



**ECDSO-E**

*Position Paper*

*Impact of Recent Energy Crisis on the Operation and Viability of  
Electricity Distribution System Operators in the Energy  
Community*

*Key Findings and Recommendations*

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**Coordination:** Energy Community Secretariat

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## About ECDSO-E

The Coordination Group of the Energy Community Distribution System Operators in Electricity (ECDSO-E CG) is established by the Ministerial Council Decision 2018/11/IMC-EnC with the aim to provide a format for discussion of all questions pertinent to DSO operation, including to develop common views to be presented to other stakeholders, elaborate guidance documents and issue recommendations for implementation.

## Approach

This position paper is based on the research of the ECDSO-E Task Force for Network Tariffs, which sets out the key data on approved and actual revenues of DSOs, level of losses and share of losses in actual and approved revenues.

The following analysis and recommendations were prepared in accordance with the Conclusions of the 21<sup>st</sup> meeting of the ECDSO-E CG held on 2 June 2022 in Athens and constitute a position paper of ECDSO-E. The position paper was submitted for review and endorsed by the executive officials of ECDSO-E CG<sup>1</sup> members, as well as by the coordinators of ECDSO-E CG.

The key findings and recommendations were reviewed by the Energy Community Secretariat, which also provided support to ECDSO-E CG in the preparation of this paper.

## Background

Distribution system operators (DSOs) are responsible for ensuring reliable electricity supply to their customers. They operate, maintain, develop and build the distribution network, in order to ensure safe, reliable and long-term distribution of electricity.

Based on national laws and in line with the Electricity Directive<sup>2</sup> 2009/72/EC, DSOs must have available all the necessary **human, technical, physical and financial resources** for the safe, reliable and long-term operation of the distribution system<sup>3</sup>.

DSOs are responsible for the operation, maintenance and development of the distribution system, and for ensuring the long-term ability of the system to cover reasonable demand for the distribution of electricity<sup>4</sup>.

Furthermore, DSOs are required to purchase the electricity necessary to cover electricity losses in their distribution systems, in accordance with transparent, non-discriminatory and market-based procedures<sup>5</sup>.

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<sup>1</sup> <https://www.energy-community.org/aboutus/institutions/ECDSO-E.html>

<sup>2</sup> Directive (EU) 2019/944 shall be implemented by 31.12.2023

<sup>3</sup> Article 26(2)c of the Directive 2009/72/EC

<sup>4</sup> Ibid, Article 25(1)

<sup>5</sup> Ibid, Article 25

All Contracting Parties to the Energy Community Treaty except Bosnia and Herzegovina and Ukraine are net electricity importers<sup>6</sup>. In the net importing Contracting Parties, gross import makes up one third of total production, while gross export makes up one quarter of total production.

Consequently, the scale of cross-border trade has a decisive impact on wholesale electricity prices in the competitive market. Recalling that electricity to cover network losses are normally purchased in a market-based procedure, the costs of electricity for covering the electricity distribution losses are heavily influenced by the prices on the European electricity markets.

The prices of electricity in the regional wholesale market have increased four to five times on average over the last 18 months, from around 50 EUR/MWh in 4<sup>th</sup> quarter 2020 band to 210 - 250 EUR/MWh in 2<sup>nd</sup> quarter 2022<sup>7</sup>.

The price surge came after the peak of the COVID crisis, as DSOs were still coping with the consequences of decreased economic activity and struggling to regain financial viability<sup>8</sup>.

It is worth noting that such a series of extraordinary circumstances has not prompted national authorities to revisit the rules and procedures for tariff setting. The overview of recognized network losses and associated costs and approved revenues from tariffs shows quite clearly the relevance of fair recognition of electricity prices.

*Table 1 Share of the approved and actual costs of network losses in the revenues of DSOs*

% of network losses in revenues		Approved by NRA			Actual/Expected		
		2020	2021	2022	2020	2021	2022
Bosnia and Herzegovina	MH ERS	9%	10%	10%	11%	11%	
	EPHZHB	23%	23%	23%	13%	13%	
Georgia	Energo-Pro	26%	31%	28%	37%	23%	26%
Kosovo* <sup>9</sup>	KEDS	49%	56%	59%	46%	92%	
Moldova	Premier Energy	22%	30%	24%	17%	27%	28%
Montenegro	CEDIS	15%	14%	14%	24%	35%	46%
North Macedonia	Elektrodistribucija	33%	36%	62%	37%	70%	104%
Serbia	Elektrodistribucija	29%	24%	22%	27%	27%	28%
Ukraine	D-TEK Grid	34%	28%		32%	34%	

Source: participating DSOs, compiled by the ECDSO-E Network Tariffs Task Force, May 2022

<sup>6</sup> export and import data for 2021

<sup>7</sup> source: "Quarterly report on European electricity prices" Market observatory for energy, DG ENER

<sup>8</sup> More in the ECDSO-E paper: [https://www.energy-community.org/dam/jcr:7ed818f1-a239-4b74-9be8-69b3fbe55582/ECS\\_DSO\\_status\\_position\\_042020.pdf](https://www.energy-community.org/dam/jcr:7ed818f1-a239-4b74-9be8-69b3fbe55582/ECS_DSO_status_position_042020.pdf)

<sup>9</sup> \* This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence.

## Key Findings

- As a result of the rapidly increasing electricity market prices, DSOs are facing enormous costs for the procurement of electricity for covering distribution losses, which exceed significantly the planned and approved amounts to be recovered from tariffs.
- The unprecedented increase of the costs of purchased electricity could not be passed through to consumers in an expedient and timely manner, partly because the tariff methodologies and the tariff procedures were not flexible enough to react adequately to the new reality, but also due to the social elements present in the electricity tariffs.
- Delay in the recognition of the actual costs of losses in the network tariffs caused a severe liquidity crisis for the DSOs exposed to market prices, endangering their ability to provide reliable and continuous supply of electricity to customers.
- In addition to delayed or inadequate recognition of the actual market price of electricity for approved losses, the difference between the approved and the actual level of losses has caused additional significant financial damage to the DSOs. Namely, when actual losses exceed the threshold approved by the regulator that cannot be compensated from savings on other items or approved profit, the cash flow and financial viability of the DSOs are significantly affected, as are the investments and operational performance of DSOs in the mid-term.
- Increased prices of other energy carriers, such as coal, firewood, gas or oil, combined with an inadequate response to adjust regulated electricity tariffs, have made electricity cheaper than other heating sources. As the prices of other energy carriers continue to rise in 2022 while electricity prices remain regulated or limited for a significant share of retail consumption, more switching to electricity for heating must be expected in the next heating season. This will require additional efforts by DSOs to meet demand and maintain network stability<sup>10</sup>.
- Driven by the high electricity prices, the interest for renewable production and self-consumption is increasing, requiring the DSOs to sustainably integrate and utilize the renewable energy sources.

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<sup>10</sup> Some DSOs are considering load shedding in order to protect the electricity distribution infrastructure and to manage grid overloads, as was the case in Kosovo\* in the previous heating season.

## Recommendations

- In order to adequately factor in volatile costs of electricity to cover electricity distribution losses, NRAs should develop more flexible pricing regulations, allowing DSOs to maintain an acceptable level of working capital, claim tariff adjustments and recover the incurred costs within a reasonable time frame.
- In case of volatile prices driving the uncontrollable costs, timely adjustments of the uncontrollable costs should be ensured with a shorter interval for tariff review and a simple procedure for tariff adjustment.
- The incentive systems applied on approved levels of losses should be temporarily reconsidered with a view to ensure that regular operation of DSOs is not endangered. Considering the impact of the market price of electricity on the costs of operation and financial viability of DSOs, regulatory authorities are invited to monitor the difference between the actual and approved levels of losses and corresponding costs. In this manner, DSOs will be released of the unsustainable financial burden and be able to fully focus on improving their performance and the development of distribution systems.
- Social protection measures, especially protection of vulnerable customers, should not be implemented through network tariffs as cost-reflective pricing is needed to drive customers' consumption patterns and investment decisions.
- The process of elimination of cross-subsidies in the tariffs has to go hand in hand with the development of sustainable programs for the protection of vulnerable consumers by the relevant national authorities.
- National authorities have to develop efficient and effective policies for optimal utilization of available energy sources, aiming to discourage excessive use of subsidized electricity for heating purposes. This includes, but is not limited to, strategies and programs promoting energy efficiency, alternative energy sources, supporting self-consumption, etc.
- All stakeholders should aim to prevent by all means the need for load shedding, a measure of last resort to protect the electricity distribution system. This implies an inclusive process where all relevant stakeholders contribute to the development of sustainable national measures.

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