

Stage 01: Modification Proposal

Grid Code

GC0113:

Mod Title: The open, transparent, non discriminatory and timely publication of the generic and/ user specific values required to be specified by the relevant TSO(s) and / or relevant system operator et al., in accordance with the DCC.

Purpose of Modification:

This modification will set out within the Grid Code the obligations in the EU Connection Codes as they relate to the specification of certain items by certain obligated party or parties.

The Proposer recommends that this modification should be: assessed by a Workgroup to form the final proposals for the mod and then proceed to Workgroup Consultation.

This modification was raised *18 04 2018* and will be presented by the Proposer to the Panel on *26 04 2018* (**Code Administrator to provide date**). The Panel will consider the Proposer's recommendation and determine the appropriate route.



High Impact: None



Medium Impact: Transmission Owners (including OFTOs and Interconnectors), Distribution Network Operators, Transmission System Users System Operator and Generators



Low Impact: None

What stage is this document at?

01	Modification Proposal
02	Workgroup Report
03	Code Admin Consultation
04	Draft Final Modification Report
05	Report to the Authority

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Any Questions?

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Timetable

The Code Administrator will recommend a timetable to the Grid Code Panel on 26 April 2018

Workgroup Meeting 1	
Workgroup Meeting 2	
Workgroup Meeting 3	
Workgroup Report presented to Panel	
Code Administration Consultation Report issued to the Industry	
Draft Final Modification Report presented to Panel	
Modification Panel decision	
Final Modification Report issued the Authority	
Decision implemented in Grid Code	

Defect

The Grid Code does not currently provide transparency for GB stakeholders of the technical requirements of general application or the technical requirements of specific application that arise from the application of the DCC in GB.

What

The Grid Code will need to be amended to set out the procedure for the publication of those values, as set out in the DCC¹:

- (i) to be specified by the relevant TSO and / or the relevant system operator; and
- (ii) to be coordinated and / or agreed between the relevant TSO and / or the relevant system operator and the new Demand² parties.

Why

Guidance from BEIS and Ofgem was to apply the new EU requirements within the existing GB regulatory frameworks. This would provide accessibility and familiarity to GB parties, as well as putting in place a robust governance route to apply the new requirements in a transparent and proportionate way.

Recital (9) of the DCC also sets out that:

“The requirements [of the DCC] should be based on the principles of non-discrimination and transparency...”.

This modification needs to be undertaken in timely manner to ensure impacted Users are aware of their compliance obligations - particularly in relation to procurement of equipment, testing and operational requirements. This modification is also therefore, critical to facilitate/demonstrate Member State compliance to the DCC (EU) Connection Network Code.

The production of (and ongoing maintenance of) a transparent reporting template, that would arise with this modification, will allow Users that are within the scope of DCC (and parties seeking to manufacture associated equipment) **to clearly see and understand what the DCC technical requirements are in GB as well as know that a derogation would need to be applied for** (if they wished to proceed further with their connection or sale(s) etc.,).

¹ ‘Demand Connection’ Code – Regulation 2016/1388
<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1388&from=EN>

² For the purposes of the this Modification where we refer to ‘new Demand’ or ‘new Demand parties’ we mean all those listed in Article 3(1) (a)-(d) of the DCC.

How

With the support of the industry, we will use this modification to finalise the solution to apply the EU Connection Codes requirements, before consulting with the wider industry and submitting to Ofgem for a decision.

2 Governance

Given the materiality, complexity and wide-ranging impact of the changes proposed in this Modification, the Proposer believes that self-governance or fast track governance arrangements are not appropriate in this case.

This modification should:

- be assessed by a Workgroup and the Panel should consider amalgamation with GC0107

Given the legislative application of the DCC and, therefore, that the values will need to be specified by the relevant party by September 2018 then it is necessary that this open and transparent reporting, of the generic and specific values; for

- (i) **new** connection of transmission-connected, demand facilities, transmission-connected distribution facilities, and distribution systems and
- (ii) **new** Demand Units used by a Demand Facility or a Closed Distribution System to provide Demand Response Services to relevant System Operators and relevant TSOs;

is in conformance with that timeline.

3 Why Change?

This Proposal is one of a number of Proposals which seek to implement relevant provisions of a number of new EU Network Codes/Guidelines which have been introduced in order to enable progress towards a competitive and efficient internal market in electricity.

Some EU Network Codes/ Guidelines are still in development and these may in due course require a review of solutions developed for those Network Codes/ Guidelines that come into force beforehand. The full set of EU Network Codes/ Guidelines are:

- Regulation 2015/1222 – Capacity Allocation and Congestion Management (CACM) which entered into force 14 August 2015
- Regulation 2016/1719 – Forward Capacity Allocation (FCA) which entered into force 17 October 2016
- *Regulation 2016/631 - Requirements for Generators (RfG) which entered into force 17 May 2016*
- *Regulation 2016/1388 - Demand Connection Code (DCC) which entered into force 7 September 2016*

- *Regulation 2016/1447 - High Voltage Direct Current (HVDC) which entered into force 28 September 2016*
- Transmission System Operation Guideline (TSOG) - entry into force anticipated Summer 2017
- Emergency and Restoration (E&R) Guideline - entry into force anticipated Autumn 2017

The DCC (EU) Network Code was drafted to facilitate greater connection of renewable generation; improve security of supply; and enhance competition to reduce costs for end consumers, across EU Member States.

The code specifically sets harmonised technical standards for the connection of new Demand parties, namely; (a) transmission-connected demand facilities; (b) transmission-connected distribution facilities; (c) distribution systems, including closed distribution systems; and (d) demand units, used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant TSOs.

Significant work to progress GB understanding of these codes and consider the approach for implementation has been undertaken in Grid Code/Distribution Code issue groups GC0091 for DCC.

However, this 'pre-work' has not considered aspects relating to the publication of the associated value or values for the connection of new Demand in GB.

4 Code Specific Matters

Technical Skillsets

- Understanding of the GB regulatory frameworks (particularly Grid Code)
- High level understanding of the EU Network Codes/ Guidelines and their potential impact
- Operational/technical understanding of equipment which are bound by these codes
- Where appropriate, knowledge of the obligations and operational processes of GB Network Operators and the GB National Electricity Transmission System Operator

Reference Documents

Network Code for Demand Connection legal text:

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R1388&from=EN>

5 Solution

The initial thinking is that the approach set out in GC0107 (which deals with the equivalent publication of items related to the RfG³) should be applied with respect to the Demand Connection Network Code.

Therefore, as with GC0107, the Ofgem Multiple TSO Allocation spreadsheet⁴ will be amended, by the addition of columns to the right (of those already shown) to act as a transparent reporting template.

The Grid Code will require the parties concerned to populate the template, as appropriate.

The transparent reporting template will show (1) the party or parties who are responsible for the specification of the value or, if appropriate, value range; and (2) the actual applicable value⁵ itself for that organisation (or, if appropriate, organisations).

In respect of (1) it is currently understood that there are four 'groupings' that are responsible, namely:

- (i) the relevant TSO; or
- (ii) the relevant TSO and the relevant system operator; or
- (iii) the relevant system operator; or
- (iv) the relevant TSO and / or the relevant system operator and the relevant party (as per Article 3(1) (a)-(d)⁶).

In respect of (2) it is currently understood that there are a number of possible organisations that are relevant, including: National Grid (as SO), National Grid (as E&W TO), the two Scottish TOs, OFTOs (plus, in the future, potentially CATOs?) and the 14 licenced DNOs⁷.

We have prepared, for GC0107, an illustrative representation of what the transparent reporting template (which could also be applied for this Modification)

³ Regulation 2016/631

⁴ This can be found on the Ofgem website.

<https://www.ofgem.gov.uk/publications-and-updates/decision-our-consultation-assignment-transmission-system-operator-obligations-under-requirements-generators-demand-connection-high-voltage-direct-current-and-forward-capacity-allocation-regulations-within-gb>

⁵ Or, where applicable, value range.

⁶ (a) new transmission-connected demand facilities; (b) new transmission-connected distribution facilities; (c) new distribution systems, including new closed distribution systems; (d) new demand units used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant TSOs.

⁷ Eastern Power Networks Plc; Electricity North West Limited; London Power Networks Plc; Northern Powergrid (Northeast) Limited; Northern Powergrid (Yorkshire) Plc; Scottish Hydro Electric Power Distribution Plc; South Eastern Power Networks Plc; Southern Electric Power Distribution Plc; SP Distribution Plc; SP Manweb Plc; Western Power Distribution (East Midlands) Plc; Western Power Distribution (South Wales) Plc; Western Power Distribution (South West) Plc; and, Western Power Distribution (West Midlands) Plc.

might look like with item (1) shown in columns H-K (in yellow) and item (2) shown in columns L-AE (in light green).

We would suggest that the Workgroup review all the DCC obligations, in respect of the specification of certain values by the party or parties concerned (as per (1) above) and identify if these are either:

a generic value – that is they are to be applied by the party or parties concerned in a harmonised way to all new Demand parties; or

(only where permitted by the DCC) a DCC specific value – that is to be applied by the party or parties concerned to a specific connection / facility only –.

In respect of the generic value, as set out in the DCC, the value should be harmonised by the party or parties concerned.

This is because the failure to provide a harmonised generic value will not facilitate Union-wide trade in electricity, will not ensure system security, will not facilitate the integration of renewable electricity sources, will not increase competition and will not allow more efficient use of the network and resources and, therefore, the benefit of consumers will not be achieved.

In a limited number of cases the DCC (EU) Connection Network Code does permit non harmonised values to be applied⁸, in coordination with and with the agreement of the new Demand party/parties – which we refer to as DCC specific value.

For illustrative purposes we refer to the generic value to be applied as ‘X’ (or, where the DCC permits this value to be a range ‘X₁-X₂’) when the Workgroup reviews the DCC specification obligations.

For illustrative purposes we refer to the DCC specific value to be applied as ‘Y’ (or, where the DCC permits this value to be a range ‘Y₁-Y₂’) when the Workgroup reviews the DCC specification obligations.

It is proposed that, if approved, the party or parties who are responsible for the specification of the value(s)⁹ would be required to populate the transparent reporting template; i.e. replace the ‘X’ (or ‘X₁-X₂’) or ‘Y’ (or ‘Y₁-Y₂’); with their respective value¹⁰ by Friday 7th December 2018 at the latest, although they would be free to do so prior to this date if they wished¹¹.

Where, going forward beyond Friday 7th December 2018, the party or parties who are responsible for the specification of the value(s) etc., wished to change the said value¹² they would provide to National Grid SO¹³ their updated value¹⁴ within one Business Day of the party or parties specifying the new said value¹⁵ and National Grid SO would, within one Business Day amend, update and (re)publish the

⁸ Or where a derogation has been applied for and been granted by the NRA.

⁹ Or, if appropriate, range of values.

¹⁰ Or, if appropriate, range of values.

¹¹ We would suggest that the implementation date for this proposal be set five Business Days after an Authority decision – thus parties could populate the template from that date onwards.

¹² Or, if appropriate, range of values.

¹³ As the Grid Code (Code) Administrator.

¹⁴ Or, if appropriate, range of values.

¹⁵ Or, if appropriate, range of values.

transparent reporting template. The change in the said value¹⁶ would take effect from 00:01 on the next Business Day after the Business Day¹⁷ that the amended and updated transparent reporting template was (re)published by National Grid SO.

We recognise that in respect of a DCC specific value that there may be reservations around the confidentiality of the value(s) concerned. We note however, that such reservations would not be relevant where a derogation has been granted, from the DCC value(s), as the applicable value(s) in that case would be published, as part of the derogation notice, by the NRA.

Nevertheless, in recognition of the reservations around the confidentiality of the value(s) we would propose the following approach. Where an organisation concerned with specifying the value(s) has agreed the DCC specific value (s) for less than four sites then those values would only be notified to Ofgem.

However, where four or more such sites had the DCC specific value(s) then all these values (or more likely the range of the said values) would be notified (by the organisation concerned) via the transparent reporting template, rather than to Ofgem only. We have shown this in columns AF-AY (in light blue) in the illustrative representation of the transparent reporting template. We also recognise that the Workgroup might wish to consider if these DCC specific value (s) should be published by party type (if appropriate) as per Article 3(1) (a)-(d)¹⁸.

Finally, for completeness, we would propose that where a derogation has been granted by Ofgem that the value¹⁹ concerned would also be placed on the transparent reporting template²⁰ by the relevant organisation²¹ (or, if appropriate, organisations). We have shown this in columns AZ-BS (in orange) in the illustrative representation of the transparent reporting template.

¹⁶ Or, if appropriate, range of values.

¹⁷ Thus a change published by NG SO during Wednesday would take effect from 00:01 on Thursday.

¹⁸ (a) new transmission-connected demand facilities; (b) new transmission-connected distribution facilities; (c) new distribution systems, including new closed distribution systems; (d) new demand units used by a demand facility or a closed distribution system to provide demand response services to relevant system operators and relevant TSOs.

¹⁹ Or, if appropriate, range of values.

²⁰ We would suggest this be done within two Business Days of the publication of the Ofgem derogation notification.

²¹ Such as the Relevant TSO or Relevant System Operator.

6 Impacts and Other Considerations

- i. The Grid Code will bear the primary impact of the EU Connection Code modification. Some consequential changes are anticipated in the STC code.*
- ii. The Transmission/Distributions connections processes will need to be slightly altered to ensure they accommodate the new EU requirements as set out in the modified Grid Code.*
- iii. No system changes are anticipated as a result of implementing the EU Connection Codes*

Does this modification impact a Significant Code Review (SCR) or other significant industry change projects, if so, how?

The EU Network Codes/ Guidelines implementation is being undertaken as a substantial programme of work within the GB industry. However, this modification does not impact on any on-going SCR.

Consumer Impacts

This modification facilitates the implementation of consistent technical standards across the EU for the connection of new Demand.

7 Relevant Objectives

Impact of the modification on the Relevant Objectives:

Relevant Objective	Identified impact
<p>To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity</p> <p>The proposed solution will allow the System Operator / Distribution Network Operators to efficiently apply the EU Network Code/ Guidelines requirements to the Users of the system through the National Industry Codes.</p>	<p>Positive</p>
<p>To facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate the national electricity transmission system being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity)</p> <p>The proposed solution will assist the Users of the Transmission and the Distribution system during the connection process.</p>	<p>Positive</p>
<p>Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in the national electricity transmission system operator area taken as a whole</p> <p>The publication of a harmonised set of values or, where permitted by the DCC, of a specific value(s) will promote the security and the efficiency of transmission and distribution systems.</p>	<p>Positive</p>
<p>To efficiently discharge the obligations imposed upon the licensee by this license and to comply with the Electricity Regulation and any relevant legally binding decisions of the European Commission and/or the Agency; and</p> <p>The EU Connection Codes derive from the Third Energy Package legislation which is focused on delivering security of supply; supporting the connection of new Demand; and increasing competition to lower end consumer costs.</p> <p>This proposal ensures openness and transparency around the technical values needed by new Demand parties seeking to connect in GB. Without full visibility of the value (or range of values, if applicable) these new Demand parties will be impeded when they are ordering new equipment or seeking to connect.</p> <p>The manufactures will also be hindered in the use of 'equipment certificates' if the harmonised value(s) is kept secret by the network operator(s). As has been recognised within the DCC, the use of 'equipment certificates' will significantly reduce the need (and substantially reduce the cost for new Demand parties and network operators) for each individual new connection in terms of compliance</p>	<p>Positive</p>

testing – which leads to lower costs to end consumers, thus maximising social welfare (which is conformance with the Electricity Regulation).

Furthermore, this modification ensures GB compliance with EU legislation in a timely manner and does so in a way that is not more stringent than EU law permits.

To promote efficiency in the implementation and administration of the Grid Code arrangements

Positive

The publication in a single location of the GB applicable DCC values (or range of values, if applicable) will avoid the need (i) for this to be done by each of the parties concerned (1 SO, 3 onshore TOs, numerous OFTOs, 14 DNOs plus possibly countless CATOs in the future) and (ii) for users to have to find this important information, at differing locations within numerous websites (for each of the parties noted under (i)). Therefore this proposal will promote the efficiency in the implementation and administration of the Grid Code arrangements.

8 Implementation

This modification must be in place to ensure the requirements of the DCC EU Connection Code are set out in the GB codes *by* two years from the Entry Into Force date of September 2018.

It is therefore crucial that this work is concluded swiftly to allow the industry the maximum amount of time to consider what they need to do to arrange compliance.

9 Recommendations

Panel is asked to:

- Refer this proposal to a Workgroup for assessment.
- Consider amalgamation with GC0107 (Code Administrator recommends this)

10 Legal Text

Not yet agreed.