

**REQUEST FOR AMENDMENT BY ALL REGULATORY
AUTHORITIES**

ON THE

**ALL TSOs' PROPOSAL FOR THE KEY
ORGANISATIONAL REQUIREMENTS, ROLES AND
RESPONSIBILITIES (KORRR) RELATING TO DATA
EXCHANGE**

**IN ACCORDANCE WITH ARTICLE 40(6) OF THE
COMMISSION REGULATION (EU) 2017/1485 OF 2
AUGUST 2017 ESTABLISHING A GUIDELINE ON
ELECTRICITY TRANSMISSION SYSTEM OPERATION**

23 July 2018

I. Introduction and legal context

This document elaborates an agreement of all regulatory authorities of the European Union, agreed on 23 July 2018 at the Energy Regulators' Forum to request amendments to the all TSOs' proposal for the Key Organizational Requirements, Roles and Responsibilities (KORRR) relating to data exchange in accordance with Article 40(6) of the Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on Electricity Transmission System Operation (SO GL).

This agreement of all regulatory authorities shall provide evidence that a decision on the KORRR does not need to be adopted by ACER pursuant to Article 6(8) of the SO GL at this stage. It is intended to constitute the basis on which the regulatory authorities will each subsequently request an amendment to the KORRR pursuant to Article 7 of the SO GL.

The legal provisions forming the basis of the KORRR can be found in Articles 4, 6(2) and 40(6) of the SO GL. They are set out here for reference.

Article 4 – Objectives and regulatory aspects

1. *This Regulation aims at:*
 - (a) *determining common operational security requirements and principles;*
 - (b) *determining common interconnected system operational planning principles;*
 - (c) *determining common load-frequency control processes and control structures;*
 - (d) *ensuring the conditions for maintaining operational security throughout the Union;*
 - (e) *ensuring the conditions for maintaining a frequency quality level of all synchronous areas throughout the Union;*
 - (f) *promoting the coordination of system operation and operational planning;*
 - (g) *ensuring and enhancing the transparency and reliability of information on transmission system operation;*
 - (h) *contributing to the efficient operation and development of the electricity transmission system and electricity sector in the Union.*
2. *When applying this Regulation, Member States, competent authorities, and system operators shall:*
 - (a) *apply the principles of proportionality and non-discrimination;*
 - (b) *ensure transparency;*
 - (c) *apply the principle of optimisation between the highest overall efficiency and lowest total costs for all parties involved;*
 - (d) *ensure TSOs make use of market-based mechanisms as far as possible, to ensure network security and stability;*
 - (e) *respect the responsibility assigned to the relevant TSO in order to ensure system security, including as required by national legislation;*
 - (f) *consult with relevant DSOs and take account of potential impacts on their system; and*
 - (g) *take into consideration agreed European standards and technical specifications.*

Article 6 - Approval of terms and conditions or methodologies of TSOs

[...]

2. *The proposals for the following terms and conditions or methodologies shall be subject to approval by all regulatory authorities of the Union, on which a Member State may provide an opinion to the concerned regulatory authority:*
 - (a) *key organizational requirements, roles and responsibilities in relation to data exchange related to operational security in accordance with Article 40(6);*

[...]

Article 40 – Organisation, roles, responsibilities and quality of data exchange

[...]

6. By 6 months after entry into force of this Regulation, all TSOs shall jointly agree on key organisational requirements, roles and responsibilities in relation to data exchange. Those organisational requirements, roles and responsibilities shall take into account and complement where necessary the operational conditions of the generation and load data methodology developed in accordance with Article 16 of Regulation (EU) 2015/1222. They shall apply to all data exchange provisions in this Title and shall include organisational requirements, roles and responsibilities for the following elements:

- (a) obligations for TSOs to communicate without delay to all neighbouring TSOs any changes in the protection settings, thermal limits and technical capacities at the interconnectors between their control areas;
- (b) obligations for DSOs directly connected to the transmission system to inform the TSOs they are connected to, within the agreed timescales, of any changes in the data and information pursuant to this Title;
- (c) obligations for the adjacent DSOs and/or between the downstream DSO and upstream DSO to inform each other within agreed timescales of any changes in the data and information pursuant to this Title;
- (d) obligations for SGUs to inform their TSO or DSO, within agreed timescales, about any relevant changes in the data and information established pursuant to this Title;
- (e) detailed contents of the data and information established pursuant to this Title, including main principles, type of data, communication means, format and standards to be applied, timing and responsibilities;
- (f) the time stamping and frequency of delivery of the data and information to be provided by DSOs and SGUs, to be used by TSOs in the different timescales. The frequency of information exchanges for real-time data, scheduled data and update of structural data shall be defined; and
- (g) the format for the reporting of the data and information established pursuant to this Title.

The organisational requirements, roles and responsibilities shall be published by ENTSO for Electricity.

[...]

II. Process

The draft KORRR was publicly consulted by all TSOs through ENTSO-E from 31 October 2017 to 1 December 2017¹, in line with Article 11 of the SO GL. The final KORRR proposal (dated 27 February 2018) was received by the last regulatory authority of the Union on 3 April 2018.

Article 6(7) of the SO GL requires all regulatory authorities to consult and closely cooperate and coordinate with each other in order to reach an agreement, and make decisions within six months following the receipt of the submitted proposal by the last regulatory authority. For practical planning reasons - and not to interfere with or delay related national or other processes – all regulatory authorities agree that a national decision for issuing this agreed request for amendment to the KORRR is, therefore, required by each regulatory authority by 15 August 2018.

¹ The public consultation included a stakeholder workshop held by ENTSO-E on 14 November 2017. The consultation documents are available on ENTSO-E's website: <https://consultations.entsoe.eu/system-operations/korrr/>

III. Agreed position of all regulatory authorities

All regulatory authorities appreciate the efforts made by the TSOs to incorporate in their KORRR proposal most of the suggestions made and to clarify most issues raised by all regulatory authorities in their informal feedback provided to ENTSO-E on 13 December 2017 and in the subsequent bilateral exchange.

Generally, all regulatory authorities can support most of the proposed text of the KORRR. However, in order to allow for the individual regulatory approvals of the KORRR, there are outstanding issues – which are ordered along the sequence of the Articles– that still need to be resolved. Therefore, the following amendments to the KORRR proposal are requested by all regulatory authorities:

Whereas section

In **paragraph (1)** of the whereas section - and/or in Article 1(1) - it should be clarified which TSOs are referred to as “all TSOs” in the proposal, e.g. by stating that “all TSOs of the European Union” are meant.

The whole paragraph (1) still seems to be redundant with the very similar formulation in Article 1(1), i.e. one of both would be sufficient.

Paragraph (4) states “Article 40(6) of the SO GL establishes the legal basis for the KORRR...”, which represents an unnecessary duplication with the same reference provided in Article 1(1) of the KORRR. **Paragraph (4)** also contains a disturbing line break in the quotation of subparagraph (f).

Paragraph (8) could be omitted as it merely restates the content of Article 40(10) of the SO GL, which is unnecessary here.

Article 6(6) of the SO GL requires the proposal to include a description of the expected impact of the proposed rules on the objectives of the SO GL. As already stated in the NRAs’ informal feedback of 13 December 2017, “the understanding of the KORRR proposal’s purpose could be improved by reducing the scope of the “whereas” section to mainly focus on a short description of [...]”

- *Which main objectives of the SO GL are met by the new KORRR proposal and how (e.g. by listing the major “new achievements” (i.e. SO GL refinements) of KORRR and by explaining their expected impact on secure system operation). [...] Possible elements of this listing could include e.g. the harmonisation of the organisation of data exchanges including clear responsibilities of actors, minimum requirements on data exchange methods, planning, formats and content in order to achieve a coordinated and better system security (incl. cyber and data security).*

Although **paragraphs (9) to (18)** of the ‘whereas section’ contain the respective references to the objectives (of Article 4(1) of the SO GL), they still lack clarity on the more concrete expected impacts and benefits of the KORRR.

Article 1 Subject matter and scope

Paragraph 5f states *“follow take into consideration agreed European standards and technical specifications.”* Instead it should read *“follow agreed European standards and technical specifications”*.

Article 2 Definitions

Paragraph 1 is also referring to the terms defined in Article 2 of the EBGL, although KORRR is not subject to EBGL and does not seem to use the terms defined in the EBGL. Please check whether this reference to the EBGL could be omitted.

Article 3 General responsibilities

Paragraph 2 (2nd sentence) refers to Article 40(5) of the SO GL allowing for revisions of the default option of data provision both to TSOs and DSOs (as requested by the Commission). Since it can be argued, whether the data provision model options are covered by Article 40(5) and/or rather Article 40(7), the reference should be simplified to Article 40. In addition it should be checked, whether the overlaps with paragraph 3 could be reduced.

Paragraph 3 states; *“Subject to approval by the competent regulatory authority or by the entity designated by the Member State, in line with Article 40 (5) of the SO GL, each TSO in coordination with the DSOs in its control area shall define whether distribution-connected SGUs in its control area shall provide the structural, scheduled, and real-time data, to the TSO directly or through its connecting DSO or to both. [...]”*.

The EU associations representing DSOs find that Article 40(7) of the SO GL (obliging each TSO to agree with the relevant DSOs on effective, efficient and proportional processes for providing and managing data exchanges between them, including on the format for data exchange) inherently and practically also requires TSO-DSO agreement on the data provision “model” (direct TSO- or cascading model). While Article 40(5) of the SO GL concerns the coordination between DSOs, SGUs and TSOs as regards the determination of the applicability and scope of the data exchange (i.e. the data categories), Article 40(7) of the SO GL covers the processes and formats, which legally requires TSO-DSO agreement. Such an obligation should not be “downgraded” by the KORRR, which is closely linked to both articles, nor should efficient national solutions be restricted or prohibited by KORRR.

All regulatory authorities are of the view that the issue of data exchange models (i.e. how data is most efficiently and effectively exchanged among the SGUs, DSOs and TSOs) should be resolved at national level in accordance with Article 40 of the SO GL. Paragraph 3 should therefore be revised as suggested further below.

Paragraph 3 further states in its **last sentence** that the quality and granularity of the data [received by a DSO and to be sent to the TSO] shall be maintained or improved. It is not clear how the quality and granularity shall be maintained or even improved by the DSO. In case of a cascaded data exchange model, DSOs collect a wide range of data with the necessary granularity to fulfill the DSOs’ duties. The data is then aggregated and provided to the TSO ensuring the quality and granularity the TSO requests according to its needs. All regulatory authorities agree with the DSOs’ position that the current formulation (without any clarification and justification) could be misleading or even prohibiting efficient solutions to be found at national level when implementing the SOGL. Therefore, the sentence should be removed or revised by clarifying - separately for data quality and data granularity – what is meant by “improvements”, why they are required and how they could be achieved.

Taking account of both above-mentioned aspects of paragraph 3, a possible **new formulation of the whole paragraph 3** could read: *“Subject to approval by the competent regulatory authority or by the entity designated by the Member State, the applicability and scope of the data exchange shall be determined at national level in line with Article 40 of the SO GL. The effective and efficient*

processes for managing the data exchange between the TSO and DSOs shall be also agreed at national level in accordance with Article 40 of the SO GL. The decision on the data exchange model may be independent for each type of information and SGU, if required. When the data is provided directly to the TSO, after request of the DSO to whose network the SGU is connected, the TSO shall make it available to the DSO. When the data is provided to the DSO, the DSO shall provide the required data to the TSO with a data granularity according to the TSO's needs."

Paragraph 4 contains the responsibility of the direct recipient (TSO or DSO) for checking the quality of data received (i.e. whether it complies with the TSOs quality requirements) before sharing it with another entity. However, the paragraph is silent on the consequences of the check. The paragraph should be amended so that it is clarified that the (first) recipient shall not only check, but also ensure (e.g. by requesting corrected or missing data from the sending SGU, if errors have been detected through the check) that the data quality complies with the TSOs quality requirements. The scope of the quality check and the consequential specific steps to be undertaken shall be determined at national level (i.e. agreed among the concerned parties). The KORRR does not specify the detailed requirements. That is why the reference can be omitted.

Wording proposal: "4. When the TSO or the DSO receives the data directly from the SGU, the TSO or DSO shall check and ensure that the data complies with the quality requirements specified by the TSOs or, where applicable, by the DSOs according to the KORRR before sharing it with another entity." [Possible addition: "The scope and the possible consequences of the quality check shall be defined at national level. Where data is checked for quality (e.g. plausibility, completeness check) and is subsequently corrected, the corrected data shall also be shared for efficiency reasons as well.]

Paragraph 5 requires a wording clarification / improvement and should read "*Adjacent DSOs and/or ~~between~~ the downstream DSO and upstream DSO shall inform each other on the processes and formats of any change in the data and information **to be exchanged** between them according to Article 40(6) of the SO GL."*

Paragraphs 6-8 still put the responsibility for installation, configuration, security and maintenance of communication systems / links on DSOs ("up to the communication interface point agreed with the TSO", cf. para 6) or on SGUs (cf. para 7) and give TSOs (or in certain cases DSOs) the right to unilaterally define the interface point (cf. para 8). As already communicated in the Informal NRA feedback to ENTSO-E on 13 December 2017; *„the responsibility of DSOs, CDSOs and SGUs for the communication systems used to exchange data with the TSO should be limited to the parts of the communication system they can actually control. The responsibility for security and maintenance of communication infrastructure (e.g. internet / mobile / fixed network) used for the data exchange by (both of) the parties cannot be put (just) on the main data sending entity."*

In a subsequent informal correspondence with ENTSO-E, NRAs suggested that a preferred solution could be to omit the current respective paragraphs (6), (7), (8) of Art. 3 of the KORRR and thereby allow – or even better to explicitly state - that efficient solutions shall be agreed at national level. The following arguments support this request:

- There is no legal basis/provision in the SO GL requiring the TSOs to determine the (split of the) responsibility for the communication infrastructure in the KORRR for all Member States.
- Data provision could be bidirectional in some cases (e.g. DSO<->TSO), which would not justify shifting the responsibility for the communication infrastructure to just one party (e.g. DSO).
- It is disproportionate to put the responsibility for the functioning of third-party operated communication infrastructure ("installation, configuration, security and maintenance of the communication links", such as internet, phone lines), which is beyond the control of the SGU/DSO, only on the SGU/DSO. It is not appropriate to ask SGUs/DSOs to take liability regardless of negligence or fault, e.g. if the internet/phone lines break down.
- Although the KORRR does not specify the data communication means, the current Article 3(6) to (8) indirectly allows TSOs (or DSOs in some cases) to unilaterally determine the communication means via the definition of the communication interface point (for example: if the TSO determined the "communication interface point" to be a specific TSO's IT server / platform interface, the

communication means is thereby also predetermined, i.e. e-mail or phone or separate communication link/line would be ruled out.)

- Finally, similar concerns as mentioned above were raised by stakeholders at the European Stakeholder Coordination Group meeting(s), so the question stands to which extent DSOs and also SGUs have been consulted about the definition of the communication interface point?

Article 4 Confidentiality

According to paragraph 1, all data affected by the KORRR shall be regarded as confidential information unless explicitly stated otherwise.

Pursuant to paragraph 2, TSOs may share obtained confidential information with all other TSOs that have implemented the necessary procedures to handle confidential information as set out in Article 12 of the SO GL.

However, Article 40(3) of the SO GL specifies that confidential information is only to be shared when necessary to carry out the operational security analysis.

Therefore, **paragraph 2** of Article 4 of the KORRR should be aligned with Article 40(3) of the SO GL and limited in scope so as to avoid misuse of data by adding the precondition *“only when necessary to carry out the operational security analysis, the inertia and dynamic stability assessments”*.

All regulatory authorities would like to clarify that each party receiving data according to the KORRR can use this data also for other purposes than the ones described in the SO GL, if and to the extent that those are covered by national or Union law. For example, generation data provided according to the SO GL can be used to calculate and provide aggregated generation output per market time unit and production type pursuant to Article 16(1) b) and Article 16(3) of the Commission Regulation (EU) 543/2013, in case the relevant data is not yet provided by the primary owners of the information (e.g. generation or production units).

Article 5 Access to information

Although the reciprocity of data exchanges (i.e. DSOs being entitled to access data from TSOs as set out in Article 40(10) of the SO GL) is (now) covered in **paragraph 3**, structural, scheduled and real-time information beyond the DSO's connection point with the TSO can only be requested upon justification (i.e. for operational security analysis / reliable dynamic simulation of grids), and that request may even be rejected by the TSO. This represents an unnecessarily strict limitation and interpretation of “relevant information” accessible to DSOs and may not be fully in line with Article 40(10) of the SO GL. Therefore, these limitations (i.e. the sentence starting with “Upon justification....” and the whole remainder of paragraph 3) should be deleted.

Article 6 General Responsibilities of TSOs

The wording of **paragraph 5** could be improved in the following way: *“Subject to approval of the competent regulatory authority or approval of the entity designated by the Member State in accordance with Article 40 (5) of the SO GL, each TSO, in coordination with the DSOs and SGUs, shall define ~~which the~~ SGUs in its control area ~~which~~ shall provide ~~the~~ real time data.”*

Paragraph 6 states that *“Each TSO shall provide updated information of DSO network of its control area that is part of the observability area of other TSO to those TSOs.”* This formulation is imprecise, as there could be several distribution systems connected to the transmission system of one TSO. The sentence should therefore be amended to read: *“Each TSO shall provide updated information of DSO networks of its control area that are part of the observability area of other TSOs to those TSOs.”*

Paragraph 7 provides that *“Each TSO may provide updated information of the neighbouring TSO networks which have an impact on the distribution networks of its own control area to the DSOs operating those distribution networks.”* Pursuant to Article 40(10) of the SOGL, a DSO shall be

entitled to receive the relevant information from the relevant TSO. Article 40(7) also requires an agreement between the TSO and relevant DSOs on data exchange processes, including, where required for efficient network operation, the provision of data related to distribution systems and SGUs. All regulatory authorities consider that any information impacting on a distribution network is relevant information for the DSO's operation of the impacted network. Consequently, the wording of paragraph 7 should be amended to reflect an obligation of the TSO to provide the relevant information to the DSO. (i.e. *"Each TSO shall provide updated information..."*).

Article 7 Structural data used by TSOs

Paragraph 2 (the end of the 1st sentence) should be amended by adding a reference to Article 40(7) of the SO GL to better accommodate the DSOs' concerns as regards the required agreement between TSOs and DSOs on the processes and format of data exchange.

Article 9 Responsibilities of TSOs

Paragraphs 1, 2 & 3 should be corrected to read *"within the TSO's control area,..."* and the second sentence in **paragraph 4** should be corrected to state *"...or third parties within its control area."*

Paragraph 5 (1st sentence) should also cover the communication of planned and unplanned unavailability of network elements in the connection point to the transmission connected SGUs, as this information is also necessary for the transmission connected SGUs' scheduling.

Article 10 Format Real Time Information

The headline of this Article should be revised, as it covers more than just the format of Real Time information (suggestion: Article 10 – Provisions for Real Time information).

In **paragraph 1 and 2** it should be added, that also the list of detailed content for Real Time data should be published (and not just the format).

The first sentence in **paragraph 3** should be corrected to state *"...within its control area."*

Article 11 Responsibilities of DSOs – Structural data – Notification of changes

Paragraph 1 extends the scope of the DSO's obligation to review structural information of **network elements** in the observability area (as provided in the consulted draft KORRR) to **all PGMs and demand facilities in the control area** it shares with the TSOs, instead of limiting it to SGUs, as provided in the enabling provisions of the KORRR.

The reasons for these changes are unknown to all regulatory authorities and should be explained. As DSOs complained about the problematic wide extension of the scope, requiring for example in some regions to regularly review a huge number of connected PV installations (for which other national data gathering processes may already exist), it should become obvious that only aggregated data could be meant here. As regards demand facilities, mainly those providing demand-response should be of interest for the TSO. Therefore, the original scope (i.e. reviewing structural information of network elements in the observability area) should be reinstated.

In addition the advance notice period for any planned change stated under a) to c) was increased to 6 months (instead of 3 months in an earlier version of KORRR) without further justification. DSOs claim that the only way they can comply with this is to make customers wait for new connections or other changes, i.e. holding them up for long enough so that the DSO can notify the TSO. It is not clear to all regulatory authorities, why this change to 3 months was introduced. If it was only for consistency reasons with the GLDPM-v1, which sets 6 months as a default in its Article 16(1), then this is considered an insufficient reason, because Article 16(2) GLDPM-v1 allows for less constraining notice periods for the data sending entity.

All regulatory authorities agree with DSOs that this change bears the risk of slowing down the energy transition significantly. At least some of the generators considered significant as regards the SOGL are built and connected to the distribution systems much faster than three months. In order for the KORRR not to delay the whole connection process for unjustified formal obligation reasons, paragraph 1 should be amended to read as follows:

1. *"Each DSO shall review the structural information of its network elements that form the **Observability Area** of its TSO and of the **SGUs** connected to those network elements at least every 6 months and provide updated information to the TSO in the following situations as defined at national level:*

- a) At least **3** months before planned commissioning of a new network element or SGU.*
- b) At least **3** months before planned final removal from service of the network element or SGU.*
- c) At least **3** months before planned relevant modifications to the network element or SGU.*
- d) As soon as possible in case there is a change in the Observability Area;*
- e) As soon as an error in the data set transmitted earlier is detected."*

In light of the above, **Article 8 Responsibilities of TSOs – Structural Data - Notification of Changes** and **Article 15 Responsibilities of SGUs – Structural Data – Notification of Changes** should be checked whether it requires revisions accordingly. (i.e. all the mentioned periods of 6 months therein should be changed back into the 3 months periods, as previously stated in the draft KORRR version; Art. 15, 1st sentence also requires a wording correction, as its first part is unclear).

The coordination for the format specification set out in **paragraph 2 of Article 11** should also include SGUs. In addition, for efficiency and consistency reasons, the specified format should be – to the extent possible – the same as the one specified by TSOs according to Article 7(2) of KORRR.

Article 12 Scheduled Data – Rights and responsibilities of DSOs

Paragraph 1 refers to planned and unplanned unavailability of network elements, while the last sentence of paragraph 1 and **paragraph 2 (2nd sentence)** refer to scheduled data provision by DSOs. The latter lacks a legal basis in the SO GL. DSOs noted that "There is no requirement in SOGL Part II Chapter 2 Title III Articles 43-44 for scheduled data to be included in KORRR. In fact outages are not data at all but entities in their own right and managed in Part III, Title III of SOGL. Article 96 of SOGL (Year-ahead coordination of the availability status of relevant assets for which the outage planning agent is a TSO taking part in an outage coordination region, a DSO or a CDSO) requires DSOs to plan their outages a year in advance. The process consists of preliminary availability plans, validation and then finalisation (Art. 97-99 SOGL). Updates to these unavailability plans are managed by Article 100 allowing updates to final year-ahead availability plans between year-ahead and real-time execution. These updates can be sent to the respective TSO by a DSO acting as outage planning agent (Article 100.2 SOGL).

The process foreseen in Title III is exhaustive, there's obviously no need for any additional data exchange under Title II of SOGL and KORRR. As such Article 12 of the KORRR should be deleted to support legal certainty and limit KORRR to its enabling provisions in Title II of SOGL."

All regulatory authorities support ask for a clarification why these references have been included and would like ENTSO-E to consider the deletion of the respective (parts of) Article 12.

Article 13.3: Requirements on data exchange (in relation to Article 17.2)

DSOs noted that “There is a confusing overlap between Article 13.3 and Article 17.2 of the final draft KORRR. This is a source of legal uncertainty for DSOs as well as SGUs connected to distribution systems. Both Articles seem to apply real-time data requirements to DSO connected SGUs. They appear to be saying the same thing. It would be logical given that Article 13 is in a section about DSOs to drop 13.3 and just ensure that 17.2 is complete...”

All regulatory authorities support this concern and ask for a clarifying revision of both Articles to promote legal certainty.

Article 16 – Scheduled Data provided by SGUs

Spelling: please correct “through” in paragraph 2 and perhaps reorder the sentence for better readability.

IV. Conclusions

The regulatory authorities have agreed to **request an amendment to the KORRR submitted by all TSOs pursuant to Article 40(6) of the SO GL**. The amended proposal shall take into account the regulatory authorities’ position stated above. In accordance with Article 7(1) of SO GL it should be resubmitted by TSOs to the national regulatory authorities no later than 2 months after the last national decision to request an amendment has been made.

All regulatory authorities must make their national decisions to request an amendment to the KORRR, on the basis of this agreement, by 15 August 2018.