

Draft Self-Governance Modification Report

GC0158: Reversing unimplemented aspects of GC0068

Overview: This modification aims to fully reverse the unimplemented changes to the Grid Code which formed part of the approved modification 'GC0068: Grid Code New and Revised Unit Data and Instructions'. It is a tidying up exercise and replaces the withdrawn modification proposal GC0126.

Modification process & timetable

1	Proposal Form 10 August 2022
2	Code Administrator Consultation 31 August 2022 - 03 October 2022
3	Draft Final SG Modification Report 19 October 2022
4	Final SG Modification Report 01 November 2022
5	Appeals Window 09 November 2022 - 29 November 2022
6	Implementation 06 December 2022

Have 5 minutes? Read our [Executive summary](#)

Have 15 minutes? Read the full [Draft Self-Governance Modification Report](#)

Have 30 minutes? Read the full Draft Self-Governance Modification Report and Annexes.

Status summary: This report has been submitted to the Panel for them to decide whether this change should happen.

This modification is expected to have a: **Low impact**

Generators, National Grid Electricity System Operator and Elexon

Modification drivers: Cross-code Change, Efficiency, Governance, Harmonisation and Transparency

Governance route Self-Governance modification. A decision will be made by the Grid Code Review Panel on whether this should be implemented.

Who can I talk to about the change?

Proposer:

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Executive summary

The modification is a tidying up exercise and removes the requirement to implement the aspects of GC0068¹ which needed the Electricity Balancing System (EBS) to go live before being incorporated (implemented) in the Grid Code.

This replaces the withdrawn modification proposal GC0126².

What is the issue?

'GC0068: Grid Code New and Revised Unit Data and Instructions was approved in March 2014, but not all of the legal text was incorporated (implemented) into the Grid Code. The remaining parts of GC0068 legal text (see Annex 1) which needed to be incorporated into the Grid Code was linked to the go-live of the Electricity Balancing System (EBS). However, this trigger will no longer be activated, because progress in this area is now being made under the [Future Balancing](#) project.

What is the solution and when will it come into effect?

Proposer's solution:

Reverse the unimplemented aspects of GC0068 associated with EBS go live including Dynamic Stable Import and Export Limits. Note that these changes have not actually been incorporated into the Grid Code since the trigger for them to be implemented has not been activated.

Implementation date:

06 December 2022.

Panel determination: To be updated post Panel Meeting

What is the impact if this change is made?

Reversing the requirement to include these unimplemented, but historically approved, legal text changes to the Grid Code allows for a cleaner starting point for any future work in this area.

Interactions

With the Balancing and Settlement Code (BSC), including the [BSC Issue 98 'Review of current practice of setting Dynamic Parameters within the Balancing Mechanism'](#) and BSC modification [P373](#) which reversed unimplemented changes originally approved in P297.

¹ [GC0068: Grid Code New and Revised Unit Data and Instructions](#)

² [GC0126: Implementing Profiled Stable Import and Export Limits, and reversing unimplemented aspects of GC0068](#)

What is the issue?

[‘GC0068: Grid Code New and Revised Unit Data and Instructions’](#) was approved in March 2014, but not all the legal text was incorporated (implemented) into the Grid Code. The remaining parts of GC0068 legal text (see Annex 1) which needed to be incorporated into the Grid Code were linked to the go-live of the Electricity Balancing System (EBS). However, this trigger will no longer be activated, as progress in this area is now being made under the [Future Balancing](#) project.

This proposal seeks to reverse the requirement to implement the remaining aspects of GC0068 including the functionality for time varying profiles of Dynamic Stable Import and Stable Export Limit (SIL and SEL).

Why change?

This is a tidying-up exercise similar to the [BSC modification P373 to reverse unimplemented changes approved originally in P297](#).

The National Grid ESO’s (NGESO) Strategic Road Map includes the development of [Future Balancing](#) (which provides for a system which will be able to handle Dynamic Data, including Dynamic SIL/SEL). Reversing the unimplemented aspects of GC0068 associated with EBS go live, including Dynamic SIL/ SEL, will allow for a cleaner starting point for any future work with handling Dynamic Data.

[‘GC0126: Implementing Profiled Stable Import and Export Limits, and reversing unimplemented aspects of GC0068’](#) was raised in April 2019 to reverse most of these changes with the exception of profiled SIL/ SEL, which at the time appeared to have a positive Cost Benefit Analysis (CBA).

A more detailed impact assessment via an internal NGESO Challenge and Review into Dynamic SIL & SEL Grid Code Modification in January 2021 concluded that consumer benefits in implementing Dynamic SIL/ SEL previously identified were no longer present within the context of other NGESO and Industry priorities. This is because:

- It doesn’t deliver the benefits described in the original modelling assessment while costs and complexity have increased (implementation of Dynamic SIL/SEL would impact more than 8 interfaces and over 10 legacy systems).
- Stakeholder interest in this development also appeared limited, evidenced by the limited numbers of consultation responses and participation in [Super SEL](#).
 - Super SEL is available and has effectively delivered most of the dynamic functionality benefits without requiring any system changes.
- The fundamental underlying assumptions in the original CBA which estimated costs at £700k were insufficiently robust.
- The updated estimated cost to deliver these changes was assessed to be in the region of £3m, based on calculations by applying consistent standards for estimation across all projects.
- Dynamic SIL/SEL would not offset the need for day-ahead agreements as there is no mechanism for it in the Balancing Mechanism (BM).
 - Minor benefits could be recognised by having a future view of SEL automatically in the system (representing a small improvement for the Control Room) but this is a process-related benefit only; potential consumer benefits are minimal.

- [Future Balancing](#) capability, in preparation for Net Zero Operation, and Dynamic Parameters will be able to be implemented in the future.
 - Given the cost and time required to implement Dynamic SIL/SEL in legacy systems it does not represent best use of resources.

The [October 2021 Grid Code Review Panel](#) recommended that GC0126 was put on hold until the output of the [BSC Issue 98 'Review of current practice of setting Dynamic Parameters within the Balancing Mechanism'](#) (raised by EnergyUK in October 2021) was known. The report presented by Elexon to the BSC Panel in June 2022 concluded that:

- No new BSC Modifications or Change Proposals would be raised directly from Issue 98, and based on updates provided by NGENO IT on system and optimisation capabilities, the group were unlikely to pursue this in the short/ medium term as progress would be limited.

To date no code modification proposals have been presented, and NGENO withdrew their support for GC0126 in July 2022 as it would not represent good value for consumers and that unimplemented aspects of GC0068 required in future developments would be better served by specific modification proposals.

GC0158 replaces the withdrawn modification GC0126.

What is the proposer's solution?

This proposal seeks to reverse the requirement to implement the remaining aspects of GC0068 associated with EBS go live including Dynamic Stable Import and Export Limits. Note that these changes have not actually been made in the Grid Code since the trigger for them to be implemented will not be activated.

Legal text

Annex 2 contains the legal text changes from GC0068. This proposal seeks to reverse all the approved but not yet incorporated (implemented) aspects of GC0068 legal text into the Grid Code, which are highlighted in **yellow**.

The legal text which was implemented as part of GC0068 is unaffected by this proposal (**APPENDIX 3 – ANNEXURE 1; APPENDIX 3 – ANNEXURE 2; APPENDIX 3 – ANNEXURE 3; APPENDIX 4 – ANNEXURE 1**)

What is the impact of this change?

Proposer's assessment against Grid Code Objectives	
Relevant Objective	Identified impact
(a) To permit the development, maintenance, and operation of an efficient, coordinated and economical system for the transmission of electricity	Neutral
(b) 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);	Neutral
(c) Subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution	Neutral

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	Neutral
(e) To promote efficiency in the implementation and administration of the Grid Code arrangements	Positive Reversing the requirement for the unimplemented historic legal text changes allows for a cleaner starting point for any future work with handling Dynamic Data

Proposer's assessment of the impact of the modification on the stakeholder / consumer benefit categories	
Stakeholder / consumer benefit categories	Identified impact
Improved safety and reliability of the system	Neutral
Lower bills than would otherwise be the case	Positive Implementation of Dynamic SEL/SIL does not represent good value for consumers since costs have increased and the benefit case is unclear. Therefore, reversing all unimplemented changes associated with Electricity balancing System (EBS) will have a positive impact on costs and remove any impacts on delivery of other development priorities.
Benefits for society as a whole	Neutral
Reduced environmental damage	Neutral
Improved quality of service	Positive We are tidying up unimplemented changes and leaving a clean starting point for any future work in this area.

Code Administrator Consultation Summary

The Code Administrator Consultation was issued on the 31 August 2022 closed on 3 October 2022 and received 3 non-confidential responses. No late responses were

received. A summary of the responses can be found in the table below, and the full responses can be found in Annex 4.

Code Administrator Consultation summary	
Question	
Do you believe that the GC0158 Original Proposal better facilitates the Grid Code Objectives?	<p>Two respondents stated that the change would better facilitate Grid Code objective (e).</p> <p>One respondent did not support the modification because Ofgem had stated within their GC0068 decision letter that there were benefits in implementing GC0068 to grid code objectives a, b & c.</p>
Do you support the proposed implementation approach?	<p>Two respondents supported the implementation approach.</p> <p>One respondent questioned why GC0068 was not being fully implemented, given that the ESO had originally stated all these items would be included in the BRS at no cost.</p>
Do you have any other comments?	<p>One respondent stated they would have preferred to see a Workgroup alternative where other dynamic parameters are identified in lieu of dynamic SIL/SEL. They stated that there was an absolute need for the introduction of dynamic parameters into BM and dispatching as the current methods do not reflect the real dynamics in the system.</p> <p>Another respondent stated that GC0068 intended to introduce “a greater range of data and instructions to be exchanged by electronic means” and reduce the requirement for faxes. But as instructions are still being sent by fax, they queried when the ESO would introduce a modification to faxes all together. Additionally, they raised a concern that there remains a requirement within the Grid Code to provide data which is not used.</p>
Legal text issues raised in the consultation	
No issues were raised regarding the legal text.	
EBR issues raised in the consultation	
No EBR issues were raised in the consultation.	

Proposers’ response to comments received via the Code Administrator Consultation

- Future of Balancing have completed a Feasibility & Analysis report on how faxes may be replaced. They are hoping to provide an idea of costs and timelines for this in March 2023 and Dispatch are planning to move to alternative communication means by 2026.
- The need for dynamic parameters into BM and dispatching was universally recognised during the recent BSC Issue 98 Work Group. Their report 'Review of the

current practice of setting Dynamic parameters within the Balancing Mechanism' examined several alternatives and the NGENO completed a technical feasibility study into 3 of these. The report concluded that introducing Dynamic SIL/SEL and other dynamic parameters (Option 6) would have the least impact.

Given the active and ongoing Future Balancing workstreams, pursuing this now would have a negative opportunity cost, divert resources and delay other desirable items. It is still on the ESO's roadmap to include dynamic data in our new system (called Open Balancing Platform, OBP) but this will be in later releases (circa 2027).

- The estimated IT delivery cost of building into an ageing architecture, which is set to be replaced, went up from £700k to £3m to build into an ageing architecture. This likely cost and timescale associated with implementation when viewed alongside current ESO and industry priorities suggests that there is little-to-no value in delivering Dynamic SIL/SEL versus the current baseline.

Panel determination vote

The Panel met on the 27 October 2022 to carry out their determination vote.

They assessed whether a change should be made to the Grid Code by assessing the proposed change against the Applicable Grid Code Objectives:

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

Vote 1: Does the Original facilitate the objectives better than the Baseline?

Panel Member: **Alan Creighton: Network Operator Representative**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Panel Member: **Alastair Frew: Generator**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Panel Member: **Christopher Smith: Offshore Transmission Licensee**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Panel Member: **Guy Nicholson: Generator**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Panel Member: **Jamie Webb: National Grid ESO**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Panel Member: **John Harrower: Generator**

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Panel Member: Robert Longden: Supplier

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Panel Member: Roddy Wilson: Onshore Transmission Licensee

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Panel Member: Sigrid Bolik: Generator

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Panel Member: Steve Cox: Network Operator Representative

	Better facilitates AO (a)?	Better facilitates AO (b)?	Better facilitates AO (c)?	Better facilitates AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original						
Voting Statement						

Vote 2 – Which option is the best?

Panel Member	BEST Option?	Which objectives does this option better facilitate? (If baseline not applicable).
Alan Creighton		

Alastair Frew		
Christopher Smith		
Guy Nicholson		
Jamie Webb		
John Harrower		
Robert Longden		
Roddy Wilson		
Sigrid Bolik		
Steve Cox		

Panel conclusion

To be updated after the Panel meeting.

When will this change take place?**Implementation date**

06 December 2022

Date decision required by

Panel Self-Governance vote needs to take place on 27 October 2022.

Implementation approach

No systems or processes will need to be amended as a result of this proposal.

Interactions

- | | | | |
|--|--|---|--------------------------------|
| <input type="checkbox"/> CUSC | <input checked="" type="checkbox"/> BSC | <input type="checkbox"/> STC | <input type="checkbox"/> SQSS |
| <input type="checkbox"/> European
Network Codes | <input type="checkbox"/> EBR Article 18
T&Cs ³ | <input type="checkbox"/> Other
modifications | <input type="checkbox"/> Other |

Acronyms, key terms and reference material

Acronym / key term	Meaning
BM	Balancing Mechanism
BSC	Balancing and Settlement Code
CBA	Cost Benefit Analysis
CUSC	Connection and Use of System Code
EBS	Electricity Balancing System
GC	Grid Code
NGESO	National Grid Electricity System Operator

³ If your modification amends any of the clauses mapped out in Annex GR.B of the Governance Rules section of the Grid Code, it will change the Terms & Conditions relating to Balancing Service Providers. The modification will need to follow the process set out in Article 18 of the Electricity Balancing Regulation (EBR – EU Regulation 2017/2195). All Grid Code modifications must be consulted on for 1 month in the Code Administrator Consultation phase, unless they are Urgent modifications which have no impact on EBR Article 18 T&Cs. N.B. This will also satisfy the requirements of the NCER process.

SEL	Stable Export Limit
SIL	Stable Import Limit
SQSS	Security and Quality of Supply Standards
STC	System Operator Transmission Owner Code
T&Cs	Terms and Conditions

Reference material

- [GC0068 Authority Decision Letter 3rd March 2014](#)
- [GC0126 Proposal Form 1st April 2019](#)
- [Elexon BSC Issue 98 WG report 9th June 2022](#)
- [October 2021 Grid Code Review Panel Meeting Minutes](#)

Annexes

Annex	Information
Annex 1	Proposal form
Annex 2	GC0068 Legal Text
Annex 3	GC0158 Self-Governance statement
Annex 4	Code Administrator Consultation responses