

Workgroup Consultation Response Proforma

GC0154:

Incorporation of interconnector ramping requirements into the Grid Code as per SOGL Article 119

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 to grid.code@nationalgrideso.com by **5pm on 03 August 2023**. Please note that any responses received after the deadline or sent to a different email address may not receive due consideration.

If you have any queries on the content of this consultation, please contact Catia Gomes catia.gomes@nationalgrideso.com or grid.code@nationalgrideso.com

Respondent details	Please enter your details	
Respondent name:	Lijia Qiu / Vince Hamond	
Company name:	Nationalgrid Ventures	
Email address:	Lijia.qiu@nationalgrid.com	
Phone number:	07817098892	
Which best describes your organisation?	<input type="checkbox"/> Consumer body <input type="checkbox"/> Demand <input type="checkbox"/> Distribution Network <input type="checkbox"/> Operator <input type="checkbox"/> Generator <input type="checkbox"/> Industry body	<input checked="" type="checkbox"/> Interconnector <input type="checkbox"/> Storage <input type="checkbox"/> Supplier <input type="checkbox"/> Transmission Owner <input type="checkbox"/> Virtual Lead Party <input type="checkbox"/> Other

I wish my response to be:

(Please mark the relevant box)

☒ Non-Confidential

☐ Confidential

Note: A confidential response will be disclosed to the Authority in full but, unless agreed otherwise, will not be shared with the Panel or the industry and may therefore not influence the debate to the same extent as a non-confidential response.

For reference the Applicable Grid Code Objectives are:

- To permit the development, maintenance and operation of an efficient, coordinated and economical system for the transmission of electricity*
- Facilitating effective 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);

- c) 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;*
- d) 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*
- e) To promote efficiency in the implementation and administration of the Grid Code arrangements*

For reference, (for consultation questions 5 & 6) the Electricity Balancing Regulation (EBR) Article 3 Objectives and regulatory aspects are:

- a) fostering effective competition, non-discrimination and transparency in balancing markets;*
- b) enhancing efficiency of balancing as well as efficiency of national balancing markets;*
- c) integrating balancing markets and promoting the possibilities for exchanges of balancing services while contributing to operational security;*
- d) contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector while facilitating the efficient and consistent functioning of day-ahead, intraday and balancing markets;*
- e) ensuring that the procurement of balancing services is fair, objective, transparent and market-based, avoids undue barriers to entry for new entrants, fosters the liquidity of balancing markets while preventing undue market distortions;*
- f) facilitating the participation of demand response including aggregation facilities and energy storage while ensuring they compete with other balancing services at a level playing field and, where necessary, act independently when serving a single demand facility;*
- g) facilitating the participation of renewable energy sources and supporting the achievement of any target specified in an enactment for the share of energy from renewable sources.*

What is the EBR?

The Electricity Balancing Regulation (EBR) is a European Network Code introduced by the Third Energy Package European legislation in late 2017.

The EBR regulation lays down the rules for the integration of balancing markets in Europe, with the objectives of enhancing Europe's security of supply. The EBR aims to do this through harmonisation of electricity balancing rules and facilitating the exchange of balancing resources between European Transmission System Operators (TSOs). Article 18 of the EBR states that TSOs such as the ESO should have terms and conditions developed for balancing services, which are submitted and approved by Ofgem.

Please express your views in the right-hand side of the table below, including your rationale.

Standard Workgroup Consultation questions																		
1	Do you believe that the Original Proposal and/or any potential alternatives better facilitate the Applicable Objectives?	<p>Mark the Objectives which you believe each solution better facilitates:</p> <table border="1"> <tr> <td>Original</td> <td><input type="checkbox"/>A</td> <td><input type="checkbox"/>B</td> <td><input type="checkbox"/>C</td> <td><input type="checkbox"/>D</td> <td><input type="checkbox"/>E</td> <td><input type="checkbox"/>F</td> <td><input type="checkbox"/>G</td> </tr> <tr> <td>WA(G)CM1</td> <td><input checked="" type="checkbox"/>A</td> <td><input checked="" type="checkbox"/>B</td> <td><input checked="" type="checkbox"/>C</td> <td><input checked="" type="checkbox"/>D</td> <td><input checked="" type="checkbox"/>E</td> <td><input type="checkbox"/>F</td> <td><input type="checkbox"/>G</td> </tr> </table> <p>We believe that the Original Proposal fails to better achieve the applicable objectives, with the case not clearly made that there is an enhancement to the efficiency, economics or security of system operation, that competition has been facilitated, or that the proposal has been sufficiently coordinated with industry stakeholders including EU TSOs.</p>	Original	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G	WA(G)CM1	<input checked="" type="checkbox"/> A	<input checked="" type="checkbox"/> B	<input checked="" type="checkbox"/> C	<input checked="" type="checkbox"/> D	<input checked="" type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G
Original	<input type="checkbox"/> A	<input type="checkbox"/> B	<input type="checkbox"/> C	<input type="checkbox"/> D	<input type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G											
WA(G)CM1	<input checked="" type="checkbox"/> A	<input checked="" type="checkbox"/> B	<input checked="" type="checkbox"/> C	<input checked="" type="checkbox"/> D	<input checked="" type="checkbox"/> E	<input type="checkbox"/> F	<input type="checkbox"/> G											
2	Do you support the proposed implementation approach?	<p><input checked="" type="checkbox"/>Yes <input type="checkbox"/>No</p> <p>Support the Alternative, not the Original.</p>																
3	Do you have any other comments?	<p>Whilst necessary to raise a Grid Code mod to satisfy the codification requirement of Interconnector ramping, as per Ofgem's decision in 2019, the matter of identifying whether a change to ramp rate is necessary should have been wider assessment than just via Grid Code. The original 'long-list' of solutions in the initial GC0154 Proposal included market-based solutions, which would be out of scope to achieve via a Grid Code modification. The Original Proposal has therefore been inappropriately narrowed to a technical solution that is within scope of the Grid Code, but which fails to address wider issues or other potential solutions.</p> <p>In addition, the interactions with European initiatives (notably the 15minute MTU project and associated shortening of ramping windows) could introduce significant impact.</p> <p>The long-established Interconnector business model is to operate within and contribute to the overall GB market. The maintenance of system security has been identified as the main driver of the Original Proposal, and NGV acknowledges the importance of the managing and maintenance of system security. However, there are many factors that contribute to the system operation, across demand profile (and its forecasting), generation output and Interconnector schedules, all within the framework of the market operation. Clearly the aggregate contribution from Interconnectors has increased over recent years, and is projected to continue to, however it</p>																

		<p>appears somewhat arbitrary to simply place a blanket reduction of ramp rates by 50%, without properly exploring all opportunities in further detail. A more normal approach would be to explore market-based arrangements to satisfy the majority of operational scenarios, perhaps with clear technical backstop measures available for ESO as necessary for more extreme situations should they arise.</p> <p>The projected savings under the Original Proposal need substantiating, particularly if this is one of the key bases on which the OP is to be assessed. Baringa's report indicated some scenarios considered, and assumptions made, however it is remarkable that the cost savings can be resolved to an absolute value. Sensitivity studies, ranges of scenarios and inherent uncertainty will lead to a range of possible outcomes. Even if the CBA undertaken is a useful first step, and notwithstanding the above comments on the importance of wider market-based arrangements, further investigation/clarification on CBA would be a natural next step. The commentary on the Workgroup discussions on the CBA, reflect this concern.</p> <p>Therefore, we would support the adoption of the Alternative Proposal and if still considered necessary setup a separate study to consider wider impact including connecting EU TSO impact, more thorough CBA assessment and potential market-based solution. Alternative, we suggest an extension up to six months to evaluate the alternative workgroup proposals.</p>
4	Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Not at this stage
5	Do you agree with the Workgroup's assessment that GC0154 does impact the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Grid Code?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No None identified
6	Do you have any comments on the	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

	impact of GC0154 on the EBR Objectives?	
		n/a

Specific Workgroup Consultation questions

7	Does the Original proposal or the alternative impact EU TSOs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <p>Yes. As a minimum the co-owner/operator, and potentially the wider ENTSO synchronous area for overall cross-border management coordination.</p>
8	Has there been sufficient effort taken to seek and obtain European engagement? Other- if other what else could have been done?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <p>Engagement with EU TSOs appears to have been relatively late and insufficient in the process. Interaction with other European initiatives, in particular the 15-minute MTU project with associated shorter Ramping windows, appears not to have been factored into the study. It is not clear how that and the Original Proposal are compatible, with a high risk that market-nominated flows could not be achieved, as well as open questions on how to account for the associated imbalance that would likely be incurred.</p>
9	Does the Original proposal / alternative allow for GB to reach its net zero targets?	<input type="checkbox"/> Yes (Alternative) <input checked="" type="checkbox"/> No (Original) <p>A key identified benefit of Interconnectors is their ability to import and export intermittent and renewable generation depending on where it is most available and based on the wider European market for energy. Whilst the market is not directly exposed to limitations in the Interconnector ramp rate, the reality is that the more that ramp rates are restricted, the less that the I/C Operators are able to achieve the market's cross-border nominated flow. Where this occurs the ESO may need to replace the undelivered generation from plant that is more expensive and potentially with fossil-fuelled generation, which would indeed affect GB's ability to achieve net-zero targets..</p>
10	Do you believe the Original proposal or alternative impacts the interconnector business model? (Please consider any commercial and operational impacts)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <p>The more that Interconnector ramp rates are restricted, the more risk that there is an under/over delivery of energy in each Settlement Period. The overall impact on Interconnector is the net under/over delivery between the two interconnected markets, and some mitigation can be</p>

		<p>achieved by equalising the over-delivery in one SP with an under-delivery in the next SP. The more that ramp rates are constrained, coupled with ENTSO initiatives to shorten MTUs and the ramping windows available to interconnectors, the more the financial impact on I/Cs. Interconnectors revenues are shared with consumers through regulatory regimes such as cap and floor and Use of Revenues (IFA), and it is not clear whether the projected savings by the Original Proposal factor in this additional consumer impact.</p>
11	<p>Does the Original proposal / alternative meet the requirements of Ofgem's August 2019 decision on the implementation of the SOGL? (Check if this is incorporated in grid code objectives)</p>	<p><input checked="" type="checkbox"/> Yes (for Alternative) <input checked="" type="checkbox"/> No (for Original)</p> <p>The Alternative Proposal would meet the requirement by including the existing I/C ramp rates in the Grid Code. Ofgem did not conduct an Impact Assessment on the expectation that the existing ramp rates that are part of current business practice would be included in the Grid Code, which would appear to rule out the Original Proposal. For reference, Ofgem 2019 decision letter relevant wordings are as below:</p> <p>“We have not undertaken an Impact Assessment for this proposal. This is because we consider that the current provisions contained into the Grid Code or in the proposed intermediate methodology cannot be deemed to constitute a change to existing GB requirements and arrangements. Whilst the obligations in the proposed intermediate methodology are not currently part of the Grid Code and NETS SQSS, they are consistent with the ESO's internal business practices and do not therefore lead to any significant change. Accordingly, we consider that an impact assessment is unnecessary in this situation.”</p>
12	<p>Do you believe that the Original/alternative solves the operational challenges faced by the ESO as a result of fast simultaneous interconnector ramping?</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Original Proposal may assist in certain situations, however the degree to which the OP is proportionate to the scale of the problem is not clear. It is also not clear the extent to which the OP may inadvertently introduce additional challenges, for example where faster I/C ramping may otherwise have assisted ESO in meeting a change in national demand in conjunction with generation schedules. When viewed at high level the management of system frequency and supply/demand balance is a function of all three variables demand, generation (all-types) and interconnector imports/exports, and their respective rates of change. Placing a restriction on one of these variables cannot be viewed as a full solution,</p>

		(even if it would assist with some operational scenarios) and could overlook other wider opportunities and benefits such as via a more coordinated approach, the sourcing of market-based solutions and the facilitation of renewable generation.
13	Do you believe the Original proposal or alternative proposal/s impacts or is impacted by the EU 15 MTU change?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Both proposals could be impacted by EU 15 MTU changes. The original proposal will have bigger impact and limitation to the interconnectors. The ramp that can't be finished will need to be spilled to other period or have direct impact to the market and end consumer welfare.
14	Do have any comments on the reliability of the CBA conducted by Baringa? If available, please provide any analysis supporting your response.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Baringa has provided some additional answers to workgroup questions. However, it didn't give a detailed explanation of how the balancing cost evaluation has been carried out nor demonstrate the assessment has been considered objective and open. Also, some key points such as operability and security of supply impact have only been carried out qualitatively rather than quantitatively.
15	Are there any considerations for implementation on the Original proposal /alternative proposals? (e.g., IT impacts or considerations)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Original Proposal will require changes to Interconnector control systems which might lead to additional cost and time for implementation should the proposal needs to be implemented. Alternative Proposal will not require changes.