



European Union / Instrument for Pre-Accession (IPA) Energy Sector Technical Assistance Project

EU-IPA12/CS03

Consulting Services for the Design and Implementation Plan for the Gas Trading Platform

Shippers' Forum Presentation

27 October 2015







The Aim of the Project

"Turkey aims for a **regional leadership** via building up an **energy hub and terminal** in order to meet energy **supply security** taking into consideration **free market conditions**, **diversity of resources and market structure based on free competition**"

- Should Turkey wish to attract national and foreign investment in gas infrastructure, its needs to set up a transparent gas market. Transparency is trust-building and creates an investment climate as we have seen elsewhere
- The formation of EPIAŞ, which is expected to operate organized physical gas markets together
 with other energy commodities, this year, is generally perceived as an additional push towards
 this goal, as many recognize that geographical advantage by itself is not sufficient and a wellfunctioning marketplace needs to be developed

We believe this project "Consulting Services for the Design and Implementation Plan for the Gas Trading Platform" is of strategic importance for our country

Introduction

Expected Results and Delivery Phases for the GTP Project

— Introduction

- The EC and the Ministry for EU
 Affairs have signed the Financing
 Agreement for National Program
 for Turkey under IPA for the Year
 2012. Energy Sector Program
 (Phase I) project is one of the
 projects included in the annex of
 the corresponding Financing
 Agreement to be funded under
 IPA 2012 programming
- The execution of the project will be led by MENR and administered by the World Bank
- Collected proposals on 06
 August, 2014 and finalized the selection of successful bidder on 27 February, 2015
- Signed contract on 25 May, 2015 between General Directorate of Foreign Relations and EU of the MENR of the Republic of Turkey and Accenture Turkey

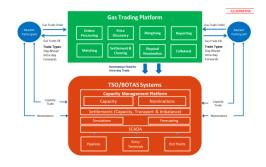






Expected Results —

- Confirmation of the compatibility of the new EBB with the requirements of an OTC gas market platform
- Recommendations for changes to its technical and functional specifications
- Preparation of the functional design for the establishment a Gas Trading Platform and related components (including BOTAS' SCADA system and communications systems) to enable commercial balancing and/or wholesale spot gas trading
- Training of personnel through site visits, trainings and workshops by 2016



— How We Will Deliver the Project —

Months 1 2 3 4 5 6 7 8 9 10 11 12

Phase 1 – Market Analysis and Business Requirements

- D1 Inception Report
- D2 Interim Evaluation Report
- D3 Draft Survey and Evaluation Report (DSER-1)
- D6 Draft Survey and Evaluation Report (DSER-2)
- D7 Analysis Report (ANR-1 & ANR-2)
- D8 Analysis Report (ANR-3)
- D10- Final Survey, Analysis and Evaluation Report (FSER)

Phase 2 – Functional and Technical Design

- D2 Interim Evaluation Report
- D4 Draft Report for Func. Design & Spec. for the new EBB
- D5 Final Task 1 Report
- D11- Draft Technical and Functional Design Report (DTFD)
- D12 Final Design Specifications Report

Phase 3 – Training and Capacity Building

- D2 Interim Evaluation Report
- D9 Assessment Report (AR)
- D13 Training and Capacity Building
- D14 Final Report

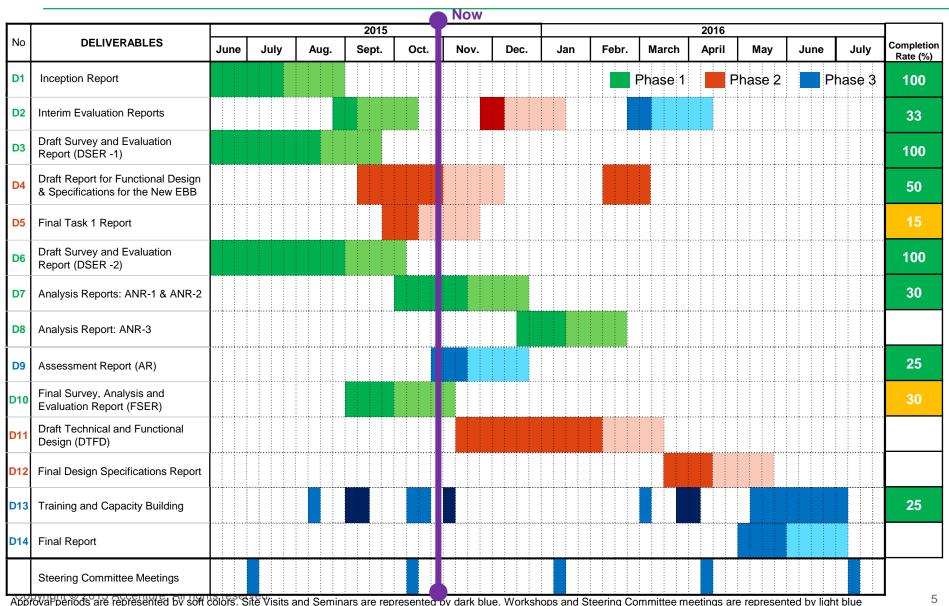
Scope of Work

High-Level Interactions among GTP, EBB, OTC Market and Shippers

Gas Trading Platform Gas Trading Platform: Forward/Futures, Day-Ahead, Intra-Day and Balancing Markets operated by BIST, EPİAŞ and BOTAŞ TSO Real Time Market Until Day-Ahead (D-1) Day-Ahead (D-1) Day After OTC Forward/Futures Market Day-Ahead Market Balancing Market Intra-Day Market Price Signal TL/m3 (self matching) BOTAŞ TSO Balancing Market Operation BIST EPİAŞ Data/Information Data/Information Data/Information **EBB TSO** Bid / Offers **Shippers**

Time Plan

Follow-up on Deliverables



Conclusions

Key Take-Aways from Deliverables

D7 – ANR-1 & ANR-2 Analysis Reports

D3 – Draft Survey and Evaluation Report (DSER-1)



D4 – Draft Report for Functional Design & Spec. for the new EBB

D6 – Draft Survey and Evaluation Report (DSER-2)



D10 – Final Survey, Analysis and Evaluation Report (FSER)

D13 – Training and Capacity Building



D9 – Assessment Report D13 – Site Visits (continued)

D1 – Inception Report

- Communicating Project Plan Changes
- Key Findings during Inception:
 - o Need for a Long-Term, Phased Roadmap
 - o Varying Detail and Priority Level of the Project
 - Scope of EBB and Data Related Issues
 - Need for a Strong TSO
 - Need for Cost-based Pricing
 - Managing Seasonal Profile and Demand Uncertainty
 - o Lack of Common Set of Units in Harmony with the EU Markets

Conclusions

Key Take-Aways from Deliverables

D3 – Draft Survey and Evaluation Report (DSER-1)

- EBB as a Market Transparency Platform:
 - Standardized and Timely Data
 Publishing by the EBB
 - Enforce regulation requirements for publishing
- Functional Review of EBB:
 - Develop additional components for primary & secondary capacity trading
- · Technical Review of EBB:
 - Improve/allow integration across EBB, SCADA, Demand Forecast and Simulation tools
 - Improve status on certain components (i.e. Learnability, documentation analysis, portability analysis)



D4 – Draft Report for Functional Design & Spec. for the new EBB

D6 – Draft Survey and Evaluation Report (DSER-2)

- Gas-on-gas competition reached 50% of the market in 15 years in Europe
- «Buyer's market»
- Shorter contract duration, higher flexibility and hubindexed
- European Gas Target Model
 - Non-discrimentary, liquid, reliable price signals
 - Entry/Exit System with a single VTP
 - o NC CAM and CP, NC EU BAL
- o PRISMA, PEGAS
- Turkey potential gas hub
 - Lack of physical and commerical flexibility (interconnection, storage, LNG etc.)
- Lack of transparent pricing methodology
- Need for long-term phased approach



D10 – Final Survey, Analysis and Evaluation Report (FSER)

D13 – Training and Capacity Building

- · Italy Site Visit:
 - TSO Market Experience
- TSO Back-end systems
- PSV and PEGAS
- Additional Workshop on EBB:
 - Detailing functional and technical analysis of EBB
 - Reflecting on feedback provided by stakeholders
- Seminar on DSER-2:
 - Presenting main concepts and conclusions regarding NG
 Price Formation, EU Gas
 Target Model and
 Components, Market and Gas
 Trading Platform Systems and
 Tools



D9 – Assessment Report D13 – Site Visits (continued)

Conclusions

Key Take-Aways from Deliverables

D7 – ANR-1 & ANR-2 Analysis Reports

Recommend the most appropriate Market Model for Turkey by taking into account the market development and physical and institutional capacity of Turkey, the needs for the measurement infrastructure for effective operation of the balancing markets

D3 – Draft Survey and Evaluation Report (DSER-1)

- EBB as a Market Transparency Platform
- Functional Review of EBB
- · Technical Review of EBB



D4 – Draft Report for Functional Design & Spec. for the new EBB

D6 – Draft Survey and Evaluation Report (DSER-2)

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D9 – Assessment Report D13 – Site Visits (continued)

D1 – Inception Report

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High performance. Delivered.