



The Role of DSOs in Energy Saving Applications

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As the energy sector continues to evolve and increasingly digitalise, it becomes crucial to establish a common European framework for data sharing and using. To foster consumer engagement in the transition, this encompasses a framework for the implementation of a Common Energy Reference Framework (CERF) for energy saving applications.ⁱ DSOs are shaping this approach to increasingly facilitate demand response by active consumers.

Energy saving applications based on the CERF, set forth as part of the EU Action Plan on Digitalising the Energy System, aim at increasing the efficiency of energy consumption by providing consumers and end-users with relevant information about the energy mix, the local state of the electric grid, their electricity consumption, and corresponding energy-saving advice. DSOs shall be able to communicate their flexibility needs by identifying where, when and to what extent congestion in LV, MV and HV grids are expected.ⁱⁱ The ultimate aim of the CERF is to increase the efficiency of energy consumption across Europe of 11.7%, in line with the EU target for 2030.ⁱⁱⁱ

E.DSO (the European Distribution System Operators' Association) represents 35 leading electricity distribution system operators (DSOs) from across Europe. Being at the centre of the energy sector, we are committed to facilitating the transition to a more efficient, user-centric energy system. This is underlined by E.DSO member initiatives, like the *DSO Boost* by Fluvius and the *Digital Balcony* by E-REDES.^{iv} E.DSO supports all initiatives that aim to empower customers and promote sustainable energy consumption.

By establishing a common framework for energy saving applications, consumers will have access to accurate and relevant information about the grid status and gain a better understanding of their energy usage. This allows them to make informed decisions about how and when to adjust energy consumption, ultimately leading to the increased resilience of electricity grids and a reduction of CO₂ emissions.

We see significant benefits in supporting the CERF for Energy Applications. By shaping the ongoing harmonisation of information exchanges with consumers on the European level, DSOs are at the forefront of next-generation consumer applications. DSOs are able to co-create novel business



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opportunities based on open-source approaches that ensure data security and transparency. Moreover, DSOs leverage on transparent bi-directional exchange of information to increase the stability and resilience of electricity grids. By learning from the challenges of last winter, DSOs' commitment to creating CERF-based consumer applications sets a strong step to facilitate energy savings for the next winter and beyond.^v

How can DSOs become active?

The success of the Blueprint for the CERF, developed by the InterConnect project,^{vi} will depend on the availability and granularity of data and its effective use. Therefore, we are committed to contributing with our expertise on utilizing grid signals, supporting open data access to pilots, and enhancing interoperability, exploitability, and replicability. The design of such a framework requires engagement from both the grid and the consumer side. Therefore, we appreciate the involvement of various stakeholders, like the European Commission and ENTSO-E, in this endeavour.

With first validation results expected before the end of the year, DSOs and SMEs may join the development of pilot consumer applications via the **Open Call of April 2023**^{vii}. Ensuing consumer engagement activities will be supported via a forthcoming Digital Europe Programme call, which will be launched on May 11th 2023^{viii}.

We believe that the CERF initiative will facilitate the transition to a cleaner, more efficient energy system by facilitating demand response while promoting energy savings and a sustainable energy consumption. Therefore, E.DSO invites all stakeholders to support the initiative and work towards an increasingly sustainable energy transition.

ⁱ **European Commission** (2022), Digitalisation of the energy system:

https://energy.ec.europa.eu/topics/energy-systems-integration/digitalisation-energy-system_en

ⁱⁱ **E.DSO** (2023), White Paper. A multi-scaled approach for a digitalised energy system transformation:

[https://www.edsoforsmartgrids.eu/images/E.DSO White Paper digitalised energy system FINAL.pdf](https://www.edsoforsmartgrids.eu/images/E.DSO%20White%20Paper%20digitalised%20energy%20system%20FINAL.pdf)

ⁱⁱⁱ **European Commission** (2023), European Green Deal: EU agrees stronger rules to boost energy efficiency: https://ec.europa.eu/commission/presscorner/detail/en/IP_23_1581



iv **E.DSO** (2022), CUSTOMERS' POWER - Use Cases from E.DSO's Members for a Participative Electric Distributed Generation and Integrations into their Grids:

https://www.edsoforsmartgrids.eu/images/Brochure-E.DSO_2022.pdf

v **BEUC, CEER, Eurelectric, Eurogas, EER, EU DSO Entity** and **E. DSO** (2022), Joint Common Principles for Enhanced Consumer Protection this Winter:

https://www.edsoforsmartgrids.eu/images/Joint_common_principles_energy_final.pdf

vi **InterConnect project** (2023), InterConnect provides a first blueprint for a Common European Reference Framework for energy applications for consumers :

<https://interconnectproject.eu/energy-applications/>

vi **InterConnect project** (2023), InterConnect Demonstrators of Energy Applications Open Call:

<https://interconnect-energy-apps-oc.fundingbox.com/>

vi **European Commission** (2023), Digital Europe Programme's multiannual work programme for 2023 - 2024: <https://digital-strategy.ec.europa.eu/en/library/digital-europe-programmes-multiannual-work-programme-2023-2024>

