The new INOGATE Project
Electricity & Gas
Key Expert 2: Nikos Tsakalidis
Astana, June 2014
BUILDING PARTNERSHIPS FOR ENERGY SECURITY
www.inogate.org
Electricity and Gas

Objectives:

Improved Trade/Competitive Markets/Harmonised Standards Efficiency of Infrastructure

Policy Framework:
- Baku Initiative
- Eastern Partnership (Energy Security Platform)
- Energy Community

Tariffs
Regulatory issues/Market rules

Cross-border trade

Standards

Infrastructure Efficiency

REGIONAL ACTIVITIES

SPECIFIC ASSISTANCE (AHEF)
Stakeholders Targeted

Cabinets of Ministers Ministries in charge of Energy Ministries of Economy

Energy Regulators

Consumer protection Organisations

Electricity Companies (TSOs)
Gas Companies (TSOs)
Commercial System Operators

NSBs (National Standardisation Bodies)
Certification & Accreditation organisation

Research Energy Institutes
Technical Experts Groups (TEG) in PCs

...about 120 specialists in 11 PCs

**TEG 1: Energy Markets & Infrastructure**

- Team 1: Energy Policy
- Team 2: Tariffs & Regulation
- Team 3: Licensing, Markets and Monitoring
- Team 4: Cross-border trade Electricity
- Team 5: Cross-border trade Gas
- Team 6: Gas infrastructure

**TEG 2: Standardisation (Electricity & Gas)**

- Team 1: Standardisation policy, Technical regulations
- Team 2: Gas standards
- Team 3: Electricity standards
EU partner organisations
Regional Activities (1) with participation of Kazakhstan

**Tariffs**
- Tariff Study methodologies review & recommendations – first draft is ready.
- Tariff Seminar, Budapest, 29-31 October, 2013

**Regulatory Issues, Market rules**

**Cross-border Trade (E & G)**
- Capacity building of Electricity & Gas TSOs (2 regional seminars, Jan & May 2013)
- Sub-regional workshops.
Regional Activities (2) with participation of Kazakhstan

E & G Infrastructure

- EU Gas Technologies & Methodologies—Study with updated approach (Engl/Russ draft sent)
- Regional seminar in EU, Sept. 2014 (place tbd) show case of methodologies & technologies for gas losses, PIMS, LDAR, optimal programme for each PC.

E & G Standards

- Review of standardisation and technical legislation systems of 11 NOGATE PCs. Regional Study.
- PC Road Maps & Action Plans for harmonisation of standards (for KZ under preparation)
- Facilitated implementation of the agreement EASC on transfer of 60 translated gas standards to PCs (NSBs) - is provided on request
- Study tour to DWGV, April 2014, Bonn, Germany
Regional Activities (example 1)

Capacity Building of Gas TSOs, Venice, Milan, May 2013
Regional Seminar/study tour.

Work scope & activities:

- latest EU CBT gas platform
- gas markets & prices
- visit to SNAM facilities
- 3rd GIE conference
- access to 350 EU gas stakeholders, exchange of experience
- increased capacity of PCs gas TSOs (high evaluation results)
- PCs gas investment projects promoted (initial negotiations held)
- AHEF ideas initiated (Uzbekistan)
Regional Activities (example 2)

Tariff seminar,
Budapest, 29 -31 October

Work scope & activities:
Representatives from 7 of PCs. Covered all aspects of tariff setting:
- OPEX, CAPEX and RoA
- Tariff design
- Investments
- Public Service Obligations
- Network Access

Regional Review of Tariffs
- Focus on methodologies for Electricity and gas
- Comment on alignment with EU practices

Tariff Seminar
- Tariff methodologies
- Tariff Design
Regional Activities (example 3)
Capacity building of National Standardisation Bodies,
London, Loughborough, July 2013
Regional Seminar/study tour.

- concept RM & AP presented
- key competences of NSBs discussed
- visit to BSI facilities & laboratories (E & G)
- agreement to go ahead with RM & APs for 6 PCs
- agreement to harmonise Priority standards (Ukraine, etc)
- agreement with EASC, transfer of 112 translated standards to PCs

Work scope & activities:

BSI Standards – the process today

- New work proposal
- Public comment
- Committee drafting
- Final standard

Deliver, manage, track and bill a rich set of services for customers

OSs/Bss (Operations support system / business support system)

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Programme funded by the EU
Regional Activities (example 4)

Study Visit, April 2014, Bonn and Essen, Germany

- Introduction to how DVGW operates and develops specific gas standards;
- Showcase Open Grid Europe as an example of a transmission network operation of a Member State;
- Practical session in a technical gas institute

Work scope & activities:
## Specific assistance AHEF: Active Applications

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<tr>
<th>Country</th>
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<tbody>
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<td>Armenia</td>
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<td>Kyrgyzstan</td>
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How AHEF works?

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Eligible Applicant:

Application for TA under the AHEF

Selection

ITS Project Team:

Pool of Experts

AHEF Project ToR

EC Approval:

Implementation
AHEF: Kazakhstan
(ongoing)

Active applications (Electricity):

- KZ89 - Study and analysis of experience in development of power exchange trade.
- KZ107 - Study and analysis of the existing models of electricity market.
- KZ108 - Study and analysis of tariff setting in the area of electricity (production, transmission, supply).
- KZ105 – Study and analysis of differentiated tariffs for day/night zones and volumes of consumption.
- KZ106 - Study and analysis of experience of using benchmarking methodology (in tariffs)

Under consideration:

- 6 applications on LNG (LPG) regulations, market, efficiency and standards.
AHEF: Georgia example

1. Cathodic Protection System Design (on-going)
2. Direct Assessment Techniques of unpiggable pipelines
3. Construction Supervision (Non Destructive Testing-NDT) and Pipeline Testing and Commissioning (completed)

Work scope & Key Results:

- 3 seminars in Tbilisi & study tour to Greece
- participation open to other PCs
- reduced cost of the construction and maintenance
- reduced gas emissions improving the environment
- optimal design of rehabilitation programmes
- internationally recognized NDT certificates
AHEF: Azerbaijan example

Consultancy services on Advanced Meter Infrastructure (AMI) application at Azerenerji’s distribution networks (ongoing)

Work scope:

- 2 phases
- Assessment of the current state of the Metering Data Management (MDM) systems
- AMI system design
- Support in procurement AMI systems
- 100% collection rates
- Reduction of technical losses to 5%
- Prevention of illegal access to grid and meters;
- Establishment of a modern and well-functioning customer services.
AHEF: Armenia example

Rules of connection to electricity and gas distribution networks (completed).

- analysis of the current legislation framework on connection conditions and charging, propose technology on utilisation
- recommendations regarding the rules and connection tariffs
- formulation and adoption by PSRC of proposals and in an improvement of the relevant primary and secondary legislation.

Work scope & Key Results:
AHEF: Uzbekistan

Technical Assistance for the supply and use of gas pressure regulators for the Gas Distribution Network (ongoing)

- Assessment of existing Gas Distribution Network and existing Pressure regulators
- Technical Evaluation of the international low pressure regulators (to be acquired by Uzbekneftegaz) on adaptability with the recently purchased advanced gas meters.
- Preparation and implementation of one day workshop for the presentation of the evaluation study.
- Overall impact saving 200 m3 annually
INOGATE Office in Tbilisi

First Caucasus INOGATE office is located in the building of the Georgian Oil and Gas Corporation (GOGC).

**Electricity & Gas team**

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
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<tbody>
<tr>
<td>Deputy TL/KE - Gas and Electricity</td>
<td>Nikos Tsakalidis</td>
</tr>
<tr>
<td>Electricity regulatory expert (long term)</td>
<td>John Swinscoe</td>
</tr>
<tr>
<td>Gas infrastructure expert (long term)</td>
<td>Achilleas Gekas</td>
</tr>
<tr>
<td>Office Manager</td>
<td>Keti Mirianashvili</td>
</tr>
<tr>
<td>Communications and Event Expert</td>
<td>Rusudan Nonikashvili</td>
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**Back up team / Project Management - Greece**

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<tr>
<th>Expertity</th>
<th>Name</th>
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<tbody>
<tr>
<td>Energy Market Governance &amp; Electricity Expert</td>
<td>Sophia Nikolakaki</td>
</tr>
<tr>
<td>Energy Markets Convergence Expert</td>
<td>Nikos Tourlis</td>
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**One expert in Kiev office**

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<th>Expert</th>
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<tr>
<td>Standardisation Expert</td>
<td>Viktor Petrenko</td>
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Thank You!

Nikos Tsakalidis  
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