

# All TSOs' proposal for the key organisational requirements, roles and responsibilities in relation to data

A consultation response paper

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## **EXECUTIVE SUMMARY**

This response paper is a joint response from EURELECTRIC, CEDEC, GODE and EDSO for Smart Grids, taking part in the ENTSO-E public consultation on All TSOs' proposal for the key organisational requirements, roles and responsibilities (KORRR) in relation to data pursuant to Article 40.6 of Commission Regulation (EU) 2017/1485 of 2 August 2017 establishing a guideline on electricity transmission system operation (SO GL). The consultation response has been submitted online.

In the view of EURELECTRIC, CEDEC, GODE and EDSO for Smart Grids, the scope of the KORRR should remain the way it is defined in the System Operation Guideline (article 40.6). The KORRR should not introduce more stringent requirements. Building on several network codes and guidelines and on other related European legislation, legal consistency should be guaranteed. This would be important already to allow for a constructive and detailed stakeholder feedback.

Data exchange is a topic with a long history in terms of TSO-DSO cooperation. In this respect, in addition to the absolute need for legal consistency, the already agreed operational principles should also be respected. This should be the case for example of the agreement reached between TSOs and DSOs at European level (and published in the Data Management report<sup>1</sup>), that generally, each system operator should be responsible for directly collecting the data from users connected to its grid (generators, consumers, storage etc.). This already agreed solution should be reflected and respected in the KORRR.

In the KORRR proposal, EURELECTRIC, CEDEC, GODE and EDSO for Smart Grids find that there is a serious inconsistency in the System Operation Guideline (article 40.7) where it reads that TSOs and DSOs should agree on effective, efficient and proportional processes for providing and managing data exchanges. In the KORRR, the agreement has been replaced with "coordination", resulting not only in legal inconsistency but also in establishing a hierarchy between the TSOs and DSOs. The wording "agreement" should therefore be used instead. Article 4.4 of the KORRR proposal must be changed to an unmodified copy of article 40(10) of (EU) 2017/1485. A restriction of rights of DSOs, stemming from art. 40.10, is unacceptable.

EURELECTRIC, CEDEC, GODE and EDSO for Smart Grids consider that duplicated data transfer is inefficient. It brings about unnecessary costs to stakeholders and should therefore be strongly deprecated. We also emphasise that DSOs with a connection point to a transmission system have a legal right to receive the relevant structural, scheduled and real-time information from the relevant TSOs and to gather the relevant structural, scheduled and real-time information from the neighbouring DSOs.

It is necessary to guarantee also for the KORRR proposal that the fundamental principles of EU law are respected. These are: the principle of proportionality (Article 5(4) of the Treaty on European Union), the principle of subsidiarity (Article 5(3) of the Treaty on European Union) and the principle of data scarcity (e.g. article 6(1) of (EU) 2016/679).

In the view of EURELECTRIC, CEDEC, GODE and EDSO for Smart Grids, paragraph 1 of Article 18 should be deleted completely. There is no justification for a retrospective application of the requirements. TSOs should provide a thorough justification before applying any requirements retrospectively. Furthermore, the process for exemptions is costly, bureaucratic and unsuitable.

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<sup>1</sup> [https://www.entsoe.eu/Documents/Publications/Position%20papers%20and%20reports/entsoe\\_TSO-DSO\\_DMR\\_web.pdf](https://www.entsoe.eu/Documents/Publications/Position%20papers%20and%20reports/entsoe_TSO-DSO_DMR_web.pdf)

## RESPONSE

Please find below the comments of EURELECTRIC, CEDEC, GODE and EDSO for Smart Grids per title or section.

We use the following abbreviations (alphabetical order):

CGMM – Common Grid Model Methodology  
CDSO – Closed Distribution System Operator  
DSO – Distribution System Operator  
GDPR – European General Data Protection Regulation  
GLDPM – Generation and Load Data Provision Methodology  
KORRR – Key Organisational Requirements, Roles and Responsibilities  
NRA – National Regulatory Authority  
OPDE – Operational Planning Data environment  
SGU – Significant Grid User  
TSO – Transmission System Operator  
TYNDP – Ten Year Network Development Plan

### Whereas

The last but one sentence of recital two ("Of special relevance is the global demand-generation balance, whose responsibility is assigned to the TSO in Regulation (EC) No 714/2009.") should be deleted completely. The task of global demand-generation balance assigned to TSOs in (EC) 714/2009 refers to the long-term timeframe in the range of the TYNDP. It has no relevance for the timeframe that the KORRR refers to nor is it subject to Title II of (EU) 2017/1485, to which the KORRR is limited.

The last sentence of recital (3) ("This complementarity refers to who, how and when the data defined in the GLDPM has to be exchanged.") should be deleted. The GLDPM already defines who, how and when data has to be exchanged. Cf. e.g. Art. 3(4) (who), art. 4 (how) and art. 16 (when) of the GLDPM. If TSOs deem those definitions insufficient, they should justify any further need.

In recital (6), article 40(7) of (EU) 2017/1485 should be cited correctly: "Article 40(7) specifies the obligation for the TSOs to agree with the relevant DSOs on the process for exchanging provision and management of information between them, including, where required for efficient network operation, the provision of data related to distribution systems and SGUs."

In recital (7), the last sentence ("The KORRR shall include the method for assessing the relevant of network elements to define the observability area of the TSO") should be deleted. It is not the purpose of the KORRR to include such a method, but to define a methodology in application of art. 75 of (EU) 2017/1485. This is clearly defined in art. 75 (2) of (EU) 2017/1485:"[...]The methods referred to in point (a) of paragraph 1 shall allow the identification of all elements of a TSO's observability area, being grid elements of other TSOs or transmission-connected DSOs, power generating modules or demand facilities[...]"

Recital (8) should be rewritten to: "Article 40(10) specifies the right of DSOs with a connection point to a transmission system to receive the relevant structural, scheduled and real-time information from the relevant TSOs and to gather the relevant structural, scheduled and real- time information from the neighbouring DSOs" to cite the first sentence of art. 40(10) of (EU) 2017/1485 correctly.

Recital (11) should be rewritten to: "In the aim to facilitate common operational planning principles as requested by Article 4(1)(b) of Regulation 2017/1485, the KORRR Proposal takes into account all data already requested by GLDPM and GLDPM v2 to prepare scenarios to perform operational security analysis in the planning stage. This data is deemed sufficient to fulfil this task". The data necessary for coordinating security analysis and operational planning is already requested by GLDPM and GLDPM v2. If the data set of these two GLDPM documents is insufficient, data demand going beyond that should be thoroughly justified. Stakeholders already invest in data exchange technologies to facilitate data exchange emanating from GLDPM and GLDPM v2. If data demand is changed by the KORRR, stakeholders see the risk of stranded investments.

Recital (12) should be rewritten to: "The KORRR Proposal includes the organization to exchange, among other, real time data between TSOs, necessary to perform the load-frequency control processes as defined in Article 4(1)(c) of Regulation 2017/1485 and, more specifically, in Article 141(3) of Regulation 2017/1485 for each monitoring area". The only application of real time data and its exchange for load-frequency control processes is the monitoring of real-time active power exchange between monitoring areas (and, consequently, LFC blocks and synchronous areas). Therefore, real-time data exchange for LFC should be limited to this purpose.

Recital (13) should be rewritten to: "To ensure the conditions for maintaining operational security throughout the Union as specified in Article 4(1) (d) of Regulation 2017/1485, TSOs need to have good observability of the System in order to perform reliable security analysis. The KORRR proposal aims to set the framework for the TSOs to access necessary data of their respective observability area". This change is necessary to make clear that it is not the task of the KORRR to ensure the observability, but the methodology stemming from article 75 of (EU) 2017/1485.

Recital (17) should be changed to: "The KORRR Proposal will contribute to the efficient operation and development of the electricity transmission system and electricity sector in the Union while having good observability of the system to perform reliable security analysis and thus identifying necessary improvements in the Transmission System". It would indeed be sufficient and efficient to identify the necessary improvements instead of all possible improvements.

Recital (18) should be rewritten to: "In conclusion, the KORRR Proposal contributes to the general objectives of the Regulation 2017/1485 to the benefit of consumers" to put consumers at heart of this methodology.

## TITLE 1 General Provisions

<b>Article 1</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	
	Explanation why the change is needed	ENTSO-E should check the wording, some editorial mistakes.
	Clarification regarding the interpretation of the article	
<b>Article 2</b>	Does the article require a change or clarification?	change

	Proposed alternative wording for the article	<p>1. For the purposes of the KORRR, the terms used in this document shall have the meaning of the definitions included in Article 3 of <b><i>the Regulation (EU) 2017/1485</i></b>, Article 2 of Regulation (EU) 2015/1222, Article 2 of Regulation (EC) No 714/2009, Article 2 of Commission Regulation (EU) No 543/2013, Article 2 of Regulation (EC) No 631/2016, Article 2 of Regulation (EC) No 1388/2016, Article 2 of Regulation (EC) No 1447/2016 as well as Article 2 of Directive 2009/72/EC of the European Parliament and of the Council and the other items of legislation referenced therein.</p> <p>2. <i>No change</i></p> <p>3. The KORRR shall be binding <b>upon TSOs</b> as referred to herein and their permitted successors and assigns and irrespective of any change in the TSO's names.</p> <p>4. <i>No change, but check editorial mistakes.</i></p> <p>5. <i>No change.</i></p> <p>6. For the purpose of the KORRR, Real Time Data means a representation of the actual state of the facilities <b>as agreed between the relevant TSO, DSOs and SGUs.</b></p> <p>7. For the purpose of the KORRR, SGUs are considered to provide data directly to the TSO or DSO <b>when there is no other system operator between SGU and the receiving TSO or DSO.</b></p>
	Explanation why the change is needed	<p>The change in paragraph 3 is necessary to make the sentence meaningful, as the original sentence contained unnecessary text remains from a former version.</p> <p>The change in paragraph 6 is necessary to avoid unnecessary and unjustified costs to stakeholders by obliging them to update data every minute even when data didn't change in between, and irrespective of actual TSO needs.</p> <p>The change in paragraph 7 is necessary to make the paragraph meaningful.</p>
	Clarification regarding the interpretation of the article	
<b>Article 3</b>	Does the article require a change or clarification?	change

	<p>Proposed alternative wording for the article</p> <p><b>New 1.</b> <i>This methodology sets out the key organisational requirements, roles and responsibilities in relation to data exchange with TSOs. Each TSO shall have the right but not the obligation to obtain or receive the data set out in Title II of Regulation (EU) 2017/1485 from the owner of the relevant network element or the party responsible for providing the information, as the case may be, provided that all of the following conditions are met:</i></p> <ul style="list-style-type: none"> <li><i>a. the TSO requires the data in order to carry out the operational security analysis in accordance with Article 72 of Regulation (EU) 2017/1485; the set of required data shall be the minimum set that enables the TSO to do so;</i></li> <li><i>b. the data are not already available to the TSO:</i> <ul style="list-style-type: none"> <li><i>i. either pursuant GLDPM and CGMM;</i></li> <li><i>ii. pursuant national legislation or regulation, contractual basis or based upon any other kind of legally binding mechanism;</i></li> <li><i>iii. or if the data is publicly available.</i></li> </ul> </li> <li><i>c. the data are not already available to the respective DSO. In such a case, the data shall be exchanged directly between the TSO and the DSO.</i></li> </ul> <p><b>New 2.</b> <i>This KORRR does not confer TSOs the right to request data not explicitly described in Title 2 of Regulation (EU) 2017/1485. For avoidance of doubt, data regarding grid elements outside the observability area of the respective TSO are out of scope.</i></p> <p><b>New 3.</b> <i>The harmonisation intention of Article 40(6) of Regulation (EU) 2017/1485 shall be understood to refer to the harmonisation of key organisational requirements, roles and responsibilities in relation to data exchange. TSOs shall not invoke the harmonisation requirement in order to obtain data which they do not require for their legal tasks assigned by Regulation (EU) 2017/1485.</i></p>
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	<p>Proposed alternative wording for the article (continued)</p> <p>1. Each TSO, DSO, CDSO or SGU <b><i>shall</i></b> be responsible for the quality of the information they provide regarding their facilities or services. Except where explicitly otherwise stated, they shall be the party required to provide the data.</p> <p>2. <i>Delete paragraph.</i></p> <p>3. <i>Delete paragraph.</i></p> <p>4. <i>Distribution connected SGUs shall provide the structural, scheduled and real time data directly to the DSO they are connected to. However, exceptionally, each TSO, in agreement with the DSOs in its Control Area, may define whether the distribution connected SGUs in its control area shall provide the structural, scheduled and real time data directly to the TSO or to the DSO they are connected to. When the data is directly provided to the TSO, the TSO shall provide it to the DSO. When the data is provided to the DSO, the DSO shall provide the data to the TSO.</i></p> <p>5. <i>No change.</i></p> <p>6. CDSOs, SGUs shall not be required to provide the same data directly to both the TSO and the DSO it is connected to.</p> <p>7. DSOs, CDSOs and SGUs shall be responsible for the installation, configuration, security and maintenance of the communication systems, <i>excluding the communication channel</i>, to exchange data with the TSO according to the KORRR unless explicitly otherwise agreed with the TSO.</p> <p>8. <b><i>Delete the last part of the paragraph:</i></b> "The delegating entity shall remain responsible for ensuring compliance with the obligations under Regulation 2017/1485, including ensuring access to information necessary for monitoring by the regulatory authority."</p>
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	Explanation why the change is needed	<p>The additional first three paragraphs are necessary to make sure fundamental principles of European Union law are respected. This is: the principle of proportionality (Article 5(4) of the Treaty on European Union), the principle of subsidiarity (Article 5(3) of the Treaty on European Union) and the principle of data scarcity (e.g. laid down in article 6(1) of (EU) 2016/679).</p> <p>The change in paragraph 1 is necessary to adapt the wording to a form suitable to legal documents.</p> <p>Paragraph 2 and 3 should be deleted, as they refer solely to parties offering services to TSOs. From our point of view, services provided to TSOs and any obligation stemming from that should not be defined in the KORRR, but can be bilaterally agreed when procuring such services.</p> <p>Paragraph 4 should define cascaded data exchange as the general principle for data exchange regarding SGUs connected to distribution systems. This general rule was agreed in the TSO-DSO data management report (page 16 of the report: "Generally, each system operator should be responsible for directly collecting data from users connected to its grid (generators, consumers, storage, etc.) [...]"). Paragraph 4. sentence 1 should be changed from "coordination" to "agreement", as agreement is required by article 40(7) of (EC) 2017/1485 for all data exchanges related to distribution systems. Sentence 2 should be deleted as it creates inefficiencies, legal and economic uncertainties and risks if multiple decisions on data exchange are possible for each and every SGU. In sentence 3, "make it available" must be changed into "provide it" as TSOs are obliged to provide it to the DSO to fulfil their obligations from 72/EC/2009, art. 12 e): "Each transmission system operator shall be responsible for: (e) providing to the operator of any other system with which its system is interconnected sufficient information to ensure the secure and efficient operation, coordinated development and interoperability of the interconnected system;" Data related to SGUs at the distribution system is unquestionably necessary to ensure the secure and efficient operation of the (distribution) system. The last sentence of paragraph 4 should be deleted, as it is unclear how quality and/or granularity of data could be improved by the receiving party. Furthermore, when assuming cascaded data exchange, the highest efficiency level is untapped by data aggregation and thus refinement. Such solutions are prohibited by the requirement contained in the last sentence without any necessity or justification.</p>
	Explanation why the change is needed (continued)	<p>Paragraph 6 should explicitly prohibit duplicated data transfer, as it is inefficient and constitutes unnecessary costs to stakeholders.</p> <p>In paragraph 7, it cannot be the sole responsibility of DSOs, CDSOs and SGUs for the installation, configuration, security and maintenance of the communication channels. The TSO has an equal responsibility.</p>

		Paragraph 8: It should be possible to transfer responsibilities to all.
	Clarification regarding the interpretation of the article	
<b>Article 4</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. <i>Delete paragraph.</i></p> <p>2. <i>No change.</i></p> <p>3. <i>No change.</i></p> <p>4. <b><i>According to Article 40(10) of Regulation 2017/1485, DSOs with a connection point to a transmission system shall be entitled to receive the relevant structural, scheduled and real time information from the relevant TSOs and to gather the relevant structural, scheduled and real time information from the neighbouring DSOs. Neighbouring DSOs shall determine, in a coordinated manner, the scope of information that may be exchanged.</i></b></p> <p>5. <i>No change.</i></p> <p>6. Competent National Regulatory Authorities shall have access to all information exchanged according to the KORRR upon <b><i>motivated</i></b> request. <b><i>The NRAs are obliged to treat the data they receive from TSOs and/or DSOs as confidential.</i></b></p> <p>7. <i>No change.</i></p> <p>8. <i>Delete paragraph.</i></p> <p><b>New 9. If there is an exchange of personal data between TSO and DSO, TSO and DSO collaborate to enable each other to be compliant with the GDPR (European General Data Protection Regulation).</b></p>

	<p>Explanation why the change is needed</p> <p>Paragraph 1 should be deleted, as it is very similar but not identical to the provisions of article 12 of (EU) 2017/1485. Providing similar but deviating provisions in this methodology will lead to legal uncertainties for stakeholders, as it is not immediately clear which document has to be respected when provisions deviate from each other.</p> <p>Paragraph 4 must be exchanged against an unmodified copy of article 40(10) of (EU) 2017/1485. The original version of this paragraph constitutes a restriction of rights of DSOs stemming from art. 40(10), which is unacceptable.</p> <p>A prerequisite for paragraph 6 is that the NRA is obliged to treat the data that he receives from system operators as confidential. If not, this paragraph would open the door to breach confidentiality via regulators.</p> <p>Paragraph 8 should be deleted, as it is unclear whether it constitutes an extension of the provisions of art. 12 of (EU) 2017/1485 or not. To avoid legal uncertainties, the provision of art. 12 should be deemed sufficient for the cases paragraph 12 aims at.</p> <p>New paragraph 9: <i>Even more important than confidentiality is privacy. One could argue that, when we speak about data exchange TSO-DSO, we do not immediately think of data of an individual person, but is not excluded by the KORRR. It might become even realistic when low voltage grid users start to deliver balancing services to the TSO, for example with sanitary heat boilers, through an aggregator. In that case, we all have to comply with the European General Data Protection Regulation (GDPR), which imposes a lot of things in order to have robust processes (audited), to guarantee that individual data are not divulged, and that each individual person can always know who does what with data about him.</i></p>
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## TITLE 2 Key Organisational Requirements, Roles and Responsibilities

### Chapter 1

Article 5	Does the article require a change or clarification?	change
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	Proposed alternative wording for the article	<p>1. No change.</p> <p>2. <b><i>According to Article 43(1) of Regulation (EU) 2017/1485, each TSO shall determine the observability area of the transmission-connected distribution systems which is needed for the TSOs to determine the system state accurately and efficiently, based on the methodology developed in accordance with Article 75.</i></b></p> <p>3. No change.</p> <p><b>New 4. Each TSO shall provide updated information about their transmission system part of the observability area of neighbouring DSOs to those DSOs.</b></p> <p>4. No change.</p> <p>5. TSOs <b>shall</b> use the information platform developed in accordance with Article 114 of Regulation 2017/1485 to exchange structural and scheduled information with other TSOs.</p>
	Explanation why the change is needed	<p>Paragraph 2 provides provisions very similar but not identical to the provisions of article 43 of (EU) 2017/1485. Providing similar but not identical provisions in the methodology will lead to legal uncertainties as it will not be immediately clear which document has to be applied in case of deviating provisions. To avoid such legal uncertainty, the provisions of (EU) 2017/1485 should simply be copied to the methodology.</p> <p><b>New paragraph 4. Following the current state of the art, some DSOs have their own observability areas stretching out to elements of the transmission system. To account for that and to ensure the necessary observability for DSOs as defined in the whereas (2) of the KORRR, TSOs should be obliged to provide data relating to the transmission system to the neighbouring DSOs.</b></p> <p>Paragraph 5 should be adapted to ensure that TSOs use the OPDE, as the establishment of another, parallel system for the same type of data would be inefficient.</p>
	Clarification regarding the interpretation of the article	
<b>Article 6</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. <i>Delete paragraph.</i></p> <p>2. Each TSO shall store electronically the structural data of the electric system <b><i>as long as it is necessary to fulfil its legal tasks.</i></b> The storage shall contain the information from the transmission system, from the observability area in the distribution networks, from the observability area in neighbouring transmission systems and from the SGU according to articles 41, 43, 45, 48, 51 and 52 of Regulation 2017/1485.</p> <p>3. <b><i>Each TSO shall specify the format and may publish templates for the structural data that transmission-connected SGUs shall provide. Each TSO shall agree with the DSO on the format and may publish templates for the structural data that the DSO and</i></b></p>

		<i>distribution-connected SGUs shall provide. When doing so, each TSO shall take into account and complement, where necessary, the definitions provided following Article 18 of GLDPM and GLDPM v2.</i>
	Explanation why the change is needed	<p>Paragraph 1 should be deleted, as it is very similar but not identical to the provisions of article 40(2) and 40(3) of (EU) 2017/1485. Providing similar but deviating provisions in this methodology will lead to legal uncertainties, as it will not be immediately clear which document has to be applied in case of deviating provisions. To avoid such legal uncertainty, the provisions of (EU) 2017/1485 should simply be copied to the methodology.</p> <p>Furthermore, paragraph 1 seems to go beyond what is provided for in article 40(2) and 40(3) of (EU) 2017/1485. TSOs are not entitled to define provisions going beyond (EU) 2017/1485.</p> <p>Paragraph 2 should limit data storage to the time period data that is necessary to fulfil legal tasks. As soon as it is no longer necessary, such data should be deleted, following the principle of data scarcity.</p> <p>Paragraph 3 should be adapted to respect the provisions contained in Article 40(7) of (EU) 2017/1485 and oblige TSOs to take into account what is already defined stemming from the GLDPM. Any parallel definition of data formats etc. would be inefficient and cause unjustified costs to stakeholders.</p>
	Clarification regarding the interpretation of the article	
<b>Article 7</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. Each TSO shall review the structural information it shares with other TSOs <b>and DSOs</b> at least every 6 months and provide updated information of the observability area to the neighbouring TSO <b>and DSO</b> in the following situations:</p> <p>a) to e): <i>No change</i>.</p> <p>2. According to the information stated in the Articles 4(5), SGUs may request the update of the structural data to its TSO.</p>
	Explanation why the change is needed	DSOs are system operators and shall be treated as such. According to Article 40(10) of Regulation 2017/1485, "DSOs with a connection point to a transmission system shall be entitled to receive the relevant structural, scheduled and real-time information from the relevant TSOs". This entitlement encompasses updates, as information can only be relevant if it is up to date.
	Clarification regarding the	Definition of error needed: what does "error" mean in paragraph 1 (d)? Does it mean an error in the data set transmitted earlier or a malfunction of the SGU?

	interpretation of the article	
<b>Article 8</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. Each TSO shall be capable of exchanging scheduled data with SGUs, DSOs or third parties to whom the exchange of scheduled information may have been delegated. Scheduled data shall at least include the generation and load schedules resulting from market trades between day-ahead and real time, unavailability or limitations to active power production or consumption of SGUs, unavailability of network elements of DSOs in the TSO's observability area.</p> <p>2. Each TSO shall define, <b><i>in agreement with the DSOs</i></b>, and publish the format of the information and the technical requirements to exchange the scheduled data. The technical requirements should where possible, be in accordance with an international standard recommended by all TSOs and with current technologies to guarantee security, confidentiality and redundancy of the communications. <b><i>When doing so, each TSO shall take into account and complement, where necessary, the definitions provided in Article 18 of the GLDPM and GLDPM v2.</i></b></p> <p>3. Delete paragraph.</p> <p>4. <b><i>Each TSO shall communicate to the DSOs directly connected to their transmission system their planned and unplanned unavailability of network elements in the observability area of DSOs. For planned unavailabilities, they shall agree on the necessary level of coordination and communication between them. For unplanned unavailabilities, the TSOs shall communicate them as soon as practicable.</i></b></p>

	Explanation why the change is needed	<p>Paragraph 1 should avoid referring to NEMOs, as NEMOs are not subject of (EU) 2017/1485 and therefore should not be subject of the KORRR.</p> <p>Paragraph 2 should be amended to ensure the requirements defined following the GLDPM and GLDPM v2 are taken into account. Defining parallel, deviating requirements for the same set of data another time is inefficient and causes unnecessary costs. The definition of the format for scheduled data should be done in agreement with the DSOs (cf. remarks above).</p> <p>Paragraph 3 should be deleted, as the content is already covered in Article 6 of the KORRR.</p> <p>For paragraph 4, if a planned unavailability of a network element in the connection points needs an action by the DSO (for example if the DSO has to do switching actions to supply a part of his system through another connection point), a communication on D-1 by the TSO to the DSO is far too late. Furthermore, it should not be only communicated but also coordinated: such actions must be part of the operational planning of the TSO and DSO which must be aligned. Good practice in Member States is that the TSO and the DSO agree that a planned outage with a certain impact must be jointly coordinated and prepared by the TSO and DSO. The level of coordination and preparation depends on the impact that a planned outage on the TSO grid may have on the DSO. The agreement ensures that each party is able to plan in advance, if deemed appropriate, the necessary actions that must be undertaken to ensure the quality of supply to its grid users, or at least to reduce its negative impact on it to a reasonable level, during the unavailability.</p> <p>For unplanned unavailabilities, no communication can be done in advance.</p>
	Clarification regarding the interpretation of the article	
<b>Article 9</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. Each TSO may specify <b>more details</b> with regard to real time information exchanged according to Articles 42, 44, 47, 50, 52 and 53 of Regulation 2017/1485. <b>With regard to Article 44, 50 and 53 of Regulation 2017/1485, the specifications of the TSO is subject to an agreement with the respective DSO according to Article 40(7) of Regulation 2017/1485.</b></p>
	Explanation why the change is needed	<p>It must be clear that only more details on the data set already defined in (EU) 2017/1485 may be provided. "Content" is ambiguous in this regard, as it is not clear to stakeholders whether that may mean additional data. Such additional data would constitute a more stringent requirement in comparison to what is laid down in (EU) 2017/1485 and therefore prohibited.</p>

		Again, an agreement between TSO and DSO is foreseen in Article 40(7) of (EU) 2017/1485 for all data related to distribution systems and distribution-connected SGUs.
	Clarification regarding the interpretation of the article	
<b>Article 10</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. Each TSO, <i>in agreement with the DSOs</i> of its control area, shall specify and publish the format for real time data exchange related to the distribution network <b>control</b> area and to the SGUs within its control area.</p> <p>2. Each TSO, <i>in agreement with the DSOs</i> of its control area, shall specify the requirements for real-time data exchange related to the distribution network <b>control</b> area and to the SGUs within its control area. The technical requirements should, where possible, be in accordance with an international standard recommended by all TSOs and with current technologies to guarantee security, confidentiality and redundancy of the communications.</p> <p>3. No change.</p> <p>4. Each TSO shall define the refresh rate for the real time data exchanges in its control area. It shall not be longer than 1 minute.</p>
	Explanation why the change is needed	<p>The change in paragraphs 1 and 2 is necessary as an agreement between the TSO and the DSO is foreseen in Article 40(7) of (EU) 2017/1485 for all data related to distribution systems and distribution-connected SGUs. The original proposal does not take this requirement sufficiently into account. Avoiding confusion between the observability area and the control area for DSOs.</p> <p>The last sentence of paragraph 4 should be deleted, as the KORRR is limited to data exchange as described in Title II of (EU) 2017/1485, as clearly stated in Article 40(6) of (EU) 2017/1485. Data exchange related to load-frequency control is not subject of Title II and therefore not be part of the KORRR.</p>
	Clarification regarding the interpretation of the article	Define: logical connection in paragraph 3.

## Chapter 2

<b>Article 11</b>	Does the article require a change or clarification?	change
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	Proposed alternative wording for the article	Delete this article completely.
	Explanation why the change is needed	Article 11 should be deleted as it provides no added value to the provisions already provided in (EU) 2017/1485. In fact the question arises whether the current version of the article requires DSOs to exchange all data described in article 43 of (EU) 2017/1485. That shows that this article in its current version is a source of legal uncertainty. To avoid this legal uncertainty, it should be deleted.
	Clarification regarding the interpretation of the article	
<b>Article 12</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. Each DSO shall review the <b>DSO asset's</b> structural information it shares with the TSOs of its control area at least every 6 months and <b>in agreement between the TSO and DSO, the DSO may</b> provide updated information to the TSO in the following situations:</p> <ul style="list-style-type: none"> <li>a) At least 3 months before <b>planned</b> commissioning of a new network element or facility. <b>If agreed with the DSO,</b> the TSO may define a different timeline;</li> <li>b) At least 3 months before <b>planned</b> final removal from service of the network element or facility. <b>If agreed with the DSO,</b> the TSO may define a different timeline;</li> <li>c) At least 3 months before <b>planned</b> significant modifications in the network element or facility. <b>If agreed with the DSO,</b> the TSO may define a different timeline;</li> <li>d) As soon as <b>practicable</b> in case there is a change in the observability area;</li> <li>e) As soon as <b>practicable if</b> an error is detected <b>in the structural data.</b></li> </ul>

	Justification of the change	<p>The original version of this article goes beyond the framework given by (EU) 2017/1485. It is more stringent, which is prohibited. There is a clear update cycle of 6 months foreseen in Article 43(4) of (EU) 2017/1485. The provision of an update cycle of 3 months as foreseen by TSOs is more stringent. TSOs are not entitled to define more stringent requirements.</p> <p>Furthermore, (EU) 2017/1485 does not provide for the exchange of data of new network elements of distribution system (cf. Article 43 of (EU) 2017/1485). Of course, this can be agreed bilaterally. The whole content of Article 12 of the KORRR is subject to an agreement between the TSO and the DSO stemming from Article 40(7) of (EU) 2017/1485. This precondition of an agreement should be clearly stated in the KORRR. Additionally, use of the phrase "in agreement between the TSO and DSO" gives the DSO a chance to formally acknowledge what is required by the TSO and to be compliant with.</p> <p>Use of the phrase "DSO asset" brings specificity to the information being exchanged, clarifying that it will be asset data that is exchanged.</p> <p>Use of the word "planned" brings specificity to the situations described. It could be interpreted that the DSO is non-compliant if it did not inform the TSO of an unplanned event even if it had no prior knowledge of the event – this is not practical. We must take account of this situation. We suggest the same for TSOs and SGUs in this document so that they also have equal chance of being as compliant as possible.</p> <p>Use of the word "practicable" allows for an unplanned change in the observability area or for practical feedback if there is an error.</p>
	Clarification regarding the interpretation of the article	Definition of error needed: what does "error" mean in paragraph 1 (d)? Does it mean an error in the data set transmitted earlier or does it mean a malfunction of the SGU?
<b>Article 13</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. Transmission connected DSOs shall provide data directly to the TSO. <b><i>In general, non-transmission connected DSOs shall provide data through their connecting DSO. In agreement between the TSO and transmission-connected DSO, non-transmission connected DSOs may provide the data directly to the TSO.</i></b></p> <p><b><i>2. TSOs shall provide the scheduled data regarding power schedules of distribution-connected SGUs to each DSO or CDSO, in case these schedules are not yet available to the DSO or CDSO through the cascaded data exchange. TSOs, DSOs and CDSOs shall agree on requirements to exchange scheduled data.</i></b></p> <p><b><i>3. DSOs shall have the right but not the obligation to represent the data related to distribution-connected SGUs connected to</i></b></p>

		<i>their system as injections and withdrawals at each node on the border of TSO's individual grid model referred to in Article 64 of (EU) 2017/1485.</i>
	Explanation why the change is needed	<p>Sentence 1 of paragraph 1 should be deleted, as the KORRR is limited to data exchange as described in Title II of (EU) 2017/1485, as clearly stated in Article 40(6) of (EU) 2017/1485. Data exchange related to D-2 and day-ahead schedules of distribution systems are not subject of Title II. TSOs are therefore not entitled to define anything with regard to that in the KORRR. Paragraph 1 should define cascaded data exchange as the general principle for data exchange regarding non-transmission connected DSOs that are connected to transmission-connected distribution systems. This general rule was agreed in the data management final report of the TSO-DSO-platform (page 16 of the final report: "Generally, each system operator should be responsible for directly collecting data from users connected to its grid (generators, consumers, storage, etc.)". Subject to an agreement between TSO and transmission-connected DSO (as required in Article 40(7) of (EU) 2017/1485), deviating solutions might be agreed bilaterally.</p> <p>Paragraph 2 sentence 1 should foresee a provision of data from the TSO to the DSO instead of defining only the right to request for DSOs. TSOs are obliged to provide schedules of distribution-connected SGUs to DSOs to fulfil their obligations from 72/EC/2009, art. 12 e): "Each transmission system operator shall be responsible for: (e)providing to the operator of any other system with which its system is interconnected sufficient information to ensure the secure and efficient operation, coordinated development and interoperability of the interconnected system". Data related to the schedules of SGUs at the distribution system is unquestionably necessary to ensure the secure and efficient operation, coordinated development and interoperability of the (distribution) system by putting the DSO in a position to do its operational planning.</p> <p>Paragraph 2 sentence 2 must foresee an agreement between TSO and DSO (and CDSO) on requirements with regard to data exchange as an agreement between the TSO and DSO is foreseen in Article 40(7) of (EU) 2017/1485 for all data related to distribution systems.</p> <p>Article 13 should be extended by the right of DSOs to aggregate data of distribution-connected SGUs connected to their system as injections and withdrawals at each node at the border of the TSO's individual grid model. TSOs are obliged to represent the information obtained following Article 40(3) of (EU) 2017/1485 into injections and withdrawals of their individual grid model, as provided in Article 40(4) of (EU) 2017/1485. For the sake of efficiency and to avoid unnecessary data transfer and processing, this task should be carried out by the DSOs before providing detailed data to the TSO. That means, the additional paragraph is necessary to make sure fundamental principles of EU law are respected, i.e.: the principle of proportionality</p>

		(Article 5(4) of the Treaty on European Union) and the principle of data scarcity (e.g. laid down in article 6(1) of (EU) 2016/679).
	Clarification regarding the interpretation of the article	
<b>Article 14</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. <b><i>Subject to an agreement between the TSO and DSO</i></b>, DSOs shall provide real-time data according to <b>Article 44</b> of Regulation 2017/1485 to the TSO.</p> <p>2. <b><i>TSO and DSO shall agree</i></b> on requirements in terms of:</p> <ul style="list-style-type: none"> <li>a) Logical connections between parties and protocols used;</li> <li>b) Network Architecture including redundancy;</li> <li>c) Network security rules;</li> <li>d) ID and/or naming convention and data quality;</li> <li>e) Data Transmission Parameters and performance;</li> <li>f) Rules of conduct in the case of planned outages and disturbances of communication equipment.</li> </ul>
	Explanation why the change is needed	Paragraphs 1 and 2 should provide for an agreement between the TSO and the DSO, as stipulated in Article 40(7) of (EU) 2017/1485. Furthermore, real-time data exchange is described in Article 44 of (EU) 2017/1485. The original reference is wrong.
	Clarification regarding the interpretation of the article	Explain: Logical connections.

### Chapter 3

<b>Article 15</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. No change.</p> <p>2. <b><i>Generally, each SGU connected to the distribution system shall provide the data to the DSO, according to Article 3(4), the updated structural data according to Articles 48 and 53 of Regulation 2017/1485 of the facility operated by them in the format agreed between its DSO and TSO.</i></b></p>

	Explanation why the change is needed	Paragraph 2 should define cascaded data exchange as the general principle for data exchange regarding SGUs connected to distribution systems. This general rule was agreed in the data management final report of the TSO-DSO-platform (page 16 of the final report: "Generally, each system operator should be responsible for directly collecting data from users connected to its grid (generators, consumers, storage, etc.) [...]" . Additionally, paragraph 2 should provide for an agreement between TSOs and DSOs on data format etc., as an agreement is required by article 40(7) of (EC) 2017/1485 for all data exchanges related to distribution systems.
	Clarification regarding the interpretation of the article	
Article 16	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. Each SGU shall review the structural information it shares with the TSOs of its control area at least every 6 months and provide updated information to the TSO and DSO in the following situations:</p> <ul style="list-style-type: none"> <li>a) At least 3 months before <b>planned</b> commissioning of a new network element or facility. Upon justification, the TSO may define a different timeline <b><i>in agreement with the DSO and SGU.</i></b></li> <li>b) At least 3 months before the <b>planned</b> final removal from service of the network element or facility. Upon justification, the TSO may define a different timeline <b><i>in agreement with the DSO and SGU.</i></b></li> <li>c) At least 3 months before <b>planned</b> significant modifications in the network element or facility. Upon justification, the TSO may define a different timeline <b><i>in agreement with the DSO and SGU.</i></b></li> <li>d) As soon as <b>practicable</b> if an error is <b><i>detected in the structural data.</i></b></li> </ul>
	Explanation why the change is needed	<p>Use of the phrase "in agreement with DSO" gives the DSO a chance to formally acknowledge what is required by the TSO and to be compliant when transferring info from the SGU.</p> <p>Use of the word "planned" brings specificity to the situations described. It could be interpreted that the DSO is non-compliant if it did not inform the TSO of an unplanned event even if it had no prior knowledge of the event – this is not practical. We must take account of this situation.</p> <p>Use of the word "practicable" allows for an unplanned change in the observability area or for practical feedback if there is an error.</p> <p>Agreement with SGUs is needed to make sure that any</p>

		request from the TSO can be seen as reasonable by all parties.
	Clarification regarding the interpretation of the article	Definition of error needed: what does "error" mean in paragraph 1 (d)? Does it mean an error in the data set transmitted earlier or does it mean a malfunction of the SGU?
<b>Article 17</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. SGUs within the control area of the TSO shall provide scheduled data to their TSO. Transmission connected SGUs shall provide the data directly to the TSO. <b><i>Generally, distribution connected SGUs shall provide the data to the TSO through its connecting DSO according to Article 3(4).</i></b></p> <p>2. <b><i>Transmission-connected SGUs</i></b> shall comply with the requirements defined by the relevant TSO to exchange scheduled data. <b><i>Distribution-connected SGUs shall comply with the requirements agreed between the relevant TSO and DSO to exchange scheduled data.</i></b></p> <p>3. SGUs shall be responsible for the installation, configuration, operation and maintenance of the communication systems, <b><i>excluding the communication channel,</i></b> to exchange scheduled data with the TSO <b><i>or DSO</i></b> unless explicitly otherwise agreed with the TSO <b><i>or DSO.</i></b></p>
	Explanation why the change is needed	<p>Paragraph 1 should define cascaded data exchange as the general principle for data exchange regarding SGUs connected to distribution systems. This general rule was agreed in the data management final report of the TSO-DSO-platform (compare page 16 of the final report: "Generally, each system operator should be responsible for directly collecting data from users connected to its grid (generators, consumers, storage, etc.) [...]"'. Subject to an agreement between TSO and transmission-connected DSOs (as required in Article 40(7) of (EU) 2017/1485), deviating solutions might be agreed bilaterally.</p> <p>Additionally, paragraph 2 should provide for an agreement between TSOs and DSOs on data format etc., as an agreement is required by article 40(7) of (EC) 2017/1485 for all data exchanges related to distribution systems.</p> <p>Paragraph 3 should be adapted to take into account data exchanged with the TSO via the DSO. Furthermore, it should be made clear that the data channel is out of the responsibility range, as often public telecom networks are used.</p> <p>General remark: it should be possible for SGUs to only provide updates of scheduled data in case of changes compared to the previous communicated data. In case that no changes apply to the unit, sending redundant information should be avoided.</p>
	Clarification regarding the	

	interpretation of the article	
<b>Article 18</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p><b>1. Delete</b></p> <p>2. All SGUs within the control area of the TSO shall provide real-time data in accordance with Articles 47, 50, 52(3) and 53 of Regulation 2017/1485 to the TSO. Transmission connected SGUs shall provide the data directly to the TSO.</p> <p><i>In general, non-transmission connected SGUs shall provide data through their connecting DSO. In agreement between TSO and DSO, non-transmission connected SGUs may provide the data directly to the TSO.</i></p> <p>3. Each SGU providing data directly to the TSO <b>or DSO</b> shall fulfil the requirements defined by the TSO in terms of:</p> <ul style="list-style-type: none"> <li>a) Logical connections between parties and protocols used;</li> <li>b) Network architecture including redundancy;</li> <li>c) Network security rules;</li> <li>d) ID and/or naming convention and data quality;</li> <li>e) Data Transmission Parameters and performance;</li> <li>f) Rules of conduct in the case of planned outages and disturbances of communication equipment.</li> </ul> <p>4. SGUs shall be responsible for the installation, configuration, operation and maintenance of the communication systems, <b>excluding the communication channel</b>, to exchange real time data with the TSO <b>or DSO</b> unless explicitly otherwise agreed with the TSO <b>or DSO</b>.</p>
	Explanation why the change is needed	<p>Paragraph 1 should be deleted completely. It is completely unjustified why a retrospective application of the requirements should be necessary. TSOs should provide thorough justification before applying any requirements retrospectively. Furthermore, the process for exemptions is costly, bureaucratic and unsuitable. For example, Germany faces more than 50 000 existing SGUs. If all of these SGUs should be required to apply for justified exemption, costs will exceed 50 Mio. EUR (if we assume 1000- EUR per SGU to be processed). Furthermore, DSOs would have to assess each and every of these justifications, a process they are not prepared for. Additionally, SGUs have the right to complain to the NRA if they do not agree to the outcome of the assessment, i.e. NRAs will face a significant number of complaints.</p> <p>Paragraph 2 has been adapted as in the previous articles.</p> <p>Paragraph 4 should be adapted to take into account data exchanged with the TSO via the DSO. Furthermore it should be made clear that the data channel is out of the responsibility range, as often public telecom networks are used.</p>
	Clarification regarding the	Explain: logical connections.

	interpretation of the article	
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## Chapter 4

<b>Article 19</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	Article 19 should be deleted completely.
	Explanation why the change is needed	Paragraph 19 should be deleted completely, as the KORRR is limited to data exchange as described in Title II of (EU) 2017/1485, as clearly stated in Article 40(6) of (EU) 2017/1485. Data exchange between TSOs and NEMOs is not subject of Title II. TSOs are therefore not entitled to define anything with regard to NEMOs in the KORRR.
	Clarification regarding the interpretation of the article	
<b>Article 20</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	<p>1. Upon approval of this KORRRs proposal <b>ENTSO-E and</b> each TSO shall publish it on the internet in accordance with Article 8(1) of Regulation 2017/1485.</p> <p>2. TSOs shall apply the proposed the KORRRs as described in Title 2 as soon as all regulatory authorities have approved the proposed the KORRR or a decision has been taken by the Agency in accordance with Article 6(8) and 7(3) of the Regulation 2017/1485.</p>
	Explanation why the change is needed	Regulation (EU) 2017/1485 clearly states in its Article 40(6): "The organisational requirements, roles and responsibilities shall be published by ENTSO for electricity". The draft KORRR should respect this obligation. The KORRR can only be applied after the acceptance of all NRA or a decision by the Agency. For the avoidance of doubt, the reference to "18 months after entry into force..." should be deleted. The earliest application date is the day after its final acceptance.
	Clarification regarding the interpretation of the article	

## TITLE 3 Final Provisions

<b>Article 21</b>	Does the article require a change or clarification?	change
	Proposed alternative wording for the article	The reference language for this KORRR proposal shall be English. To avoid any doubt, <b>TSOs need to</b> translate this KORRR proposal into their national language(s), in the event of inconsistencies between the English version published by TSOs in accordance with Article 8 (1) of the Commission Regulation (EU) 2017/1485 and any version in another language, the relevant TSOs shall, in accordance with national legislation, provide the relevant national regulatory authorities with an updated translation of the KORRR.
	Explanation why the change is needed	Data flow implementation documentation of TSOs' needs to be available in national language and English.
	Clarification regarding the interpretation of the article	
	Do you have any other comments or questions regarding the proposal?	The last but two sentence of recital (2) need to be changed: "[...] To achieve <b>this goal</b> , it is necessary that each party of the electric system has the necessary observability of the network elements and services with impact in their activities[...]" to make sure the reference is unambiguous.