>
<td>734.679</td>
<td>797.639</td>
<td>910.600</td>
<td>1.068.000</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>National legal act</td>
<td>Date of planned adoption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------------------------------------</td>
<td>-------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Electricity Market Law</td>
<td>Adopted in 2001</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Petroleum Market Law</td>
<td>To be adopted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Natural Gas Licensing Regulation</td>
<td>Before market opening, tentatively before November 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Natural Gas Certificate Regulation</td>
<td>Before market opening, tentatively before November 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Natural Gas Tariff Regulation</td>
<td>Before market opening, tentatively before November 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Natural Gas Network Regulation</td>
<td>Before market opening, tentatively before November 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Regulation on Gas In-house Installations</td>
<td>Before market opening, tentatively before November 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Natural Gas Distribution Regulation</td>
<td>Before market opening, tentatively before November 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Natural Gas Market Monitoring Regulation</td>
<td>Before market opening, tentatively before November 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Electricity Licensing Regulation</td>
<td>Before market opening, tentatively before September 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Electricity Tariff Regulation</td>
<td>Before market opening, tentatively before September 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Electricity Eligible Customers Regulation</td>
<td>Before market opening, tentatively before September 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Electricity Import and Export Regulation</td>
<td>Before market opening, tentatively before September 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Electricity Market Monitoring Regulation</td>
<td>Before market opening, tentatively September 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Regulation on Employment of Local and Foreign Experts</td>
<td>Adopted 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Regulation on Entrance Examination for Assistant Energy Experts and Qualifying Examination for Energy Experts</td>
<td>Adopted 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>Regulation on Human Resources</td>
<td>Adopted 2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>