

GC0102 EU Connection Codes GB Implementation – Mod 3

Industry parties are invited to respond to this consultation expressing their views and supplying the rationale for those views, particularly in respect of any specific questions detailed below.

Please send your responses by **5pm on Thursday 9th November 2017** to grid.code@nationalgrid.com. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration by the Workgroup.

Any queries on the content of the consultation should be forwarded to grid.code@nationalgrid.com with subject clearly stating 'GC0102 Consultation Query'

Respondent:	<i>Rachel Woodbridge-Stocks - 07976708078</i>
Company Name:	<i>National Grid</i>
Please express your views regarding the Workgroup Consultation, including rationale. (Please include any issues, suggestions or queries)	<p>This workgroup consultation represents the end of a very long development process. There is very little time left to achieve compliance with the national implementation deadlines for the European Connection Codes (of which the first, RfG, is due on 17 May 2018). This work must now be brought to a timely close and hopefully this consultation will help in gathering any further evidence available and then allowing submission of the proposal(s) to the Panel and Authority without further delay. It is crucial that members of the industry cooperate to achieve this.</p> <p>Noting that legal text for the alternatives is not included in this consultation, we would point out that this is not necessary to allow their progressing to Code Administrator consultation and submission to the Authority. Given that there is very limited time remaining for compliance, the principles behind the alternative proposals are complete and that mapping tables are in the process of being prepared to ensure the GB Code is consistent with the EU Connection Codes, this consultation should be sufficient to gather any further stakeholder views and evidence and allow the work to proceed. In terms of the legal text, the relevant clauses in the code are GR21.5 which states for the Code Administrator consultation that legal text may not be required if the Panel and the Authority agree; and GR 22.1&2 regarding the final report which in GR22.2(g) requires an assessment of the changes only.</p> <p>It should also be noted that if mistakes are found at a later stage with any of the legal text within the Proposal, a modification can be raised to make amendments.</p>

	<p><i>GR.21.5 Where the Grid Code Review Panel is of the view that the proposed text to amend the Grid Code for a Grid Code Modification Proposal or Workgroup Alternative Grid Code Modification(s) is not needed in the Grid Code Modification Report, the Grid Code Review Panel shall consult (giving its reasons as to why it is of this view) with the Authority as to whether the Authority would like the Grid Code Modification Report to include the proposed text to amend the Grid Code. If it does not, no text needs to be included. If it does, and no detailed text has yet been prepared, the Code Administrator shall prepare such text to modify the Grid Code in order to give effect to such Grid Code Modification Proposal or Workgroup Alternative Grid Code Modification(s) and shall seek the conclusions of the relevant Workgroup before consulting those identified in GR.21.2.</i></p> <p><i>GR.22.2(g) The matters to be included in a Grid Code Modification Report shall be the following (in respect of the Grid Code Modification Proposal):</i></p> <p><i>g) an assessment of:</i></p> <p><i>(i) the impact of the Grid Code Modification Proposal and any Workgroup Alternative Grid Code Modification(s) on the Core Industry Documents and the STC;</i></p> <p><i>(ii) the changes which would be required to the Core Industry Documents and the STC in order to give effect to the Grid Code Modification Proposal and any Workgroup Alternative Grid Code Modification(s);</i></p> <p><i>(iii) the mechanism and likely timescale for the making of the changes referred to in (ii);</i></p>
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Standard Workgroup Consultation questions

Q	Question	Response
1	Do you believe that GC0102 Original Proposal, or any potential alternatives for change that you wish to suggest, better facilitates the Grid Code Objectives?	<p>The original proposal for GC0102 better facilitates the Grid Code Objectives.</p> <p>An assessment of the original proposal against the Grid Code objectives is as follows:</p> <p><i>i. To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity</i></p> <p>Positive. By implementing RfG and HVDC into the Grid Code with Ofgem's "only make changes where needed" approach (as can be found in their 2014 Decision Letter), the</p>

		<p>current requirements for operating the system safely have remained whilst incorporating the requirements necessary to harmonise with Europe. This therefore facilitates the development of a coordinated and efficient system.</p> <p>ii. <i>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)</i></p> <p>Positive. By implementing the necessary changes required by RfG and HVDC, New Generators and HVDC Owners connecting to the transmission network will be treated equally from a technical connections perspective (as required by RfG and HVDC). In doing so, barriers to trade will be removed.</p> <p>iii. <i>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</i></p> <p>Positive, maintaining a number of existing Grid Code requirements (not mentioned in RfG or HVDC) facilitates the safe and secure operation of the system. If these requirements were removed from the Grid Code (on the basis of not being mentioned in the European Connection Codes) as is suggested in the “more stringent” alternative, there would be implications for system security and efficiency.</p> <p>iv. <i>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</i></p> <p>Positive. This modification is required to</p>
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		<p>implement elements of the European Connection Codes forming part of the suite of European Network Codes resulting from the EU 3rd Package legislation (EC 714/2009). The most efficient way of discharging these obligations is to adopt Ofgem's "only make changes where needed" approach.</p> <p>v. <i>To promote efficiency in the implementation and administration of the Grid Code arrangements</i></p> <p>Neutral. No major impacts on the process of administering the Grid Code.</p> <p>So as noted above, the GC0102 original proposal better facilitates objectives (i)-(iv) and is neutral against objective (v).</p> <p>The 'more stringent' alternative fulfils none of the objectives as summarised below.</p> <p>Assessment of the 'more stringent' alternative against the Grid Code objectives:</p> <p>i. <i>To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity</i></p> <p>Negative. The 'more stringent' alternative has not been well defined in terms of what items have been considered to be more stringent with only a very limited number of examples so far provided, nor do we believe it embodies the "only make changes where needed" solution as required by Ofgem for implementation of the European Network Codes and so does not permit efficient development.</p> <p>ii. <i>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)</i></p> <p>Negative. The 'more stringent' alternative is</p>
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		<p>not achievable in the time available and proposes striking out of national code requirements without which system security will be compromised and new connections will be unable to proceed under safety rules and due to a lack of clarity over equipment specifications. Further, due to the time that solving these issues will take the ability of new entrants to meet their European Connection Code obligations will be compromised as the lead-time that they will have prior to compliance being required will be reduced.</p> <p>If the more stringent alternative is, instead of the principle submitted, a 3 layer approach, then any minor points subsequently identified by stakeholders as potentially being “more stringent” could be amended as they are identified. There is a concern that if, instead, the more stringent alternative continues to change and time is spent developing it further, the process is delayed and industry parties won’t get visibility of the final solution until very close to the implementation date making it more difficult for them to comply with the new standards and essentially creating a short term barrier.</p> <p>iii. <i>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</i></p> <p>Negative. The ‘more stringent’ alternative reduces secure connection of new entrants, stifles development of efficient solutions and potentially undermines the safe, secure and economic operation of the Transmission System in a reasonable, efficient and proportionate manner. .</p> <p>iv. <i>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</i></p>
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2	Do you support the proposed implementation approach?	<p>For the original proposed solution, yes. For the alternative proposed, no due to the reasons outlined above.</p> <p>The most important factors for Generators in particular at this stage should be lead time for compliance - this has been greatly reduced due to the time spent on requests for evidence and pursuing alternatives to the detriment of new entrants to the market.</p>
3	Do you have any other comments?	<p>The original proposal satisfies the requirements of RfG and HVDC and, providing there are no delays to the process, can be implemented by the deadlines required.</p> <p>Where the workgroup has identified additional changes in order to improve the efficiency of and competition within, the electricity network, these should be addressed outside of GC0102 as Open Governance allows industry parties to raise modifications to the Grid Code in order to achieve this.</p> <p>The inclusion of additional requirements that are not necessary to ensure compliance with RfG and HVDC should therefore not delay Implementation and hence risk GB to be non-compliant with European Law given that the original proposal stated in GC0102 satisfies the defect of currently being non-compliant.</p>
4	Do you wish to raise a WG Consultation Alternative Request for the Workgroup to consider?	No

Specific GC0102 Consultation Questions

Q	Question	Response
5	Do you have any comments on the structure of the proposed relationship between the D Code, G59 and G83, and G98 and G99? In particular which of the three options in Section 3.2 of this consultation do you support and why?	No comment
6	Do you agree with the organization of G99 and how it applies to the different Types of generation? Do you have any alternative suggestions for structure?	Yes
7	Do you agree with the current view of how the Grid and Distribution Codes (and G98 and G99) will be applied to installations where new PGMs are installed alongside existing pre-RfG equipment? (see page 11)	No comment
8	Do you agree on the introduction of a Preliminary Operation Notification relating to the Compliance process for Transmission connected Type B and Type C PGMs? (See <i>Workgroup discussions</i> section)	Yes, it is a tool to aid New Generators using the transmission network. We believe this clarification gives protection to both Generators and Network Operators especially given that equipment certificates might not be fully developed by May 2018.
9	Do you agree with the retaining of the current GB arrangements for automatic connection and reconnection and the logic for it? If not, what alternative should be proposed? (see section 4.1.2.2)	Yes
10	Do you consider any parts of the proposed compliance, simulation or testing requirements for distribution-connected generators to be disproportionately onerous? (See section 5.2.5)	No comment.
11	Do you agree it is appropriate to	Removing Large and Small from the Distribution

	<p>drop the designation Large and Small from the Distribution Code as proposed in section 3.3.1 of this consultation? Do you believe it is appropriate to drop the designation Large, Medium and Small from the Grid Code?</p>	<p>Code is a relatively simple step with few implications and may therefore be appropriate. However, removing Large, Medium and Small from the Grid Code has wider impacts on other GB codes and there is not sufficient time to review the wider impacts of doing so and make the necessary amendments. More importantly, it is not necessary for compliance with RfG an HVDC – which is what GC0102 seeks to address. So far as the technical requirements are concerned, the Grid Code has been updated to ensure the technical requirements are consistent with the RfG and HVDC Code without making reference to Large, Medium and Small Power Stations.</p> <p>If it sensible to remove Large, Medium and Small from the Grid Code it should be part of a separate modification, not GC0102. Under Open Governance any industry party can raise a modification to address this which can then be progressed along a separate timeline.</p>
12	<p>Do you have any comments on the draft requirements for fault recording equipment for distribution-connected Type C PGMs as drafted in Section 13.11 and Appendix C3 of G99?</p>	<p>No comment.</p>
13	<p>Do you agree that it is appropriate to include storage in G98 and G99, noting that as storage is explicitly excluded from the RfG, the technical requirements that arise solely from the RfG are not applied to storage in G09 and G99?</p>	<p>If it is necessary for compliance with RfG and HVDC or if it is a tool to allow implementation of RfG and HVDC.</p>
14	<p>Do you agree that it is appropriate to include Type A PGMs <800W in capacity in G99, noting that those technical requirements that emanate from the RfG are not applied to PGMs <800W?</p>	<p>If it is necessary for compliance with RfG and HVDC or if it is a tool to allow implementation of RfG and HVDC.</p>
15	<p>If you do not consider the proposed solution to sufficiently harmonise the connection requirements for new parties connecting to the transmission and distribution networks, how would you propose this to be addressed? (See</p>	<p>I consider the proposed solution to sufficiently harmonise the connection requirements for new parties connecting to the transmission and distribution networks, however, a possible alternative would be for distribution networks to follow the same System Management and compliance procedures as transmission networks</p>

	<i>Workgroup discussions section)</i>	– this was not proposed though as it could potentially put additional costs on Embedded Generators.
16	G98 and G99 include specific requirements for power quality, harmonic compliance etc. Do you believe it should be possible to use other international standards or requirements to achieve these ends such that these specific requirements can be dropped from these documents? An explanation of your views would be useful.	No comment.
17	Do you agree that the explanation of type testing, both full and partial, and the inclusion of equipment certificates, is sufficiently clear and unambiguous in G99 drafting? Please make any suggestions that could add clarity.	No comment.
18	The application of new technical requirements to non-type tested generation connecting to distribution networks will give rise to new processes etc. Please comment on how comprehensive the coverage of this is in the current drafting of G99 and please suggest any improvements	No comment.
19	Do you have any views on how the data and information required and articulated within G99 can or should relate to the Distribution Data Registration Code in the Distribution Code?	No comment.
20	Do you believe that this modification helps to promote transparency across the Industry and if not which areas should be improved? (see <i>Workgroup discussions section)</i>	Yes. This modification incorporates RfG and HVDC into the Grid Code so that New Users only need to refer to one Code. It removes some of the ambiguity from the ENCs to aid Users' understanding and anything that can be included into the Grid Code (as opposed to Bilateral Connection Agreements) has been in a conscious effort to promote transparency.

Legal drafting questions

Q	Question	Response
21	The Proposed draft Grid Code legal text contains a number of comments	No comment.

	incorporating both internal and workgroup comments. Please feel free to provide further comment on the documents (Annex 1-5)	
22	Do you have any views on the structure of the Grid Code drafting for System Management and Compliance? (Annex 1-5)	No comment.
23	Are there are any areas in the Grid Code or Distribution Code drafting which you do not believe reflect the requirements of the RfG or HVDC Codes and, if so, why do you believe they are deficient? (Annex 1-9)	No comment.
24	Please make any other comments on the legal text drafting for the Distribution Code, G98 and G99 using the appropriate templates issued with this consultation.	No comment.