

Distribution Network Losses and their management – Case Study session

Case study by ERÚ, Czechia

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Basic information about DSO(s) and network losses



- ***What is the total number of Distribution System Operators (DSOs) in country?***
 - 67*
- ***The structure – each DSO's natural distributed gas quantity and number of consumers?***

• GasNet	73 TWh	2,3 mil
• PPD	9 TWh	0,4 mil
• E.ON	3 TWh	0,1 mil
• other	7 TWh	8 k
- ***Share of smart meters in system?***
 - The size of the share of smart meters in distribution system is not available to ERÚ.

(*all data as of 31 Dec 2020)

Basic information about DSO(s) and network losses

- ***At what level and through what legislative documents is the component of losses in the distribution network covered in your country (government decree, technical normative acts, regulator's decision or other similar acts)?***
 - *The component of losses in the distribution network is covered in regulator's decision:
Principles of price regulation for the regulatory period 2021-2025 for the electricity and gas sectors, for market operator activities in the electricity sector and gas sector and for mandatory purchasers*

Basic information about DSO(s) and network losses



- ***What are the principles that define the methodologies which are used to determine the gas losses in distribution networks(national normative acts, methodologies, pipeline construction technical norms, other technical studies or analytical studies)?***
 - *The quantity of gas allowed to cover losses for 2021-2025 is set for each DSO individually as the arithmetic average of the actual loss values for the years 2014-2018 , or if losses determined from 2014-2018 exceeds 2 % of the average gas quantity in the years 2014-2018 that entered the distribution system, value equal to exactly 2% of the average amount of gas that entered the distribution system will be used to calculate the allowed amount of gas to cover the losses.*
- ***What is the volume/proportion of losses that are taken into account for tariff purposes. What are the various countries approach to this aspect of network losses recovery through tariffs?***
 - *Max 2% of the average amount of gas that entered the distribution system as mentioned above.*

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- **Natural gas losses percentage last three years (loses/distributed amount)?**
- *Total losses* – technical / commercial breakdown of losses not available*

	2017	2018	2019
E.ON	1,8 %	1,9 %	1,8 %
PPD	2,3 %	2,1 %	2,2 %
GasNet	1,4 %	1,2 %	1,2 %
CZ average	1,5 %	1,3 %	1,3 %

**The share of losses in the distributed quantity of gas for the Czech Republic is for the last three known years, because the actual value of losses is recorded with a two-year delay (for 2020 will be known in August 2022).*

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- ***What actions taken to reduce losses in system?***
 - *The regulatory framework motivates DSOs to make investments that result in reducing the amount of losses in the system. The regulation includes the allowed amount of losses calculated from the previous years 2014-2018, which is thus set for the whole regulatory period.*
 - *If the actual amount of losses is lower than the allowed amount, no correction factor is applied and the originally set allowed revenues remain with the DSO → profit of the DSO. The actual amount is used for calculation of the allowed amount of losses for next regulatory period.*

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**THANK YOU FOR YOUR
ATTENTION!**