



SEDC
Smart Energy Demand Coalition

Data Access in the Electricity Market

SEDC Position Paper

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SEDC Position Paper on Data Access in the Electricity Market

Availability, certainty and access to energy and pricing data is the backbone of a consumer-centric and smart energy system. Consumers should be empowered and enabled to provide their own consumption flexibility to the power system, reacting to signals from the electricity market or the needs of transmission and distribution system operators. The necessary data access can help consumers and/or their chosen service providers to understand where, when and how they use energy and enable them to better manage their energy usage through a variety of energy products and services. These can range from energy efficiency upgrades, automation and behavioural changes, to distributed energy resources and other energy management options.

Generally, and depending on the regulatory framework, data can originate from Distribution System Operators when they are owners of metering assets. Data can also originate from commercial parties who may own metering assets on behalf of the consumer, and who control other relevant information, e.g. regarding retail electricity tariffs that may also be variable. Different approaches for the management and provision of data are currently being discussed and implemented in different markets in Europe and globally. Any approach should meet important criteria that allow consumers to choose their own level of engagement and select the energy retailers and/or service providers they wish to work with.

Data management in the interest of energy consumers

The **protection of energy consumers' privacy and security** is of crucial importance in a smart energy system. Each energy consumer should have the full right to decide which market player(s) will be allowed to access specific data relating to the consumer's own consumption.

At the same time, **consumers, including tenants of apartment blocks, should be able to access at all times all data relating to their own use of electricity, water and gas**, and sub-metering should be allowed. A good example of local access to metering data under the consumer's direct control is the P1-port standard or an alternative back-end system. Universal standardisation (i.e. a harmonised standard across Europe, instead of multiple competing options) is important because it allows markets to develop in devices and services that use the data.

Data provided by Distribution and Transmission System Operators, but also from retailers and service providers should **enable any energy consumers to have a system put in place that allows them to make use of new off-the-shelf technology solutions**, and consumers should be able to flexibly and easily switch service providers and retailers. To support this, one provision for the license to be an energy retailer should be to give any data regarding consumption and tariffs to the consumer and to any party to whom the consumer grants data access.

Transparency around grid-based interventions should be part of the policy around data access, so that consumers can see at any time whether and when a DSO/TSO is controlling an output based on contracted flexibilities, or because of an intervention in market activities for reasons of system security.

Data needs of service providers

To give energy consumers the choice of different energy offers and engagement possibilities required for a competitive market, a **European framework is required to ensure appropriate and standardised data access for service providers**. Respecting the consumer's choices, it is essential that different market parties have the same access to data, and rules on unbundling of system operation and market activities are fully implemented. This refers to general metering data needed for the identification of consumers with demand-side flexibility potentials on the one hand, as well as detailed data required to deliver specific services once the consumer has chosen to engage with a service provider on the other hand.

In line with the principles established above, the energy consumer should be able to decide which service providers are entitled to access the relevant data related to his or her own consumption, both from system operators as well as retailers. Consumers could be prompted to agree or opt out of a transfer of basic metering data to accredited service providers to help identify flexibility potentials.

Once a consumer has chosen to work with a Demand Response aggregator, the following data are needed for the effective operations of the aggregator:

- **Historical interval data** going at least one year back to identify patterns;
- **Real-time data** about the consumer's consumption at any moment. This data is important to give an indication, but does not need to be of settlement grade;
- **Settlement data** which can be delivered with some delay;
- **Standing data**, e.g. whether a consumer is classified as large, what tariff classes they fall into, to which network area they are connected, etc., which is information that is necessary to participate in or confirm eligibility for certain electricity programmes and products.

Where a consumer has opted for a type of critical-peak pricing or other time-varying tariff, consumers and their chosen service providers should also be able to access this tariff information in real time.

To secure access to these data, service providers like Demand Response aggregators, energy services companies and distributed energy resource providers should be recognised as market parties with respective rights.

Both Distribution and Transmission System Operators as well as retailers should be obliged to transfer this data for defined standard cases free of charge, as consumers have already paid for these data as part of their retail bill. All parties should make the relevant data available. The exchange of the data should take place through standardised communication formats, and should adhere to reasonable security standards and be machine-readable, so as to enable different services to be combined and scaled.

Requirements for a future-proof approach to data management

In a rapidly developing sector, it is essential to avoid any technology and infrastructure lock-in effects. The **communications infrastructure should be adaptable**, allowing for an evolution of approaches and functions in line with the development of the Internet of Things infrastructure. **Universally standardised approaches for an automatic device identification and authentication will play an increasingly important role.**

This would allow complementing the consumer data listed above by more detailed local information on the type of devices involved for a particular consumer, as well as the behaviour and life-time of a device. It

would also allow for distinctive information regarding the flexible capacity that a consumer has available, besides the information on consumption patterns.

It is important to note that data provision and management can be done by different market parties, which includes, but is not limited to, Distribution and Transmission System Operators and retailers. In this respect, **a policy framework is required to ensure the credibility and security of data from third parties offering their services.**

New models allowing for the secure exchange of information between different entities, including embedded contracts in a block-chain approach, should be considered carefully.