# State of national implementation of KORRR – Updated survey

*Context and scope*

According to the Commission Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation (hereinafter referred to as “SO GL”), and specifically Title 2 about Data Exchange, it sets the obligation of TSOs, DSOs and significant grid users (SGUs) to exchange data to reflect the real and forecasted situation of the transmission system. SO GL left some decisions at national level. In concrete terms:

* Article 40.5 deals with applicability and scope of the data exchange. It has to be defined at national level and it is highly linked with the NC Requirements for grid connection of generators (RfG).
* Although KORRR (Key Organizational requirements, roles and responsibilities), set in article 40.6 of SO GL, was approved in 2019, some critical points were left to be decided at national level.
* Finally, article 40.7 of SO GL establishes the obligation that TSOs and DSOs shall agree on effective, efficient and proportional processes for providing and managing data exchanges between them.

It is useful and interesting for TSOs to share their progress and corresponding decisions.

Almost a year ago, a first survey was sent to prepare the Workshop on Data Exchange. Answers were analyzed by the dedicated PT under StG OF. During the SOC webinar hold on 22nd October, three TSOs presented their national cases of KORRR implementation.

However, considering the importance of data exchange in the future, and the fast evolution of the national Regulation in most of the countries in Europe, StG OF encourages your TSO to complete this survey in an effort to update the general overview of the state of implementation of KORRR in each country. This input will be compiled and be presented in the public workshop with Stakeholders on KORRR implementation that is scheduled in December (concrete date to come). SOC members will receive the material that will be prepared for this public workshop for their review in due time.

To fulfill this survey, please follow these instructions:

* You only need to click on the boxes that best fit your answers. In case none of them does or if you want to add any further information, please, write down your answer right next to the field “Other”.
* More than one box can be marked if answers are not contradictory.
* The questions that are preceded by an asterisk must only be answered if the answer right before had also an asterisk.
* To fill in dates, a calendar will be open when clicking on the box “*Click to choose the date”.*

## General information

Transmission system voltage levels are at or above:

[ ]  110 kV [x]  220 kV [x]  380 kV – 400 kV

[ ]  Other:

## National implementation of Article 40.5

The state of national implementation of Article 40.5 is:

[ ]  Under discussion [ ]  Sent for approval\* [ ]  Approved by relevant authorities\*

[x]  Implemented\* [ ]  Not required by authorities

[ ]  Other:

\*Please, select the implementation date or the expected implementation date:

*16/01/2019*

## National implementation of Article 40.6 (remaining actions from KORRR)

The state of national implementation of Article 40.6 is:

[ ]  Under discussion [ ]  Sent for approval\* [ ]  Approved by relevant authorities\*

[x]  Implemented\* [ ]  Not required by authorities

[ ]  Other:

\*Please, select the implementation date or the expected implementation date:

*16/12/2019*

## National implementation of Article 40.7

The state of national implementation of Article 40.7 is:

[ ]  Under discussion [ ]  Sent for approval\* [ ]  Approved by relevant authorities\*

[ ]  Implemented\* [ ]  Not required by authorities

[x]  Other: It is implemented for structural data and scheduled data exchange, and only partially implemented for real time data exchange.

\*Please, select the implementation date or the expected implementation date:

*01/10/2021*

## Which requirements of SO GL / KORRR have implied, or you expect them to imply, an important change in the national requirements or rules?

[ ]  Article 40.5\* [ ]  Article 40.6\* [ ]  Article 40.7\*

[x]  None (so far)

\*Can you please specify in which sense?:

## Schemes for exchanging data of SGUs connected to the distribution grid

Considering the following figures, please select the scheme that is planned to be implemented, or is already implemented, for exchanging each type of data.

TSO

DSO

Third party

SGU

*TSO and DSO scheme*

TSO

DSO

Third party

SGU

*TSO scheme*

TSO

DSO

Third party

SGU

*DSO scheme*

## Structural data is directly sent to:

[x]  Both TSO and DSO [x]  TSO [x]  DSO

[ ]  Still under discussion [ ]  Other:

## Scheduled data is directly sent to:

[ ]  Both TSO and DSO [ ]  TSO [x]  DSO

[ ]  Still under discussion [x]  Other: Most of the scheduled data are exchanged via the DSO scheme. However, there are some scheduled data (e.g. the generation schedule of the production units) that are sent only to TSO and that are not sent further by TSO to DSO.

## Which scheme has been nationally implemented for real time data exchange?:

[x]  Non-cascading [x]  Cascading

[ ]  Still under discussion [ ]  Other:

## Can SGUs connected to the distribution grid decide to whom they shall directly send their data?

[ ]  Yes, with no condition [ ]  Yes, but only if they are not Balance Service Providers (BSPs)\*

[x]  No [ ]  Still under discussion

[ ]  Other:

\* If BSPs are obligated to send their information directly to a specific party, please, choose which one it is:

[ ]  Both TSO and DSO [ ]  TSO [ ]  DSO

[ ]  Other:

## Which parameter is considered to define the responsibility of SGUs to exchange data and the level of data they shall exchange? Please, provide the values of the thresholds depending on the given answers.

[x]  Power: generation units ≥ 5 MW

[ ]  Connection voltage level:

[x]  Type of SGU: generation units of category B, C, D

[x]  Services provided: if a SGU provides system services and the sum of the maximal active power of all its generation/load units is less than 1.5 MW then it may aggregate the real-time data.

[ ]  Still under discussion

[ ]  Other:

## How do SGUs send their data to the TSO or to the DSO?

[ ]  Individually per SGU

[x]  Individually per SGU and aggregated in some specific cases (please specify): Data can be aggregated if there are different generation units of category B connected to the same substation. In this case the DSO is responsible for data aggregation (e.g. the total amount of active power) and then these data are transmitted further to TSO.

[ ]  Aggregated

[ ]  Still under discussion

[ ]  Other:

## Please, indicate who is responsible for the installation, configuration, security and maintenance of each data exchange link.

TSO

SGU

SGU

TSO

Third party

SGU

SGU

Third party

DSO

SGU

SGU

DSO

Third party

SGU

SGU

Third party

DSO

TSO

TSO

Third party

SGU

SGU

Third party

TSO

DSO

## Which level of information of the transmission grid do DSOs have access to?

[ ]  Only from their connection point with the transmission network

[ ]  All information of its observability area

[ ]  No information is available for them

[ ]  Still under discussion

[x]  Other: structural data and scheduled data from their connection points with the transmission network are sent from TSO to DSOs and it is expected to have real time data from DSOs connection points with the transmission network available to be exchanged before 1st of October 2021 (i.e. real time data regarding auto/transformers having the rated low voltage side 110 kV).

## Which level of information of the distribution grid does the TSO have access to?

[ ]  Only from their connection point with the transmission network

[ ]  All information of its observability area

[ ]  No information is available for them

[ ]  Still under discussion

[x]  Other: structural data and scheduled data are sent from DSOs to TSO regarding TSO observability area and it is expected to have real time data of TSO observability area available to be exchanged before 1st of October 2021.