

European Distribution System Operators for Smart Grids

EDSO Reaction to MEP Kariņš' Market Design Reports (Electricity Directive and Electricity Regulation)

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Introductory statement

In some respects, the draft reports published by rapporteur Kariņš include a number of improvements paving the way for a smarter, flexible energy system with the customers at the centre of the energy system. One element representing a positive step ahead is to reduce the obligation on member states for adopting a common data format, which would have disproportionately affected customers by introducing additional burden and costs.

Same rights and conditions for all players

As rightly pointed out in the proposals, the transition to a low-carbon economy must be done in a way that ensures a level playing field between all market participants. Clear rules for all new market participants (i.e. local energy communities, aggregators) are needed to ensure fair participation and equal treatment of all actors, without increasing the costs of the electricity system.

In this regard, several aspects raise our concerns about the effects of the new proposals on electricity grids. The shift towards a decentralised energy system implies a more active role by the DSOs to enhancing system flexibility and facilitating the deployment of distributed energy. Despite this trend, the reports extend a significant importance to the TSOs (i.e. data management, storage), whereas the recognition of DSOs' changing roles is largely ignored. This imbalance fails to reflect the challenges of the transition towards decarbonisation, decentralisation and digitalisation.

Already today, DSOs are collecting, storing and providing grid and metering data, and are managing it on behalf of customers in most countries. DSOs' responsibilities in data management at the distribution level must be recognised in the same manner with the roles acknowledged for TSOs in transmission grids, particularly as DSOs' roles will gradually evolve to implement new developments in smart metering and renewables uptake in distribution grids.

Storage as a distributed network asset

Moreover, the report points in the right direction on several aspects concerning the operation of storage devices as network assets. While EDSO welcomes these strengthened roles, we recommend guaranteeing the same rights for DSOs' ownership of storage devices as for the TSOs, giving all system operators the same conditions. Storage facilities as distribution network assets are a crucial element for DSOs to fulfilling their responsibility for maintaining grid stability.

One single DSO entity across Europe

Lastly, an institutionalised cooperation of DSOs across Europe is crucial. DSOs play a fundamental role in the energy transition, acting as key enablers of the EU's climate and energy goals. The new changes should not unduly overrule the Commission's original efforts to create a single, strong voice for DSOs in their representation with the EU and other institutions across Europe.

We highlight these issues below, also linking where relevant to some significant improvements from ENVI's opinion on the Electricity Directive.

Electricity Directive

Data management

EDSO supports rapporteur Kariņš' removal of the obligation to implement a common EU data format. Introducing a common data format should be subject to a thorough cost-benefit analysis, and respect the principles of proportionality. We believe that granting member states the possibility to ensure interoperability standards as an alternative goes in the right direction. However, the article must be strengthened to make sure that this right is fully guaranteed, and that a common data format is only one option available.

Commission proposal	Kariņš report (amendment)
Amendment 20 Proposal for a directive Article 24 – paragraph 1	Amendment 20 Proposal for a directive Article 24 – paragraph 1
1. Member States shall define a common data format and a transparent procedure for eligible parties to have access to the data listed under Article 23 (1), in order to promote competition in the retail market and avoid excessive administrative costs for the eligible parties.	1. Member States shall define a common data format <i>or ensure interoperability</i> and a transparent procedure for eligible parties to have access to the data listed under Article 23 (1), in order to promote competition in the retail market and avoid excessive administrative costs for the eligible parties.

Amendment 21
Proposal for a directive Article 24 –
paragraph 2
Text proposed by the Commission

2. The Commission, by means of implementing acts adopted in accordance with the advisory procedure referred to in Article 68, shall determine a common European data format and nondiscriminatory and transparent procedures for accessing the data, listed under Article 23 (1), that will replace national data format and procedure adopted by Member States in accordance with paragraph 1. Member States shall ensure that market participants apply *a* common European data format.

Amendment 21
Proposal for a directive Article 24 –
paragraph 2
Amendment

2. The Commission, by means of implementing acts adopted in accordance with the advisory procedure referred to in Article 68, shall determine interoperability standards and a common European data format and non-discriminatory and transparent procedures for accessing the data, listed under Article 23 (1), that will replace national data format and procedure adopted by Member States in accordance with paragraph 1. Member States shall ensure that market participants apply *interoperability standards or the* common European data format.

DSOs have been, and remain major providers of metering data, and have a key responsibility for the management and ownership of data in distribution grids. Moreover, DSOs need to have access to all kind of energy data at the low-voltage levels – grid, metering or billing, which is critical for fulfilling core DSOs tasks in ensuring system stability, and in facilitating markets.

Article 23 therefore should not prevent DSOs from accessing all data necessary from the customers, an aspect which is overlooked both by the Commission and MEP Kariņš report. Customers' consent and related exemptions are already detailed in the General Data Protection Regulation, which should serve as guiding principle for data-related issues in the market design.

Local energy communities and prosumers

DSOs are willing to support the development of local energy communities by offering them the most adequate grid infrastructure solution. DSOs are already experimenting innovative solutions on how communities engaged in collective self-consumption can use the existing grids of the DSOs, and will continue to focus on offering non-discriminatory infrastructure-related services (such as grid balancing, data or metering).

Commission proposal	Kariņš report (amendment)
Amendment 13 Proposal for a directive Article 16 – paragraph 1 – point d a (new)	Amendment 13 Proposal for a directive Article 16 – paragraph 1 – point d a (new)
	(da) adequately contribute to the costs of the electricity system they remain connected to.

In this regard, EDSO welcomes MEP Kariņš' clarification that local energy communities shall adequately contribute to the costs of the system they remain connected to. Irrespective of whether they act as 'island' operators or not, regulation must ensure that DSOs are not forced to lease their networks. Clarifying roles and responsibilities of all entities (including renewable energy communities) is key to ensuring a fair participation and equal treatment of all customers.

What is more important is that rules on energy communities must ensure that the rights of the existing customers are defended. A balanced approach must be achieved between costs borne by customers who opt not to take part in an energy community, and prosumers that can increase the costs of the system if they don't pay an appropriate tariff. What Amendment 13 fails to specify is whether the costs that members and nonmembers will pay include policy costs and other taxes which fund the energy transition and other public service obligations.

Lastly, net metering should be avoided both for individual prosumers and those taking part in local energy communities. This scheme is not an adequate tool to incentivise flexibility (i.e. by providing customers with incentives to reduce their peak load), nor to facilitate the integration of renewables. EDSO prefers more the suggested wording from ENVI's opinion on the directive, as this would ensure that wider network costs are covered.

Commission proposal	Pavel Poc report (amendment) ENVI opinion
Amendment 11 Proposal for a directive Article 15 – paragraph 1 – point b	Amendment 11 Proposal for a directive Article 15 – paragraph 1 – point b

(b) are subject to cost-reflective,		
transparent and non-discriminatory		
network charges, <i>accounting separately</i>		
for the electricity fed into the grid and		
the electricity consumed from the grid, in		
line with Article 59(8).		

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(b) are subject to cost reflective, transparent and non-discriminatory network charges **and that** electricity fed into the grid **is not offset against electricity withdrawn** from the grid.

Electric vehicles charging infrastructure

Irrespective of the market model in place, DSOs need to take part in the planning and the technical operation of recharging points, including managing the charging process in a smart way. Article 33 needs to take into account the technical operational capacities for infrastructure owned by the DSOs. In that case, the operation and the ownership of the assets is not a commercial activity, since it is for internal use only.

In case of market failure for the provision of basic infrastructure for electric vehicles or insufficient geographical coverage, national governments should be able to commission the DSOs with the installation and the operation of charging infrastructure. This might also include owning the assets. The commercial operation and the electro-mobility service are a retail activity. One issue for the electro-mobility market is to be able to install a sufficient number of public charging stations in low-density areas, or where public transport is not fully developed.

In addition, there are also numerous R&D pilot schemes analysing the impact of electric vehicles charging on the distribution grid. In such situations, DSOs should be allowed to operate the recharging points deployed for R&D purposes, and avoid the issue of stranded assets.

Commission proposal	Kariņš report (amendment)
Amendment 23 Proposal for a directive Article 33 – paragraph 1 a (new)	Amendment 23 Proposal for a directive Article 33 – paragraph 1 a (new)
	2a. Distribution system operators shall not be allowed to own, develop, manage or operate recharging points for electric vehicles.

In this regard, EDSO welcomes the additions by MEP Pavel Poc from the ENVI opinion, particularly the recognition that DSOs are able to recover their costs in case regulation decides that commercial parties will take over the operation of the recharging stations.

Commission proposal	Pavel Poc report (amendment) ENVI opinion
Amendment 20	Amendment 20
Proposal for a directive Article 33 –	Proposal for a directive Article 33 – paragraph
paragraph 4	4
Text proposed by the Commission	
	4. Member States shall perform at regular
4. Member States shall perform at	intervals or at least every five years a public
regular intervals or at least every five	consultation in order to re-assess the
years a public consultation in order to	potential interest of market parties to own,
re-assess the potential interest of	develop, operate or manage recharging points
market parties to own, develop,	for electric vehicles. In case the public
operate or manage recharging points	consultation indicates that third parties are
for electric vehicles. In case the public	able to own, develop, operate or manage
consultation indicates that third parties	such points, Member States shall ensure that
are able to own, develop, operate or	distribution system operators' activities in this
manage such points, Member States	regard are phased-out. <i>Distribution system</i>
shall ensure that distribution system	operators shall have right to recover their
operators' activities in this regard are	investment made into recharging
phased-out.	infrastructure on fair and reasonable terms.

DSO storage ownership

EDSO believes that the rapporteur's opening for regulated storage ownership is a welcoming step. DSOs will need to operate their own storage device as an integrated network asset to solve various technical problems on local grids (voltage drops/rises, load adjustments, quality issues). DSOs will use their own storage when this provides the best possible solution at the lowest societal cost. Also, EDSO agrees with Amendment 26 that battery related services must be cost-effective, and should be supervised by the national regulator.

We interpret the exemption introduced in Amendment 26 of 'short-term control' as a way to make sure that DSO storage assets do not cause long term energy imbalances. This will anyways

not be the case as DSOs do not play a role in the market by trading storage services nor energy volumes. Although we do not see any reason of why forbidding technical uses other than those implied by this amendment (i.e. long-term voltage control), as long as they are used exclusively for grid operations, a better way would be to speak more broadly of 'short-term interactions'.

Commission proposal	Kariņš report (amendment)
Amendment 26 Proposal for a directive	Amendment 26 Proposal for a directive
Article 36 – paragraph 1	Article 36 – paragraph 1
1. Distribution system operators shall not	1. Distribution system operators shall not be
be allowed to own, develop, manage or	allowed to own, develop, manage or
operate energy storage facilities.	operate energy storage facilities, except
	equipment used by the distribution system
Amendment 27	operators for local short-term control of
Proposal for a directive Article 36 –	the distribution system where there is no
paragraph 2 – introductory part	influence on energy and non-frequency
	ancillary services markets, and where the
2. By way of derogation from paragraph	national regulatory authority has granted
1, Member States may allow distribution	its approval.
system operators to own, develop,	
manage or operate storage facilities only	Amendment 27
if the following conditions are fulfilled:	Proposal for a directive Article 36 –
	paragraph 2 — introductory part
Amendment 28	
Proposal for a directive Article 36 –	2. By way of derogation from paragraph 1,
paragraph 2 – point a	Member States may allow distribution
	system operators to own, develop, manage
(a) other parties, following an open and	or operate storage facilities only if <i>all of</i> the
transparent tendering procedure, have	following conditions are fulfilled:
not expressed their interest to own,	
develop, manage or operate storage	Amendment 28
facilities;	Proposal for a directive Article 36 –
	paragraph 2 – point a
Amendment 29	

Proposal for a directive Article 36 – paragraph 2 – point b

(b) such facilities are necessary for the distribution system operators to fulfil their obligations under this Directive for the efficient, reliable and secure operation of the distribution system; and

Amendment 30
Proposal for a directive Article 36 –
paragraph 2 a (new)

(a) other parties, following an open and transparent tendering procedure, subject to review by the national regulatory authority, have not expressed their interest to own, develop, manage or operate storage facilities, at a reasonable cost;

Amendment 29
Proposal for a directive Article 36 –
paragraph 2 – point b

(b) such facilities are necessary for the distribution system operators to fulfil their obligations under this Directive for the efficient, reliable and secure operation of the distribution system and the ownership or operation of the facility does not influence competitive energy markets; and

Amendment 30 Proposal for a directive Article 36 – paragraph 2 a (new)

2a. National regulatory authorities may draw up guidelines or procurement clauses to aid distribution system operators in ensuring a fair tendering procedure.

TSO storage ownership

On the other hand, Amendment 37 is much less restrictive for TSOs' storage ownership than with regard to DSOs' rights. It says that TSOs are not allowed to have storage assets which provide ancillary services unless they are an integral part of the transmission system.

To bring both system operators' responsibilities on par and avoid any discrepancy, EDSO recommends bringing the amended wording concerning the TSOs' storage ownership in

Amendment 37 to the one for the DSOs. There is no reason why TSO and DSO should be treated differently in this respect. This would also properly reflect the changing role of the DSO.

Commission proposal	Kariņš report (amendment)
Amendment 37 Proposal for a directive Article 54 – paragraph 1	Amendment 37 Proposal for a directive Article 54 – paragraph 1
1. Transmission system operators shall not be allowed to own, manage or operate energy storage facilities and shall not own directly or indirectly control assets that provide ancillary services.	1. Transmission system operators shall not be allowed to own, manage or operate energy storage facilities and shall not own directly or indirectly control assets that provide ancillary services, unless those facilities or assets are an integral part of the transmission system and where the national regulatory authority has granted its approval

MEP Poc's report recognises the necessity for the DSOs to access all forms of flexibility in the most cost-efficient manner, including flexibility from own storage facilities. EDSO supports Amendments 21-25 of ENVI's report as it fully gives the option to the DSOs to use their own storage devices without the need of having to rely and wait for the market first.

Commission proposal	Pavel Poc report (amendment) ENVI opinion
Amendment 21 Proposal for a directive Article 36 – paragraph 1 Text proposed by the Commission	Amendment 21 Proposal for a directive Article 36 – paragraph 1
1.Distribution system operators shall not be allowed to own, develop, manage or operate energy storage facilities.	1. Distribution system operators shall be allowed to own, develop, manage or operate energy storage facilities only if the following conditions are fulfilled:

Amendment 22 Proposal for a directive Article 36 – paragraph 2 – introductory part

2. By way of derogation from paragraph 1, Member States may allow distribution system operators to own, develop, manage or operate storage facilities only if the following conditions are fulfilled:

Amendment 23

Proposal for a directive Article 36 – paragraph 2 – point a

(a) other parties, following an open and transparent tendering procedure, have not expressed their interest to own, develop, manage or operate storage facilities;

Amendment 24 Proposal for a directive Article 36 – paragraph 2 – point c (c) the regulatory authority has assessed the necessity of such derogation taking into account the conditions under points (a) and (b) and has granted its approval.

Amendment 25
Proposal for a directive Article 36 – paragraph 4

4. Regulatory authorities shall perform at regular intervals or at least every five years a public consultation in order to reassess the potential interest of market parties to invest, develop, operate or manage energy storage facilities. In case the public consultation indicates that

Amendment 22 deleted

- (a) other parties, following an open and transparent tendering procedure *under the supervision of the national regulatory authorities*, have not expressed their interest to own, develop, manage or operate *cost-effective* storage facilities;
- (c) the *national* regulatory authority has assessed that there is no necessity to apply the conditions under *point* (a) of this paragraph and has granted its approval.
- 4. Regulatory authorities shall perform at regular intervals or at least every five years a public consultation in order to re-assess the potential interest of market parties to invest, develop, operate or manage energy storage facilities. In case the public consultation indicates that third parties are able to own, develop, operate or manage such facilities, Member States shall ensure that distribution system operators' activities in this regard are phased-out. *Distribution system operators shall have right to recover their investments in storage facilities on fair and reasonable terms.*

third parties are able to own, develop, operate or manage such facilities, Member States shall ensure that distribution system operators' activities in this regard are phased-out.

Restrictions on new DSO activities

DSOs' roles in the energy system are changing considerably. DSOs will need to gradually rethink their traditional system operations, evolving towards new roles and tasks needed to operate their systems in the most efficient way when faced with the new energy challenges. New services and related activities will emerge as the energy transition advances, with the DSOs acting as a neutral, integrated platform facilitating markets and customers' participation.

In this respect, we believe it is not only premature, but overly inappropriate to constrain DSOs' future tasks, blocking important developments and much-needed innovation in distribution grids. Depriving DSOs from essential tools needed to fulfill their core tasks in maintaining system security, while relying on other players alone will not guarantee the most optimal solution if we are to minimise distribution costs for the society. If similar restrictions are not deemed necessary for the TSOs, they should not be needed for the DSOs either.

Moreover, care must be taken that these provisions do not supersede existing rules ensuring that DSOs act as neutral actors, without intervening in market activities. Provisions in national regulation already include relevant processes evaluating new services and activities associated to DSOs that fully comply with EU legislation. These structures guarantee that when DSOs are engaging in new services, these activities will be in compliance with the regulatory rules in place.

Commission proposal	Kariņš report (amendment)
Amendment 32	Article 36a
Proposal for a directive	New activities of distribution system operators
Article 36 a (new)	1. Distribution system operators shall not be allowed to carry out activities beyond those set
Text proposed by the Commission	out in this Directive and in Regulation (EU) [recast of Regulation 714/2009 as proposed by COM(2016)861/2].

- 2. Member States may allow distribution system operators to carry out activities other than those provided for in this Directive and in Regulation (EU) ... [recast of Regulation 714/2009 as proposed by COM(2016)861/2] where the regulatory authority has assessed the necessity of such a derogation and has granted its approval and the following conditions are met: (a) other parties, following an open and transparent tendering procedure, have not expressed their interest to carry out those activities;
- (b) such activities are necessary for the distribution system operators to fulfil their obligations under this Directive for the efficient, reliable and secure operation of the distribution system;
- c) such activities are necessary for the distribution system operators to fulfil their obligations under the Regulation (EU) ... [recast of Regulation 714/2009 as proposed by COM(2016)861/2], including an obligation to cooperate with the transmission system operators, ensuring the cost-efficient, secure and reliable development and operation of the distribution and transmission networks as a whole.

TSO new roles in digitisation and data management

Integrating renewables and flexible loads, most of which are connected to the distribution level, are calling for a more active role of the DSOs in managing their networks. As neutral and regulated parties, DSOs are best placed to manage grid and metering data, and ensure data privacy in most countries today. In the future, DSOs' roles in data management will evolve to take into account the progressive switch to smart metering, the use of flexibility at the distribution level, and more accurate use of energy data.

Amendment 33 grants TSOs new responsibilities in digitalisation of transmission systems and smart substations, including access to and use of real-time data. In Amendment 34 however, EDSO recommends clarifying that TSOs' responsibilities in data management also refer to transmission systems only, as DSOs on their own are responsible for data management and

related processes in distribution systems. To give the overall responsibility for data management, cyber security and data protection to the TSO would almost certainly lead to inefficient solutions. DSOs must be treated fairly, and be given equal rights to the TSOs, particularly as data monitoring and management will be crucial at the distribution level.

Commission proposal	Kariņš report (amendment)
Amendment 33 Proposal for a directive Article 40 –	Amendment 33
paragraph 1 - point j a (new)	(ja) digitalisation of transmission systems to ensure, among others, efficient real time data acquisition and use, smart substations

Commission proposal	Kariņš report
Amendment 34 Proposal for a directive Article 40 –	Amendment 34
paragraph 1 - point j b (new)	(jb) data management, cyber security and data protection.

Similar remarks on TSOs' related data asks from the amended Directive also apply to the amended Regulation. These concern **Amendments 67, 79, 80, 81 to the Electricity Regulation.**

Electricity Regulation

Distribution network tariffs

EDSO agrees that the network component in customers' bills should be free of or at least identify policy costs unrelated to network costs. However, Amendment 50 should clarify if this refers to transmission or distribution tariffs, as usually taxes and levies are not included in the grid tariffs, but are separately invoiced by the DSO as a different cost component.

Network tariffs and grid access conditions need to be defined according to local grid conditions on a national level. In this respect, an EU-wide harmonisation of distribution tariffs as might be implied by Article 16 is not advisable. Moreover, network charges should be able to differentiate

between connections at different voltage levels, as costs for generation connected to the DSO level can be different from that at the TSO level.

Commission proposal Kariņš report (amendment) Amendment 50 Proposal for a regulation Article 16 – paragraph 1 Kariņš report (amendment) Amendment 50 Proposal for a regulation Article 16 – paragraph 1

1. Charges applied by network operators for access to networks, including charges for connection to the networks, charges for use of networks, and, where applicable, charges for related network reinforcements, shall be transparent, take into account the need for network security and flexibility and reflect actual costs incurred insofar as they correspond to those of an efficient and structurally comparable network operator and are applied in a non-discriminatory manner. In particular, they shall be applied in a way which does not discriminate between production connected at the distribution level and production connected at the transmission level, either positively or negatively. They shall not discriminate against energy storage and shall not create disincentives for participation in demand response. Without prejudice to paragraph 3, those charges shall not be distancerelated.

1. Charges applied by network operators for access to networks, including charges for connection to the networks, charges for use of networks, and, where applicable, charges for related network reinforcements, shall be transparent, take into account the need for network security and flexibility and reflect actual costs incurred insofar as they correspond to those of an efficient and structurally comparable network operator and are applied in a non-discriminatory manner. Grid tariffs should not include unrelated costs supporting other policy objectives, such as taxes or levies, as this would distort production, consumption and investment decisions. In particular, they shall be applied in a way which does not discriminate between production connected at the distribution level and production connected at the transmission level, either positively or negatively. They shall not discriminate against energy storage and shall not create disincentives for participation in demand response. Without prejudice to paragraph 3, those charges shall not be distance-related.

DSO entity

While the Commission's proposal clearly states that the newly established EU-DSO entity shall consist only of DSOs that are not part of a vertically integrated undertaking or that are unbundled, the proposal of MEP Kariņš opens the possibility for other 'entities designated by Member States' to become members of the EU-DSO entity.

EDSO cautions that this body must be neutral, solely representing electricity DSOs without interference of any other industrial interests (supply, aggregation, etc.). Neglecting the unbundling criterion might compromise the body's neutrality and effective operation. However, EDSO acknowledges at the same time that a larger representation of DSOs is desirable to fully represent the electricity distribution business.

Nevertheless, there should be only one single DSO entity embracing DSOs across Europe. The wording should be adapted to make clear that creating an additional entity for smaller DSOs is not intended. This would duplicate efforts and administrative burden, causing further fragmentation and uncertainty in the DSO landscape.

Commission proposal	Kariņš report (amendment)
Amendment 121	Amendment 121
Proposal for a regulation	Proposal for a regulation
Article 49 – paragraph 1 a (new)	Article 49 – paragraph 1 a (new)
Amendment 122	Member States shall designate a body to
Proposal for a regulation	represent distribution system operators
Article 50 – paragraph 1	not fulfilling the criteria laid down in
	paragraph 1.
1. By [OP: twelve months after entry into	
force], the distribution system operators,	Amendment 122
with the administrative support of the	Proposal for a regulation
Agency, shall submit to the Commission	Article 50 – paragraph 1
and to the Agency the draft statutes, a list	
of <i>registered members</i> , the draft rules of	1. By [OP: twelve months after entry into
procedure, including the rules of	force], the distribution system operators,
procedures on the consultation with	with the administrative support of the
ENTSO for Electricity and other	Agency, shall submit to the Commission

stakeholders and the financing rules, of the EU DSO entity to be established.

Amendment 123
Proposal for a regulation
Article 51 – paragraph 1 – point e

(e) data management, cyber security and data protection;

and to the Agency the draft statutes, a list of distribution system operators and entities designated by Member States to represent distribution system operators pursuant to Article 49(1a),, the draft rules of procedure, including the rules of procedures on the consultation with ENTSO for Electricity and other stakeholders and the financing rules, of the EU DSO entity to be established.



EDSO for Smart Grids is a European association gathering leading electricity distribution system operators (DSOs), shaping smart grids for your future.

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