

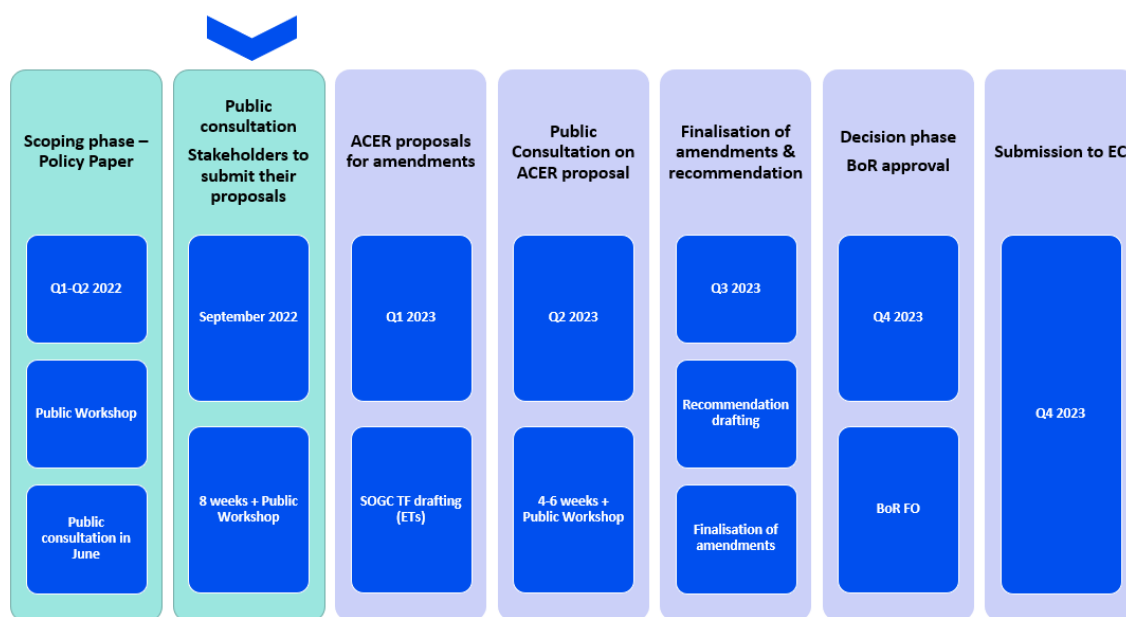
Proposals for amendments to the Demand Connection Code

Fields marked with * are mandatory.

Introduction

Important developments in the policies of decarbonisation of the European Union (EU) energy and transport sectors have taken place since the inception of the development of the first European Grid Connection Network Codes (GC NCs) in 2012.

In the framework of the Grid Connection European Stakeholder Committee (GC ESC), the European Commission proposed for ACER to initiate the process towards the amendment of the existing GC NCs in September 2022. The amendment process, as presented to the GC ESC is outlined in the Figure below:



Following the scoping phase, ACER published the Policy Paper on the revision of the network code on requirements for grid connection of generators and the network code on demand connection in September 2022. The Policy Paper aims to transparently indicate to stakeholders the key policy areas in which amendments are to be expected. Moreover, the Paper draws on the alternative policy options and provides recommendations and proposed actions for the amendment process.

[Access the ACER Policy Paper on the revision of the NC RfG and NC DC](#)

This consultation aims at gathering, from all interested stakeholders, concrete proposals for amendments to the Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a **Network Code on Demand Connection** ('NC DC').

For amendment proposals concerning Network Code on Requirements for Generators ('NC RfG'), please go to the form: [NC RfG](#).

Responses to this consultation should be submitted by 28 November 2022 23:59 CET.

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* Name of the stakeholder:

smartEn (Smart Energy Europe)

* Contact person:

[REDACTED]

* Contact person's email address:

[REDACTED]

* Country of the stakeholder's headquarters or main country of operation:

Belgium

* Type of the stakeholder:

- ☐ Generator (including association)
- ☐ Consumer (including association)
- ☐ Transmission system operator (including association)
- ☐ Distribution system operator (including association)
- ☐ Manufacturers (including association)
- ☐ Academia/research institution
- ☐ Regulatory authority
- ☒ Other (please, elaborate)

Please, elaborate on your answer above, if necessary:

Association for DSF

* Do you consent to the publication of the stakeholder's name?

- ☒ Yes
- ☐ No

* Do you consent to the publication of provided answers?

- ☒ Yes
- ☐ No (please, note that your answer, without your name and organization, may be shared with the EU institutions and national authorities, drafting team members, and other persons or entities involved in the European Grid Connection Network Codes amendment process)

Instructions

Stakeholders are invited to submit their amendment proposals to the NC DC articles that they consider should be revised in a two-step process:

1. by inserting the proposed amendments in the provided Word file
2. by motivating/reasoning the proposed amendments through this online consultation form.

Both steps are mandatory for all amendment proposals.

(Where no amendment is proposed, the article text in the word file can be left unaltered and the cells in the consultation form can be left blank.)

The mandatory steps for submitting amendment proposals are detailed below. At the end of this section, you can find an example showing how to submit your proposals.

Step 1

Please include all your amendment proposals in the **Word file provided below using the Track Changes mode**. Once you edit the file and rename it with your stakeholder's name ("NC_DC_stakeholder_name"), please upload it in the last section of this form (FILE UPLOAD)

[Download the Word file \(NC DC\)](#)

Step 2

In addition, please use this form to motivate/reason your proposals, following the instructions:


Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 14(1)	1	2	3
Article 14(2)			
Article 14(3)			
Article 14(4)			
Article 14(5)			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new provisions in this section	Reasoning	Relation to other provisions
New provisions			

Please upload your file if necessary

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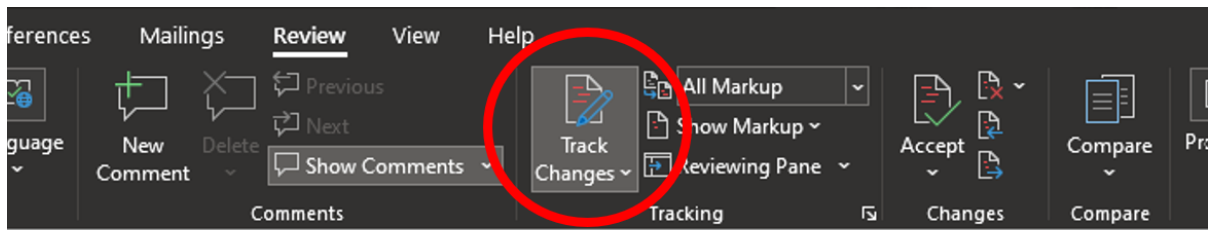
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1. Propose an amended wording of the relevant provision, as you provided in the Word file.
2. Provide the motivation/reasoning behind your proposal.
3. Indicate (if any) which other provisions of the NC DC are impacted and may need to be amended following your proposal.
4. Provide (if any) your proposals for adding new provisions to the relevant section of the Regulation, as you provided in the Word file.
5. Upload figures or tables if necessary; text inputs should be provided directly in the consultation form.

Example

This section shows an example of an input to the survey on the NC RfG. The input process is the same for the NC DC survey.

Stakeholder XYZ would like to propose an amendment to Article 27 of NC RfG. In their view, the meaning of the word "respectively" in this article is not clear. Following a two-step process, the stakeholder downloads the Word file from the Instruction section, turns on the Track Changes mode and edits the text (first step).



Article 27

System restoration requirements applicable to AC-connected offshore power park modules

The system restoration requirements laid down respectively in Article 14(4) and Article 15(5) shall apply to AC-connected offshore power park modules types B and C, respectively.

Article 28

General system management requirements applicable to AC-connected offshore power park modules

The general system management requirements laid down in Article 14(5), Article 15(6) and Article 16(4) shall apply to AC-connected offshore power park modules.

After saving the edited file on their device under the name "NC_RfG_Stakeholder_XYZ", the stakeholder uploads it in the FILE UPLOAD section.

Pages

Introduction	Instruction	Whereas	Definitions	TITLE I	TITLE II CH. 1	TITLE II
TITLE III	TITLE IV	TITLE V	TITLE VI	TITLE VII	Other	FILE UPLOAD

FILE UPLOAD

Please upload the Word file (downloaded from the *Instruction* section) containing all your amendments

The maximum file size is 1 MB

NC_RfG_Stakeholder_XYZ.docx

Select file to upload

Previous

Submit

The stakeholder proceeds to motivate/reason their proposal. As they would like to propose an amendment to Article 27 of NC RfG, they enter TITLE II CHAPTER 4 Section and insert the proposed amended wording and the reasoning (second step). As the proposed amendment of Article 27 does not affect other provisions, they leave the last column blank.

Pages

[Introduction](#)[Instruction](#)[Whereas](#)[Definitions](#)[TITLE I](#)[TITLE II CH. 1](#)[TITLE II CH. 2](#)[TITLE II CH. 3](#)[TITLE II CH. 4](#)[TITLE III](#)[TITLE IV](#)[TITLE V](#)[TITLE VI](#)[TITLE VII](#)[Other](#)[FILE UPLOAD](#)

TITLE II CHAPTER 4 - Requirements for offshore power park modules

Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 23		//	//
Article 24		//	//
Article 25		//	//
Article 26		//	//
Article 27	The system restoration requirements laid down in Article 14(4) and Article 15(5) shall apply to AC-connected offshore power park modules types B and C, respectively.	The current wording of Article 27 refers to the provisions of Articles 14(4) and 15(5). However, it is unclear from the legal text how the respective application should be understood. Indicating that the requirements of Article 14(4) shall apply to offshore PPMs type B and requirements of Article 15(5) shall apply to offshore PPMs type C follows the internal logic of the NC RfG and corresponds with the capabilities of the units in question.	//
Article 28		//	//

As the survey is long,

1. you have the possibility to edit your answer after submission. When clicking on "submit", you will be given a contribution ID, which you can then use to access your contribution here. This allows you to proceed in steps.
2. we kindly suggest that you download the entire survey as .pdf (link on the right), prepare your answers and then upload them at once in the EU Survey Tool, to avoid a session timeout on submission.

The maximum length of each cell is 5000 characters. This is the maximum technical limit set by the EUsurvey tool, which cannot be increased.

Whereas Section

Please write your amendment proposal and the reasoning in the table below.

Numbers in the first column correspond with the recitals of the NC DC Whereas section

	Amendment proposal	Reasoning	Relation to other provisions
(1)			
(2)			
(3)			
(4)			
(5)			
(6)			
(7)			
(8)			
(9)			
(10)			
(11)			
(12)			
(13)			
(14)			
(15)			
(16)			
(17)			
(18)			
(19)			
(20)			
(21)			
(22)			
(23)			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new recitals	Reasoning	Relation to other provisions
New recitals			

Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 2(1)			
Article 2(2)			
Article 2(3)			
Article 2(4)			
Article 2(5)			
Article 2(6)			
Article 2(7)			
Article 2(8)			
Article 2(9)			
Article 2(10)			
Article 2(11)			
Article 2(12)			
Article 2(13)			
Article 2(14)			
Article 2(15)			
Article 2(16)			
Article 2(17)			
Article 2(18)			
Article 2(19)			
Article 2(20)			
Article 2(21)			
Article 2(22)			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new definitions	Reasoning	Relation to other provisions
New definitions			

Please upload figures or tables if necessary

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TITLE I - General provisions

Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 1			
Article 3	<p>Delete paragraph 3.2 (b)</p> <p>3.3: In case of demand facilities or closed distribution systems with more than one demand unit, these demand units shall together be considered as one demand unit if they cannot be operated independently from each other or can reasonably be considered in a combined manner or controlled as one aggregated load.</p>	<p>Storage devices in charging mode should fall as well under the DCC code rules.</p> <p>Storage devices, which are set in a load only mode should be considered simply as loads and therefore fall ONLY under the DCC code as they never intend to use the generation mode. This would include car batteries, charging stations and emergency power batteries.</p> <p>3.3: More and more electrical loads produced in mass and installed in homes and small buildings are smart and equipped with IoT communication means. They will be aggregated.</p>	
Article 4			

Article 5	<p>Application to pump-storage power generating modules, electric vehicles, and industrial sites</p> <p>New 5.4: 4. Any electric vehicle or charging station that only works in charging mode, even if physically able to do otherwise, shall be subject to the requirements of this Regulation and shall be treated as demand unit.</p>	<p>Include EVs</p> <p>Electric vehicles' primary purpose is mobility and this need, and with it the need to charge, shall not be limited by additional RfG requirements if no bidirectional charging is desired.</p>	
Article 6	<p>(f) offer at least one draft regulation for the public to provide review and comment;</p> <p>The relevant system operator or TSO shall submit a proposal for requirements of general application, or the methodology used to calculate or establish them, for approval by the competent entity within two years of entry into force of this Regulation. The methodology and calculation shall be made available to the public for review and comment.</p>	<p>Member States regulatory authorities, SOs should provide drafts with explanation, reason, justification for the adaptations of this regulation.</p>	
Article 7			
Article 8			
Article 9			

Article 10			
Article 11			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new articles in this section	Reasoning	Relation to other provisions
New provisions			

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TITLE II - Connection of transmission-connected demand facilities, transmission-connected distribution facilities and distribution systems

Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 12			
Article 13			
Article 14			
Article 15			
Article 16	<p>The relevant TSO shall specify the functionalities required to protect the transmission network in accordance with the characteristics of the transmission-connected demand facility or the transmission-connected distribution system. The relevant TSO and the transmission-connected demand facility owner or the transmission-connected distribution system operator shall agree on protection schemes and settings relevant for the transmission-connected demand facility or the transmission-connected distribution system.</p>	<p>This wording is less prescriptive. The original wording, including "devices", could lead to TSOs requiring specific brands, products, etc. that could lead to various types of discrimination, based on cost, sizing requirements, etc., that would be favorable for certain installations and not for others. Instead, TSOs should specify what functionalities are required to protect the transmission system and applicants/facilities can find the right devices and technologies for their installations that will satisfy these requirements.</p>	
Article 17			

Article 18	<p>1. Transmission-connected demand facilities as well as distribution-connected demand facilities shall be equipped according to the IEC 61850-7-420 and IEC 62325 standards in order to exchange information between the relevant TSO and the grid-connected demand facility with the specified time stamping.</p> <p>2. Transmission-connected distribution system shall be equipped according to the IEC 61850-7-420 and IEC 62325 standards in order to exchange information between the relevant TSO and the transmission-connected distribution system with the specified time stamping.</p> <p>Delete 18.3</p>	<p>Data exchanges should be based on already published standards such as IEC 61850-7-420 and IEC 62325 that are also relevant for NC RfG and the future NC on Demand side flexibility.</p>	<p>NC RfG NC on Demand side flexibility</p>
Article 19			
Article 20			
Article 21			

Article 22	The relevant TSO shall specify and make publicly available further details concerning the operational notification procedure. Operational notification procedures defined by TSOs shall not favor or be discriminatory to any asset type or size of installation.	It is crucial that procedures and requirements for operational notifications do not preclude or present barriers to any asset type. As this industry has decades of favouring large power plants and large commercial installations, it is important that TSOs ensure that their processes, requirements, and paperwork is not exclusionary.	
Article 23			
Article 24			
Article 25			
Article 26			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new articles in this section	Reasoning	Relation to other provisions
New provisions			

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TITLE III - Connection of demand units used by a demand facility or a closed distribution system to provide demand response services to system operators

Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 27			
Article 28			
Article 29	<p>New: 3. Small demand units with flexibility capabilities on household level, e.g. storages, heat pumps and electric vehicles, shall offer their fast demand response to the overall system. Maximum reaction times and measurement precision should be made public by the manufacturer. However, no external certification or notification to SO shall be required. A single self-declaration of the offered capabilities shall be sufficient for all European SOs. If the manufacturer cannot offer the required measurement precision (2g), measurement resolution (2f) or adequate reaction time, the manufacturer shall notify the SO, but the SO shall not exclude the relevant generation unit from the market for these reasons.</p> <p>Further requirements in different member states shall be prohibited to ensure open market conditions for small, decentralised loads.</p>	<p>Small DER assets cannot be required to have the same sophistication of sensors, steering capabilities, etc. as medium and large assets. Small assets, at an individual scale, have an entirely different value proposition to end purchasers. For this reason, adding the same sophistication and capabilities as large assets inherently cost prohibitive and can also be effectively impossible. Therefore, the manufacturers should not be forced to achieve certain thresholds, but to transparently show their maximum capabilities to the SO.</p>	
Article 30			

Article 31			
Article 32	<p>Title: Procedures for demand units within a demand facility or a closed distribution system connected at a voltage level of or below 1 000 V, and of power levels higher than 1 MW</p> <p>(d) the demand unit certificate and the type-test certificate as relevant for the demand response service, or if not available, equivalent information;</p>	<p>Demand flexibility services of DER (demand and generation) to SO should be dealt with in a separate demand response code. (see ACER policy paper from August 2022)</p> <p>For small devices, aggregators and national platforms are required to enable mass market implementation.</p>	
Article 33			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new articles in this section	Reasoning	Relation to other provisions
New provisions			

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TITLE IV - Compliance

Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 34			
Article 35	f) conditions and procedures including scope for registering equipment or type-test certificates; (g) conditions and procedures for the use of relevant equipment or type-test certificates issued by an authorised certifier by the demand facility owner, the DSO or the CDSO.	Type test certificate based on family grouping will ease the certification process by authorised certifiers (be more cost effective for all parties)	
Article 36			
Article 37	An equipment or type-test certificate may be used instead of part of the tests provided for in paragraph 1, on the condition that it is provided to the relevant TSO.	Type test certificate based on family grouping will ease the certification process by authorised certifiers (be more cost effective for all parties)	
Article 38			
Article 39	An equipment or type-test certificate may be used instead of part of the tests provided for in paragraph 1, on the condition that it is provided to the relevant TSO.	Type test certificate based on family grouping will ease the certification process by authorised certifiers (be more cost effective for all parties)	

Article 40	For demand unit below 22 kW, type-test certificates shall be used instead of part of the tests provided for in paragraph 1, on the condition that it is provided to the relevant TSO.	Type test certificate based on family grouping will ease the certification process by authorised certifiers (be more cost effective for all parties)	
Article 41			
Article 42			
Article 43			
Article 44			
Article 45			
Article 46			
Article 47			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new articles in this section	Reasoning	Relation to other provisions
New provisions			

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TITLE V - Applications and derogations

Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 48			
Article 49			
Article 50			
Article 51			
Article 52			
Article 53			
Article 54			
Article 55			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new articles in this section	Reasoning	Relation to other provisions
New provisions			

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TITLE VI - Non-binding guidance and monitoring of implementation

Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 56			
Article 57			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new articles in this section	Reasoning	Relation to other provisions
New provisions			

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TITLE VII - Final provisions

Please write your amendment proposal and the reasoning in the table below.

	Amendment proposal	Reasoning	Relation to other provisions
Article 58			
Article 59			

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new articles in this section	Reasoning	Relation to other provisions
New provisions			

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ANNEX I

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new articles in this section	Reasoning	Relation to other provisions
Amendments to Annex I			

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ANNEX II

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new articles in this section	Reasoning	Relation to other provisions
Amendments to Annex II			

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Other additional provisions

Please write your amendment proposal and the reasoning in the table below.

	Proposal for new provisions	Reasoning	Relation to other provisions
Other new provisions			

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FILE UPLOAD

Please upload the Word file (downloaded from the **Instructions** section) containing all your amendment proposals in the Track Changes mode.

The maximum file size is 1 MB

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Contact

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