CEER Webinar Series on Data Accessibility - System Data

DSOs‘ perspective

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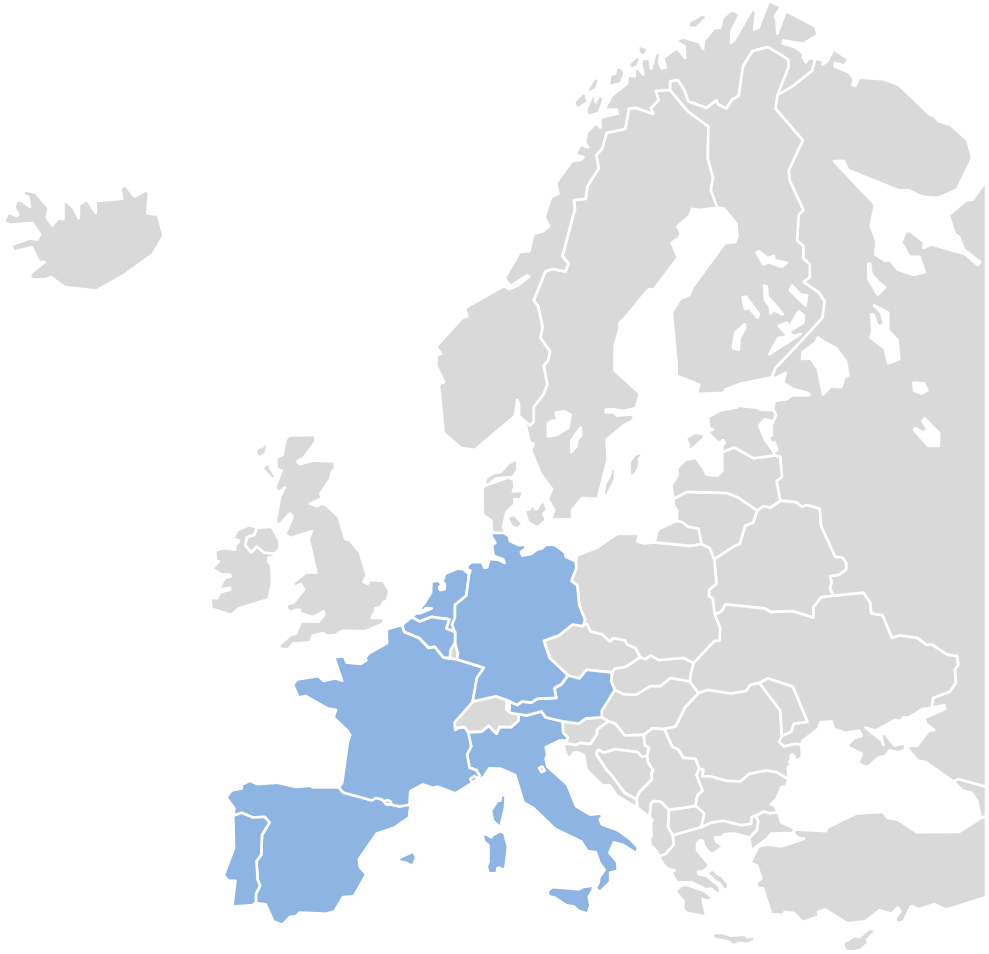
We used a survey among DSOs to substantialise our assessment



- 9 questions shedding light on data accessibility and implementation of KORRR *(Key Organisational Requirements, Roles and Responsibilities)*
- Distributed among members of both CEDEC and EDSO for Smart Grids
- We received 11 answers from 8 different member states
- The majority of answers were received from Western Europe
- Central Eastern Europe remains unrepresented

Did KORRR lead to a significant deviation?

Did KORRR (Key organisational requirements, roles and responsibilities in relation to data exchange) lead to a significant deviation with regard to data exchange between DSO and TSO compared to the time before the entry into force of the Guideline System Operation (SO GL) and/or KORRR?

KORRR did not trigger in all responding MS a significant deviation from the already existing data exchanges, but opened for some the possibility for improvements:

- allowing the DSO to have access to more data (scheduled/structural);
- supporting already ongoing or planned adjustments in existing data-exchange;

KORRR triggered for some MS however more significant changes or even a complete review of the existing data exchanges and challenges in terms of:

- availability of data from DER connected to the distribution grids;
- volume and type of data to be treated and exchanged;
- data sourcing.

Was an amendment of national rules necessary?

Was an amendment needed of the (existing) national/regional guidelines/rules on data exchange after KORRR was published?

- Apart from Austria, KORRR generated in all responding MS the establishment of new or amendments of existing legislation or technical rules.
- Not all of those new data-exchange rules are already implemented.
- Several DSOs mention that KORRR was not the only trigger to make changes, but also the quick increase of DER in MS lead to a need for amendments in their legislation.
- Real-time data exchanges seem in several MS a particular point of attention and challenge.

Overall process: Do DSOs have the impression their position is sufficiently considered?

Are you satisfied by the ***process*** of national/regional implementation, has your point of view been sufficiently taken into account?

There are mixed feelings about the satisfaction of the national/regional implementation process and the inclusion of the DSOs' point of view.

In case of a rather negative experience, the critical points are:

- resistance of the TSO, leading to partial implementation;
- TSO strongly reluctant to change existing information exchange architecture;
- disadvantage of DSOs in comparison with TSO regarding data scoping, routing and formats.

Due to the layout of the process, TSO had the edge over DSOs.

In case of a rather positive experience the + points are:

- early involvement of the DSOs in the process and active discussions;
- issues for DSOs taken into account.

The situation can be very different in the MS, due to the existing relationship and cooperation between the DSO and the TSO, but also due to existing rules and practices in place when KORRR was to be implemented.

Results: Do DSOs have the impression their position is sufficiently considered?

Are you satisfied by the ***result*** of national/regional implementation, has your point of view been sufficiently taken into account?

Although there seems a more general satisfaction of the national/regional implementation results and the inclusion of the DSOs' point of view, there are still some MS struggling with what was or will be implemented.

The critical points are:

- observability for DSOs needs improvement, they need to know better what is happening on the transmission grid;
- data exchange scheme on distributed SGUs, especially the scheme where the DSO is bypassed (e. g. real-time data from distribution-connected SGUs to the TSO);
- relevance of aggregated data versus individual data to the TSO;
- existing DSO structures not sufficiently considered (big/small DSOs, cascaded DSOs or not);
- technically non-justifiable data requirements.

Are data important also for DSOs?
Are data relevant for procuring flexibility services?

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All responding DSOs confirm that data are also important for the DSOs in the execution of their missions:

- system management and operation (e. g. knowledge of distribution connected DER - forecasting, assessing and resolving congestions);
- procurement of flexibility services;
- availability of customers' data e. g. for billing purposes
- implementation of energy communities (allowing energy sharing between Grid Users);
- information from the TSO;
- efficient planning of distribution systems etc.

Obviously, data needs for DSOs go beyond the KORRR and SOGL framework.

Which kind of data do DSOs need?

Which kind of data do DSOs need to fulfill their tasks and services? (non-exhaustive)

Real time data (for each point of delivery):

- to improve observability of the distribution system and connected DER and DSR;
- to evaluate available flexibility capability to be used by DSO if needed (e. g. congestion solving, voltage regulation, etc.) by services market or agreements;
- to evaluate if flexible resources providing the requested services (both to TSO and DSO) need corrective actions to guarantee safe system operation.

Non-real-time data (for each point of delivery)

- to analyse customers energy and power behaviour in order to evaluate and schedule reinforcements activities in the grid in an efficient (technically and economically) and in timely manner;
- to evaluate fulfilment of services requested and services provided (both if PoD operates as single unit or if it is part of an aggregated unit) also for billing/settlement activities;
- to perform billing/settlement activities other than the ones above;

Other data (for each point of delivery)

- data concerning typology of user connected (e. g. EV charging stations, HVAC system, etc.) useful for visibility, analysis purpose etc.;
- data to evaluate if, what and how many services the PoD is enabled to provide to the system (to TSO, to DSO or both);
- data whether PoD being part of aggregated unit is enabled to provide services to the system (to TSO, to DSO or both);
- data concerning forecasted baseline of PoD in case connected DER provides services to the system to evaluate timely, effectively and efficiently the impact on the grid.

What about cooperation between TSOs and DSOs?

Is the cooperation with your TSO(s) an easy
or difficult task in the frame of data accessibility and exchange?

In terms of cooperation with the TSO regarding the accessibility and exchange of data responses are not conclusive in one or another direction. Some responding DSOs are rather neutral, some are satisfied, others not so much.

However, key points are:

- avoid duplication of data exchanges and unnecessary costs;
- DSO have to keep their data acquisition obligations and provide necessary distribution-connected Grid Users' data to the TSO with the right granularity;
- need for relevant real-time data from the TSO;
- discussion on ownership and technology choices for (common) data exchange platforms;
- if more than 1 TSO in MS, avoid different requirements per TSO for DSOs regarding data exchange.

What about cooperation between DSOs and other stakeholders?

Did you experience difficulties with
any stakeholder during implementation of KORRR?

Most responding DSOs do not report big difficulties with stakeholders regarding the implementation of KORRR.

Important considerations:

- difficulties in defining all aspects in detail;
- stakeholders worried about potential necessary investment costs (real-time data).

Did DSOs face significant investments to fulfill their duties stemming from KORRR?

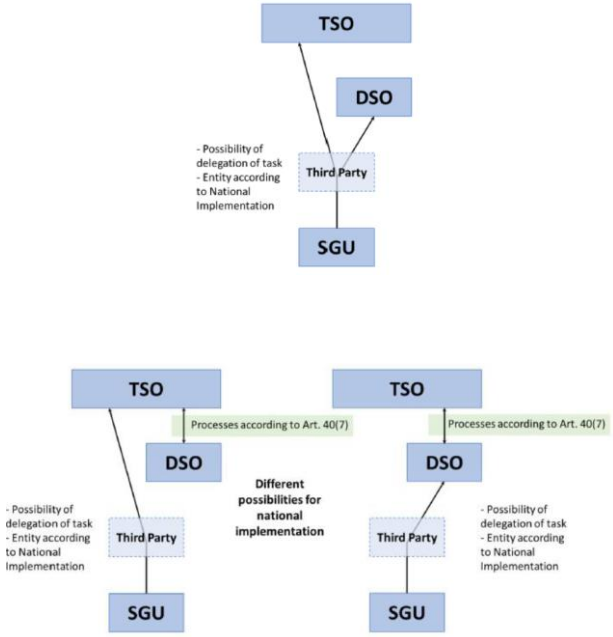
Did KORRR trigger investments on DSO-level to facilitate proper implementation?

The announced investments triggered by KORRR vary from 0 to > 1 MEUR depending on member state and DSO.

All depends on what was already existing in the member state and which choice has been made for the data exchange scheme as explained in KORRR (see possibilities in figure alongside).

Besides that, existing capabilities of DSOs (in place prior to the implementation of KORRR) are highly relevant as well.

Costs are hard to assess, as they might have multiple causes (e.g. updating control centre equipment time-dependent, but at the same time fulfilling new requirements stemming from KORRR).



Should KORRR be revised?

Should KORRR be revised to take the position of DSOs into account?
If so, what are your TOP 3 suggestions for revision?

A revision of KORRR (meaning in fact a revision of the SOGL) is not suggested by all responding DSOs.

If a revision would be considered, following suggestions are made by the DSOs who think revision is needed:

- proper involvement of each party, according to his roles and responsibilities;
- avoid duplications of data exchanges;
- focus more on data to be exchanged bidirectionally between DSOs and TSOs;
- information to the DSO from Grid Users other than SGUs (as defined in the SOGL);
- data to the DSOs (ex-ante/close to real time) to evaluate service providers delivering services;
- impact from the CEP (flexibility and energy communities) should be checked.

Assessment of implementation efforts and desire for revision of KORRR varies

Costs of implementation are highly variable

- Depending on historical national situation and obligations

DSOs need data beyond the scope of KORRR

- Due to other duties of DSOs (e.g. Metering) and national obligations e.g. regarding distributed resources

DSOs aren‘t always satisfied with just being consulted

- DSOs desire a more central role in data accessibility and exchange mirroring their role and position in the system