# Incentive-based tariffs for European gas distribution networks. Comparison with Ukraine

**Evangelos Penglis**

Partner – VIS Economic & Energy Consultants S.A.

Gas Forum II 12th-13th October, Kyiv

# Introduction

- This presentation draws from the findings of a study carried out during the first half of 2016 for the Expert Council on the Gas Market of Ukraine, by AF Mercados and VIS Economic and Energy Consultants

- The objective of this presentation is to provide an overview of regulatory frameworks concerning allowed costs / revenue caps of Gas DSOs in selected EU Member States, and identify areas of divergence/improvement for Ukraine

- The EU Member States examined for their regulatory framework were the Czech Republic, France and UK

# Outline of compared regulatory approaches

**Czech Republic**

- Czech Republic has adopted a methodology based on Revenue cap with efficiency factors on operating expenses for Gas DSOs
- Regulatory period is 3 years (previously 2 years)
- Allowed revenues cover reasonable costs of operating, maintaining and expanding the network, and enable reasonable return on assets
- Allowed rate of return on regulated assets is calculated on the basis of WACC (common to all gas sector)
- Allowed operating expenses are inflated annually and adjusted by a single efficiency factor set by the Regulator
- There is provision for annual correction for divergence between actual and planned parameters (e.g. inflation index and other economic indices)
- There is provision for annual adjustments to allowed revenues to reflect differences between actual and planned investments and difference between actual and planned gas volumes

# Outline of compared regulatory approaches

**France**

- France has adopted a Revenue cap methodology with efficiency factors on operating expenses. The regulatory period is 4 years
- Allowed revenues cover reasonable costs of operating, maintaining and expanding the network, and provide for a reasonable return on assets
- Controllable Opex (principally opex excluding safety and staff costs) are annually adjusted by inflation and also subject to a single efficiency factor set by the Regulator, following benchmarking with peer EU Gas DSOs and consultations
- Allowed return rate on regulated assets is calculated on the basis of WACC, set for each Gas DSO
- There is a provision for correction to reflect differences between actual and planned gas volumes
- The regulation includes a number of efficiency related incentives linked to quality of service, investment plan implementation etc., as part of a compensating/penalising mechanism that is applied annually

# Outline of compared regulatory approaches

**United Kingdom**

- UK (Ofgem) has adopted a Revenue cap methodology with separate efficiency factors on components of total expenditures (totex)
- Totex refers to the bulk of expenditures (capex and opex) that are deemed to be controllable by the Gas DSO
- Regulatory period is 8 years (previously 5 years)
- Allowed revenues cover reasonable costs of operating, maintaining and expanding the network, and enable reasonable return on assets
- Allowed return rate on regulated assets is calculated on the basis of a commonly set WACC for each DSO
- An efficiency factor is applied to losses, in addition to totex
- The Regulator additionally provides a reward/penalty system for quality of services, as well as incentives linked to promotion of innovation

# Outline of compared regulatory approaches

**Ukraine**
Cost-plus approach

- Currently Ukraine follows a cost-plus regulatory approach to Gas DSO tariff setting
- The current approach aims to compensate Gas DSOs for their expenses and provide reasonable profit
- Cost-plus approach has many disadvantages:
  - ✓ covers only one year
  - ✓ is based on past performance (planned DSO expenditures are based on declared data for the preceding year)
  - ✓ is not forward looking (no inclusion of planned investments in approved asset base)
  - ✓ does not provide for corrections regarding deviations to Gas DSO costs
  - ✓ provides limited incentive to Gas DSOs to control costs

# Outline of compared regulatory approaches

**Ukraine**
2013 long-term stimulating regulation

- In 2013 the Regulator published a Long Term Stimulating Regulation for Gas DSOs, which has not been applied to date
- The 2013 Regulation has the following provisions:
  - ✓ 5 years regulatory period (initially a 3-year transition period)
  - ✓ Allowed revenues cover reasonable costs of operating, maintaining and expanding the network, and enable reasonable return on (regulated) assets
  - ✓ Allowed operating expenses are indexed annually and adjusted by efficiency factors (on losses, controllable costs, etc.)
  - ✓ There is provision for an annual correction regarding actual versus planned parameters (e.g. inflation index, wage indices, tax and other economic indices, etc.)
  - ✓ There is provision for annual adjustment to allowed revenues to reflect difference between actual and planned gas volumes

# There is an need for change in the tariff regulatory regime pertaining to DSOs in Ukraine

| | Ukraine – Cost-plus | Ukraine – 2013 Regulation | Czech Republic | France | UK |
|---|---|---|---|---|---|
| **System sustainability**<br>- Revenue Sufficiency<br>- Adequacy of RoR<br>- Achievability of incentives<br>- Additivity of components | ✗ | ✓ | ✓✓ | ✓✓✓ | ✓✓✓ |
| **Economic efficiency**<br>- Productive efficiency<br>- Promotion of innovation | ✗ | ✓ | ✓ | ✓✓ | ✓✓✓ |
| **Protection**<br>- Transparency<br>- Equity of framework<br>- Simplicity of framework<br>- Predictability<br>- Stability | ✗ | ✓ | ✓ | ✓✓ | ✓✓ |

# A new improved tariff regulation is necessary and pressing

- EU DSOs exhibit a return on assets of 8 – 11%, in contrast to Ukrainian DSOs that show losses and negative return on assets during the last 2 years
- Ukrainian DSOs are reluctant to invest in the modernisation and development of the network within the current regime
- There is a need to develop a new regulatory regime for DSOs that provides a balance between incentives and efficiency
- **The long-term stimulating Regulation of 2013 is a good basis on which to proceed** so as to move from the cost-plus to a revenue regulation based on RAB, with efficiencies
- **Improvements are nevertheless needed on the 2013 Regulation**, and these can be swiftly introduced drawing from EU best practices
- It is essential to **move quickly to a new regulatory regime**, allowing for an initial transition period to permit adjustments and improvements

# Potential areas of improvement to the 2013 Long Term Stimulating Regulation

## Capital expenditure & Rate of Return

- There should be no limitations in allowed investments in network replacements and metering, provided these are essential for operations and efficiency
- It should be considered to allow work in progress for large investments with a long implementation period to be included in DSOs Regulated Asset Base, as a measure of incentivizing capex
- DSOs should be allowed to complete unfinished publicly funded distribution network investments and include these into their RAB
- The Regulation should allow for ex-post correction within the regulatory period, for changes between DSOs planned and realized investments, so as to provide flexibility
- Methodology for allowed rate of return on DSO regulated assets should be transparent, defined with Regulator participation, and reflect the risks undertaken by the DSOs

# Potential areas of improvement to the 2013 Long Term Stimulating Regulation

## Efficiency factors and Incentives

- Setting of efficiency factors should be clearly defined and based on local benchmarking and/or international comparisons where appropriate
- The incentive factors linked to quality of service and customer satisfaction are narrow in focus and imbalanced (only penalties for non-performance/failure to comply are included). They should be revised
- Efficiency factors linked to quality of services should be expanded (to include e.g. appointments missed by the DSO, new connections completed, number of meter readings, etc.)
- Indicator linked to “noncompliance with regulatory/ license requirements” should be removed. License obligations compliance should be separate from pricing regulation
- Incentives to promote innovation in DSOs should also be included

# Potential areas of improvement to the 2013 Long Term Stimulating Regulation

## Losses

- The definition and methodology of allowable losses in Ukraine should be revised, to include all types of commercial losses, such as unmetered and illegal gas usage, in line with EU practices
- The data used for defining losses has to be updated, using recent actual metrics
- The conversion of residential measurements to standard volumes should not be part of technical losses calculation, but should be part of the gas supply cost, in line with EU practices
- The rationale for setting of efficiency factors linked to losses has to be clearly defined and realistic, so as to ensure DSO sustainability