ACER draft amendments to the Network Code on Demand Connection

> Fields marked with * are mandatory.

Introduction

This consultation aims at presenting ACER's draft amendments to the **Commission Regulation (EU) 2016/1388 of 17 August 2016 establishing a Network Code on Demand Connection ('NC DC').**
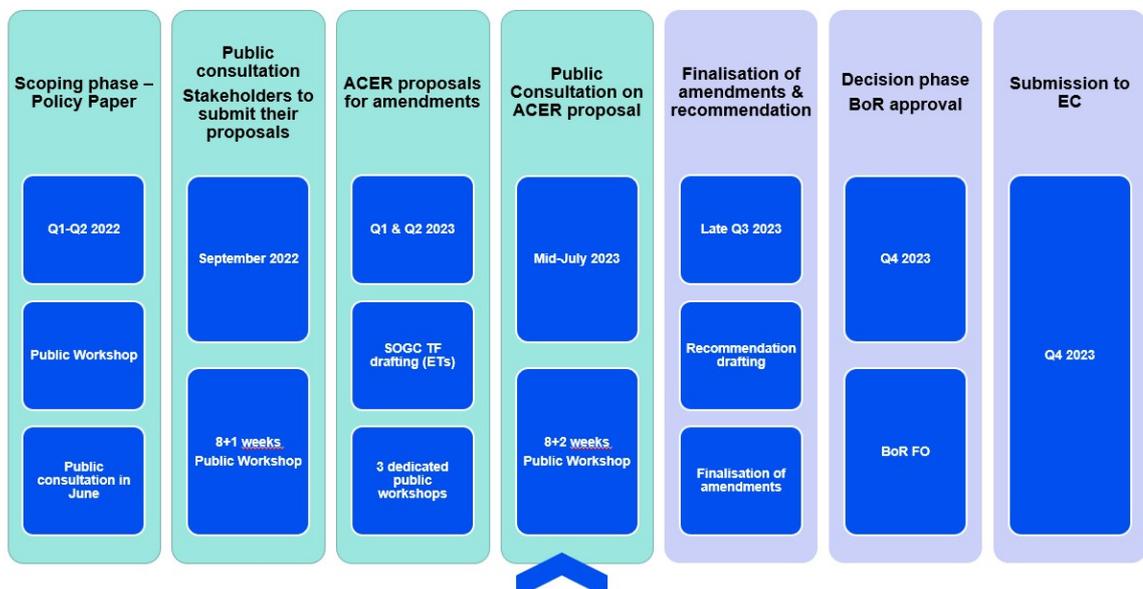For draft amendments concerning Network Code on Requirements for Generators ('NC RfG'), please go to the respective form: **NC RfG**.

Responses to this consultation should be submitted by 25 September 2023.

Background

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 aimed to transparently indicate to stakeholders the key policy areas in which amendments were to be expected.

Access the ACER Policy Paper on the revision of the NC RfG and NC DC.

As a next step, ACER launched the Public Consultation to gather stakeholders' views and concrete amendment proposals regarding the GC NCs. The stakeholders could submit their inputs by 21 November 2022.

Access the results of the Public Consultation on the amendments to the grid connection network codes.

Additionally, in the preparation of the draft amendment proposals, ACER organised three dedicated public workshops, namely:

- electromobility, power-to-gas demand units and heat-pumps (held on 17 April 2023);
- rate of change of frequency and grid forming capabilities (held on 10 May 2023); and
- electricity storage (held on 11 May 2023).

After the evaluation of stakeholders' inputs, ACER has formulated its own proposal for the amendments of the GC NCs which is subject to this public consultation.

Stakeholder's details

ACER is highly committed in processing personal data in a lawful way.
Find out more how we process your data: https://www.acer.europa.eu/the-agency/about-acer/data-protection

* Name of the stakeholder:

> Terna S.p.A.

* Contact person:

> ███████████

* Contact person's email address:

> ████████████████

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

> Italy

* 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:

* 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)

Instructions

Stakeholders are invited to submit their comments to the NC DC articles amended by ACER in three mandatory steps:

1. by downloading the ACER draft amendments in the Word file provided below. The file could also be accessed on the right panel of the consultation form under the Background Documents;
2. by commenting on the ACER's draft amendments through this online consultation form and adding their alternative text proposals to the table, if any; and
3. by uploading the alterative amendment proposals to the **entire NC DC** using the Track Changes mode in the ACER draft amendments file downloaded from Step 1.

Where the stakeholder does not have any comments regarding the amendments, the relevant cells in the consultation form can be left blank.

The mandatory steps for submitting the comments are listed below.

Step 1

Please see ACER's draft amendments in the Word file provided below. The file could also be accessed on the right panel of the consultation form under the Background Documents.

Download ACER draft amendments to the NC DC here

Step 2

Kindly note that this consultation form follows the structure of the NC DC amended legal text provided by ACER in Step 1.

The paragraph numbering in the form reflects paragraph numbers in the amended legal text. Nevertheless, stakeholders can comment on the deleted paragraphs/articles/titles, which are marked as [deleted]. New articles and titles are marked as [new].

Please use this form to comment on ACER draft amendments and/or to provide an alternative text proposal. The instructions are the following:

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below.
❷ Includes new articles

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 1		
Article 3		
Article 4		
Article 4a [new]		
Article 5		
Article 6		
Article 7		
Article 8		
Article 9		
Article 10		
Article 11		
Article 12		

Please write your amendment proposals, if any, in the table below.

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary
❷ The maximum file size is 1 MB

Select file to upload

1. Leave comments on the ACER draft amendment proposals.

2. Propose (if any) alternative wording of the relevant provision, as you provided in the Word file.

3. Provide (if any) your proposals for adding new provisions to the relevant section of the NC DC, as you provided in the Word file.

4. Upload figures or tables if necessary; text inputs should be provided directly in the consultation form.

Step 3

Where the stakeholder would like to propose an alternative amendment to the **entire NC DC**, please upload the Word file (**downloaded from Step 1**) containing all your alternative amendment proposals in the Track Changes mode to the next **FILE UPLOAD** section and rename it with your stakeholder's name ("ACER_draft_DC_stakeholder_name"). You can also upload your justification documents, where applicable.

To facilitate the process, please, make sure that the **alternative text proposals provided in this consultation form are consistent**, to the extent possible, **with those in the Word file** you are uploading, taking into account the character limitations of each cell (max 5000 characters).

FILE UPLOAD

Please upload your file here

The maximum file size is 1 MB

Only files of the type pdf,doc,docx,odt,txt,rtf are allowed

491fe5e9-a3bf-4bb6-92fc-5fe782adfcae/ACER_draft_DC_Terna.docx

Please also upload any other document (i.e. **justifications)** below, if relevant.

Please upload your file

The maximum file size is 1 MB

Please upload your file

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The maximum file size is 1 MB

Due to the significant length of this survey:

- you have the possibility to edit your answer after submission. When clicking on "Submit" button, you will be given a Contribution ID which you can then use to access your answers and edit them, if necessary.
- 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 comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Numbers in the first column correspond to the recitals of the amended version of NC DC Whereas section, including new recitals

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
(1)		
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(**)	We point out that a clear definition of a fully autonomous energy island is not present in the Regulation. We suggest to remove this reference since it could introduce uncertainties in the application of the requirements, without any concrete added value. In alternative, this concept should be better clarify in the sense that derogation from DC requirements should be granted only to fully stand alone systems not operating in parallel with any portion of the electrical system (off-grid systems). As additional point Terna does not agree and does not support the exception of these systems to follow the DC requirements regardless the time (i.e. five minutes) work in parallel with the distribution or transmission system.	Transmission-connected demand facilities, transmission-connected distribution facilities, new distribution systems, demand units used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant TSO, V1G electric vehicles and associated V1G electric vehicle supply equipment, heat-pumps, and power-to-gas demand units are subject to the requirements of this Regulation regardless of whether they are part of an citizen energy community as defined in Regulation (EU) 2019 /944, another entity, or a form of system users aggregation.
(8)		
(9)		
(10)		

(11)		
(12)		
(13)		
(14)		
(15)	Terna recommends deleting whereas no. 15, because it can be misunderstood. The LFSM-UC can't replace the demand disconnection in emergency state.	
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New recital	

Definitions (Article 2)

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new definitions

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
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)		
Article 2(*)		
Article 2(**)		
Article 2(***)		

Article 2(****)		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New definition	

Please upload figures or tables if necessary

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TITLE I - General provisions

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

Includes new articles

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 1		
Article 3		
Article 4		
Article 4a [new]		
Article 5		
Article 6		
Article 7		
Article 8		
Article 9		
Article 10		
Article 11		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

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

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 12		
Article 13		
Article 14		
Article 15		
Article 16		
Article 17		
Article 18		
Article 19	(point 1.c.IV): in order to make better manageable the LFDD, it is recommended to reduce the frequency measurement accuracy to 10mHz.	(iv) relay accuracy: lower than 10 mHz;
Article 20		
Article 21		
Article 22		
Article 23		
Article 24		
Article 25		
Article 26		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

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 comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 27		
Article 28		
Article 29		
Article 30		
Article 31		
Article 32		
Article 33		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

The maximum file size is 1 MB

[NEW] TITLE XXX - Connection of V1G electric vehicles and associated V1G electric vehicle supply equipment, power-to-gas demand units and heat-pumps

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article XX	(point 3.b): it is recommended to define a range for the LFSM-UC droop in order to have an adjustable parameter with a default value (in line with RfG approach). (point 3.g.ii): in order to make a useful LFSM regulation, the accuracy of the frequency measurement must be more severe. (table X.1.1): considering our experience as a transmission system operator we recommend to set the Uret for V1G as well as for V2G and type A PPM to 0,05p.u. in table X.1.1. This would guarantee an important improvement in system robustness. New paragraph (7) in Article XX: in line with V2G in RfG, we propose to foresee the equipment to operate the facility remotely.	(g) Requirements for frequency measurement: (i) Maximum measuring time window: 100 ms (ii) Accuracy: ±10 mHz; Table X.1.1 - Uret to be 0,05p.u 7. A V1G electric vehicle supply equipment shall be equipped with a cyber-protected data exchange interface in order to modulate, without undue delay, active power input following an instruction being received at the input port. The relevant system operator shall have the right to specify requirements for equipment to make this facility operable remotely.
Article XX+1		
Article XX+2		
Article XX+3		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

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TITLE IV - Compliance

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 34		
Article 35		
Article 36		
Article 37		
Article 38		
Article 39		
Article 40		
Article 41		
Article 42		
Article 43		
Article 44		
Article 45		
Article 46		
Article 47		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

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TITLE V - Applications and derogations

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 48		
Article 49		
Article 50		
Article 51		
Article 52		
Article 53		
Article 54		
Article 55		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

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TITLE VI - Non-binding guidance and monitoring of implementation

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 56		
Article 57		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

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TITLE VII - Final provisions

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Article 58		
Article 59		

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
New article	

Please upload figures or tables if necessary

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ANNEX I

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Annex I		

Please upload figures or tables if necessary

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ANNEX II

Please upload figures or tables if necessary

The maximum file size is 1 MB

Please write your comments on the ACER draft amendments and your alternative text proposals, if any, in the table below

	Comment on the ACER draft amendments	Alternative text amendment proposal (if applicable)
Annex II		

Please upload figures or tables if necessary

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Other additional provisions

Please write your amendment proposals, if any, in the table below

	Text amendment proposal (if applicable)
Other new provisions	

Please upload figures or tables if necessary

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Background Documents

NC_DC_ACER_draft_amendments_for_PC_2023_E_07.docx

Contact

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