



This project is funded by the European Union

Annual Action Programme for Turkey for
the Year 2015 under the Instrument for
Pre-accession Assistance (IPA II)

Technical Assistance for Improvement of Performance-Based Tariff Regulation of EMRA for Turkish Energy Markets through Introducing an Enhanced Monitoring System

Project Identification No: EuropeAid /139125/IH/SER/TR

Contract No: TR2015/EN/07/A3-01/001

**Two workshops for task 1.4
Natural gas and Electricity
11-12 December 2019**





This project is funded by the European Union



Project Title : Technical Assistance for Improvement of Performance-Based Tariff Regulation of EMRA for Turkish Energy Markets through Introducing an Enhanced Monitoring System

Contract Number : TR2015/EN/07/A3-01/001
Project Value : 1,800,300.00 Euros
Starting Date : 24/04/2019
End Date / Duration : 23/10/2020 / 18 months

Contracting Authority: **Republic of Turkey Ministry of Treasury and Finance
Central Finance And Contracts Unit**

CFCU Contract Manager : Duygu Sarıkan

Address : T.C. Hazine ve Maliye Bakanlığı Kampüsü E Blok İnönü Bulvarı No:36
06510 Emek / ANKARA

Telephone : +90 312 295 49 00

Fax : +90 312 286 70 72

e-mail : duygu.sarikan@cfcu.gov.tr

Beneficiary : **Republic of Turkey Energy Market Regulatory Authority**

Address : İşçi Blokları Mahallesi Muhsin Yazıcıoğlu Caddesi
No:51/C 06530 Yüzüncüyıl Çankaya / ANKARA

Telephone : +90 312 201 40 00 - 201 40 01 - 201 40 02

Fax : +90 312 201 40 50

Consultant : **Hulla & Co Human Dynamics KG**

Project Director : Mr Valter Anacleto

Address : Lothringer Strasse 16, A-1030 Wien, Austria

Telephone : +43 1 402 50 20 133

Fax : +43 1 402 50 20 20

e-mail : valter.anacleto@humandynamics.org

Project Team Leader : Mr Wietze Lise

Address (Project Office) : Mustafa Kemal Mahallesi, 2138 Sokak No 5/10, 06520, Çankaya,
Ankara, Türkiye

Telephone/Fax : +90 312 219 4108

e-mail : wietze.lise@afconsult.com

Reporting Period : 30th of October to 7th of November 2019

Date of Report : 08/01/2020

Compiled By : Naz Yazıcıoğlu

Checked By : Mr Kenan Sitti, Mr Emre Ertürk, Ms Guiliana Caponigro, Mr Dimitar Sterev
and Mr Wietze Lise





This project is funded by the European Union



Table of Contents

Table of Contents	1
Abbreviations	1
1 Introduction	2
2 The purpose of the meeting	2
3 Structure of the workshop	2
3.1 Workshop on natural gas	2
3.2 Workshop on Electricity	3
4 Discussion & Recommendations:.....	4
4.1 Remarks on Natural Gas.....	4
4.2 Remarks on Electricity.....	4
5 Conclusion:.....	5

Abbreviations

ÅF	Ångpanneföreningen
BOTAS	Turkish Petroleum and Gas Transmission Pipeline Company
CAPEX	Capital Expenditures
CFCU	Central Finance and Contracts Unit
DSO	Distribution System Operator
EDVARS	Electricity Distribution Data Storage and Reporting System
EMRA	Energy Market Regulatory Authority (for Electricity, Petroleum and Natural Gas)
EPIAS	Market Financial Settlement Centre
EU	European Union
EUD	European Union Delegation
EXIST	Energy Exchange Istanbul
FIT	Feed-in tariff
HD	Human Dynamics
MENR	Ministry of Energy and Natural Resources
OPEX	Operational Expenses
OSOS	Automatic Meter Reading System
PM	Project Management
PSC	Project Steering Committee
R&D	Research and Development
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SoLR	Supplier of Last Resort
TAT	Technical Assistance Team
TEIAS	Turkish Electricity Transmission Co.
ToR	Terms of Reference
WACC	Weighted Average Cost of Capital





This project is funded by the European Union



1 Introduction

The two workshops under Activity 1.4 was organized on 11-12 December 2019 in line with the requirements as stated in the ToR.

The first day of the workshop was attended by 40 persons, namely 9 staff from EMRA, 9 representatives from BOTAŞ, 2 representatives from MENR, 7 representatives from MENR, and 13 representatives from the TAT where the issues regarding natural gas were discussed.

The second day of the workshop was attended by 42 persons, namely 10 representatives from EMRA, 8 representatives from TEİAŞ, 11 representatives from MENR, and 13 representatives from TAT where the issues regarding electricity were discussed.

2 The purpose of the meeting

The meeting intended to achieve the following goals:

- To improve the capacity of EMRA by developing a new performance-based tariff calculation mechanism, including social tariffs. The Tariff project aims at three main results:
 - Methodology for performance-based tariff calculation is developed.
 - Energy market monitoring system of EMRA is improved.
 - EMRA's capacity to regulate the market through performance-based tariffs is enhanced.
- To present the draft results of delivering tariff Structure assessment and recommendation for both electricity and natural gas sectors, which report is being developed under Activity 1.1.
- To present the draft results of delivering data requirements and harmonization and standardization, which report is being developed under Activity 1.2.

3 Structure of the workshop

Both first day and second day meetings were started with the opening speech done by Mr Wietze Lise – the Team Leader of the project. He informed the participants on what has been done so far and provided information on the timeline of the ongoing and planned activities. Stating that there are 7 Tasks under the project, he underlined that the current focus in the project is on the first 4 Tasks, while the focus of the workshop is solely on Task 1. He provided information on the milestones of each tasks and what is expected for the ongoing and upcoming Tasks. The project will include reports, as well as study visits, workshops and trainings. He mentioned that as TAT, in workshop the work done until now and the draft results will be presented, and an active interaction with participation of the attendees will be aimed at.

3.1 Workshop on natural gas

The 1st day workshop continued after the opening speech. Mr Özen explained that the gas transmission tariff related regulations in both Turkey and the EU are covered in the Task 1.1 report. (Please find his presentation in Annex). He also proposed some recommendations on the efficiency improvement and suggested that related specific methodologies should be developed by EMRA in order to increase the success of the transmission operator and





This project is funded by the European Union



efficient utilisation of the transmission system. Referring to the Regulation numbered 715 in the EU, Mr Özen explained that the EU countries are required to apply dedicated tariffs for each input and output points. Following the presentation there have been a discussion related with the topic. Mr Özen explained that defining separate tariffs for each Exit Point brings too much complexity to the tariff studies. Considering the diversified supplies for Turkey from all directions, such a complex study for Turkish case wouldn't be necessary; as it is so stated in the Task 1.1 Report.

After Mr Özen's presentation, the Bulgarian case was presented by Mr Shterev, the senior gas expert from Bulgaria. The Bulgarian case is developed according to Regulation 715/2009 of the European Parliament and of the Council stipulating that transmission system operators are required to introduce a separate Entry / Exit system. The Entry / Exit is a model for access to the gas network that allows network users to reserve capacity rights independently at entry and exit points, thus creating gas transmission through zones instead of agreed routes.

Following to the presentations for gas transmission, Mr Ertürk took the floor to give information on the distribution section in the report and he underlined its importance. He emphasized that participants' comments and suggestions are very important in the preparation phase of the final version of the Task 1.1 report. He gave brief information on the report and its content including which countries are selected and why they were selected. Regarding natural gas, he stated that Turkey has a strong, sustainable, and high-quality structure in place and that no major changes are needed.

Following to the presentation done by Mr Ertürk, Ms Giuliana Caponigro, the senior international expert from Italy, took the floor to present the basics of the Italian case. The main topics she focused on were i) the analysis of the tariff practice adopted in Italian natural gas distribution; ii) the key issues; and iii) conclusions. The power point presentation has shown in detail that the tariff evolution was in parallel with the liberalization process developed in Italy starting from the early 2001s. It was described that the Italian Regulator's policy was mainly focused on the consolidation of the players (reduction of the number of DSOs) and on other key issues like quality and safety regulation and incentives on innovation (smart meters).

The main topics discussed in the afternoon session were i) the harmonization and standardization of data draft report; ii) distribution recommendations on issues under draft natural gas report within Activity 1.2. **(please find Annex)** The proposal was to provide the best understanding of the tariffs. Mr Ertürk indicated that some issues in the report, for example Dynamic WACC model, should be applied and evaluated in-depth and stated that more attention should be given to legal issues. Quality factors and performance indicators are one of the most important issues and will be emphasized in the upcoming period.

3.2 Workshop on Electricity

The 2nd day workshop commenced with the presentation done by Ms Durukan. She introduced herself and gave information on the tariff structure assessments and recommendations about transmission in the draft electricity report. **(Please find Annex)**. She explained that the main reason to compare the EU and Turkey is to identify the gaps and improvement areas.

Following to Ms Durukan, Ms Emer made a presentation on some key features of data requirements such as; harmonization and standardization of data.

Mr Sitti gave some additional information and showed the UK system example under the Activity 1.2 and 2.1. He also provided information on the risk and impact matrix and explained them in detail.

In the Afternoon session Mr Can presented the recommendation part of the report. Stating that there are 10 topics related to distribution part, he explained each subtopic, informed about the gap analysis and recommendations for each section.





This project is funded by the European Union



4 Discussion & Recommendations

At the end of the presentations, as per the agenda for the meetings, the participants were encouraged to raise their views on the Natural gas and electricity sectors. The summary of the discussion topics is presented below.

4.1 Remarks on Natural Gas

Use of connection fee: some participants were interested to learn more about the example of the connection tariff. As stated, the connection fee in Turkey can be given as an example of a guaranteed fee in Turkey. A question emerged to give some practice examples related to connection fee in the distribution tariff. Also, it was stated that the connection fee chapter in the report should be more comprehensive with more details.

Recommendation to improve the report: It is stated that the views and opinions were exchanged and underlined it was that as much as possible information is given regarding various data sources in the report. However, the report needs to be edited to improve the “flow”. It is stated that the report covers many countries with general information, but it lacks sufficient detail. It was suggested to reduce the selected number of countries, but to provide more in-depth/specific information. Also, the report should include more in-depth information on WACC implementation, connection fees, and the efficiency model, among others. In addition, it is recommended to make more use of academic sources.

EDVARS: There was a concern over lack of information on data management system “EDVARS” and it should be re-evaluated. The EU member states can be given as an example although there is not very much information nor detail about it. It is suggested that more use should be made of EDWARDS in Turkey. Also, quality, data structure and tariff data should be taken into consideration to be able to answer following questions:

- Which tariff data is needed?
- What type of data should be collected in the near future?
- Is there a possibility to improve the data quality in the near future?

4.2 Remarks on Electricity

The efficiency analysis and quality indicators: The efficiency analysis that has been mentioned uses the same parameters. It was suggested to include more information in the report on the efficiency analysis. The participants discussed following topics:

1. What are the inputs and outputs?
2. What kind of methodology has been used?
3. How can we harmonize it?
4. Is it applicable?
5. Have any tests been conducted for it?

Tariff setting: It was suggested that tariffs should be more capacity based. It is recommended to take this into consideration.

Transmission companies have carbon footprint calculations in some countries; for transport for example. However, what is mentioned here is the overall target which could be identified by the regulator and Europe prioritise it and have some implementations.





This project is funded by the European Union



Data requirements: It is stated that Task 1.2 deals with required and recommended data, whereas Task 2.1 is about the data harmonization for distribution market monitoring. EMRA commented that, in the Task 1.2 report, not only the missing data, but the whole data requirement should be included.

5 Conclusion

The workshop was conducted with participatory approach. Participants expressed their satisfaction with both the content of the workshop and the organizational arrangements; and participants showed great interest to the workshop.

Following the presentations and the discussions session, the Project Team Leader –Mr Lise– thanked all participants for their interactive participation and great contribution; and he closed the workshop.



