Gas Distribution Tariffs in the Energy Community Contracting Parties
-preliminary results of the ECRB CRM WG survey

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Background and content

• **Increasing interest in distribution tariff design** → **ECRB Work Program 2018 included survey of electricity and gas distribution tariffs focusing on:**
  – allowed revenue determination
  – allocation of allowed revenue to tariff elements i.e. tariff design

• **Scope:**
  – **Energy Community Contracting Parties with functional gas markets:** BIH (RS entity), GEO, MKD, MDA, SRB, UKR
  – ALB - methodology in place
  – Greece
Incentive-based regulation vs. cost-plus

Cost plus

- Albania
- Bosnia and Herzegovina
- Georgia
- Serbia
- Ukraine

Revenue cap

- Greece (2 years r.p.)
- FYR of Macedonia (5 years r.p.)
- Moldova (5 years r.p.)

1 year regulatory period
No efficiency factor applied
Asset valuation

Has the regulator the right to request re-evaluation of assets if deems necessary?

Yes- BIH, GEO, GRE, MKD
No- in ALB, SRB, MDA
No RAB regulation in Ukraine

Have assets been re-evaluated in the process of tariff regulation?

Yes- BIH, GEO, SRB, MDA
No- GRE, MKD
Approval of investment plans

Majority of NRAs approve investment plans of DSOs (but not in BIH and GEO)

All NRAs monitor implementation of investment plans

Assets under construction are included in RAB in majority of analyzed countries (but not in GEO and MDA)
Depreciation and Capital contributions

- **Straight-line depreciation used in all analyzed cases**
- **In majority of case the NRA defines the asset lives for regulatory purpose (but not in BIH, MKD and UKR)**
- **Capital contributions are not included in RAB**
  - in GEO they are included only in case actual costs are higher than capital contribution, in the value of difference between these two
- **Depreciation of assets funded by capital contributions is included in the allowed revenue in majority of cases, but not in GRE and MDA**
Rate of return

- **Calculated as weighted average cost of capital (WACC) in all countries, except UKR**

  **Calculated and proposed by DSOs, approved by NRA**
  - ALB,
  - BIH
  - GRE (9,23% nominal, pre tax)
  - SRB (7,77% real, pre tax)
  - MDA

  **Calculated by NRA**
  - GEO
  - MKD (6,8% real, pre tax)
  - MDA
Investment incentives

• Beside WACC, there are usually no specific regulatory incentives for investing in distribution networks. Nevertheless the following cases were reported:
  - ALB: certain RAB prepayments envisaged;
  - GRE: WACC premium;
  - MKD: allowing investments to be included ex-ante
Percentages of losses in distribution network currently recognized in the allowed revenue:

- BIH: 3% and 2.5%
- MKD: 0.7%
- SRB: 2%
- MDA: 3.4%

How is the price for allowed losses determined?

- ALB: estimated procurement price
- GEO: gas for losses bought under separate contract
- MKD: tendering procedure
- SRB: weighted average justified purchase price
- UKR: actual price for non-household customers
- MDA: purchase price including transmission and supply costs
## Tariff elements

<table>
<thead>
<tr>
<th>Energy/commodity</th>
<th>Capacity</th>
<th>Fixed charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALB</td>
<td>30%</td>
<td>70% (unit: ALL/kW)</td>
</tr>
<tr>
<td>BIH</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>GEO</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>GRE</td>
<td>80%</td>
<td>20% (unit: EUR/MWh/year)</td>
</tr>
<tr>
<td>MKD</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>SRB</td>
<td>70%</td>
<td>30% (unit: RSD/m3/day/year)</td>
</tr>
<tr>
<td>UKR</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>MDA</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
## Types of system users

<table>
<thead>
<tr>
<th>Region</th>
<th>Types of system users</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALB</td>
<td>-</td>
</tr>
<tr>
<td>BIH</td>
<td>Households, commercial customers, industrial customers and district heating</td>
</tr>
<tr>
<td>GEO</td>
<td>-</td>
</tr>
<tr>
<td>GRE</td>
<td>Households, commercial customers, industry</td>
</tr>
<tr>
<td>MKD</td>
<td>Producers of thermal energy with public service obligation, Combined cycle power producers, Households, Other gas consumers</td>
</tr>
</tbody>
</table>
| SRB    | Category $p < 6$ bar: small, out-of-peak, even and uneven  
Category $6 \leq p \leq 16$ bar: out-of-peak, even and uneven |
| UKR    | Without differentiation |
| MDA    | Low, medium and high pressure |
Some preliminary conclusions

- **Tariff regulation approaches reflect different stages of gas distribution network development**
- **Incentive based regulation is used only by 3 NRAs, although no efficiency factor is applied**
- **Except WACC, in most cases additional incentives for new investments are not applied**
- **Capacity-based distribution tariffs currently applied only in Serbia and Greece**
Thank you for your attention!

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