

Final 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 It is a tidying up exercise and replaces the withdrawn modification proposal GC0126.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 - 30 November 2022
6	Implementation 06 December 2022

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

Have 20 minutes? Read the full [Final Self-Governance Modification Report](#)

Have 60 - 90 minutes? Read the full Final Self-Governance Modification Report and Annexes.

Status summary: The Panel has made their determination and the appeals window is open until 5pm on 30 November 2022.

Panel Recommendation: The Panel, by a narrow majority, 5 votes to 4 votes, determined that the Proposer's solution should be implemented.

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 has been 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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Appeals window

If you want to appeal this decision, please send your [appeals form](#) and relevant documentary evidence to industrycodes@ofgem.gov.uk by 5pm on 30 November 2022 and inform the Code Administrator by emailing grid.code@nationalgrideso.com that an appeal has been submitted.

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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This replaces the withdrawn modification proposal GC0126².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 incorporated has not been activated.

Implementation date:

06 December 2022.

Panel determination:

The Panel, by a narrow majority, 5 votes to 4 votes, determined that the Proposer's solution should be implemented.

What is the impact if this change is made?

Reversing the requirement to include these unimplemented, but 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 were 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 remove faxes all together. Additionally, they raised a concern that there remains a requirement within the Grid Code to provide data which is no longer 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

- The Future Balancing workgroup 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 NGENSO 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 workstream, 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 was set to be replaced, went up from £700k to £3m. This £3m was not part of the ESOs business plan, therefore the ESO would have had to request that this cost be passed through onto consumers. Given the likely cost and timescale associated with implementation when viewed alongside current ESO and industry priorities this suggests that there is little-to-no value in delivering Dynamic SIL/SEL versus the current baseline.
- Even though GC0158 removes the requirement for these remaining parts of GC0068 to be incorporated into the Grid Code, they are intended to be picked up as part of the Future Balancing Programme which forms part of the ESO's RIIO business plan.

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 AO (d)?	Better facilitates AO (e)?	Overall (Y/N)
Original	Neutral	Neutral	Neutral	Neutral	Yes	Yes

Voting Statement

The changes that would have been implemented by unimplemented aspects of GC0068 seem to have been overtaken by events and it now seems appropriate to draw a line under those unimplemented aspects and create a cleaner starting point from which future changes can be made.

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	No	No	No	Neutral	Neutral	No

Voting Statement

Given the original GC0068 report and the Authorities decision letter clearly states there were benefits in implementing GC0068 to grid code objectives a, b & c which this modification is unwinding, so this modification cannot be better facilitating these objectives.

It is very difficult to understand how after 9 years the ESO cannot implement changes which allow full electronic dispatch and are still relying on faxes and requesting data nobody is using.

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	Neutral	Neutral	Neutral	Neutral	Yes	Yes

Voting Statement

By clearing legacy requirements it allows for new requirements to be proposed.

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	No	No	No	No	No	No

Voting Statement

1. The Grid Code changes made in GC0608 but unimplemented are proposed to be removed under GC0158 with the promise of something else in the future to replace them in a more cost-effective way. There is no reason to implement this Grid Code change until that replacement is in place, therefore I am voting against the change.

2. The DFMR report is confusing, muddled and leaves more questions than answers:

a. It references the “trigger” to implementing the text but does not reference where this “trigger” appears in the Grid Code. It references the go-live of the

Electricity Balancing System (EBS) as this trigger, but the EBS is not referenced in the Grid Code.

b. It references “an internal NGENO Challenge and Review into Dynamic SIL & SEL Grid Code Modification in January 2021” but does not provide a copy, reference, or link.

c. It references “Dynamic SIL/ SEL” but does not explain if this is the only matter that is being removed from the Grid Code.

d. It states “costs and complexity have increased” without any reference or evidence.

e. It states “The fundamental underlying assumptions in the original CBA which estimated costs at £700k were insufficiently robust “ with no evidence or reference.

f. It States that “Dynamic Parameters will be able to be implemented in the future” and references a “future balancing” web page which links to a report “Balancing Strategic Review Report” which does not mention Dynamic Parameters.

g. It references a “a Feasibility & Analysis report on how faxes may be replaced” without providing any reference or link.

h. It states, “pursuing this now would have a negative opportunity cost,” but it is not clear what “this” is or how it relates to GC1058.

i. The report suggests that the Grid Code is driving development of an IT delivery in an “aging architecture” – but the GC0608 changes have been not implemented since 2014 and nothing is highlighted that would prevent NGENO ceasing such IT development.

j. It suggests that it is “30 minutes” to read the report and annexes. Yet the report has the following references.

- i. Annex 1 proposal
- ii. GC0068 Authority Decision Letter 3rd March 2014
- iii. • GC0126 Proposal Form 1st April 2019
- iv. • Elexon BSC Issue 98 WG report 9th June 2022
- v. • October 2021 Grid Code Review Panel Meeting Minutes
- vi. Annex 2: GC0068 Legal Text
- vii. GC0158 Self-governance report
- viii. Code Admin Consultation response ESO
- ix. Code Admin Consultation response ESO
- x. Code Admin Consultation response ESO
- xi. the Future Balancing project.
- xii. the BSC Issue 98 ‘Review of current practice of setting Dynamic Parameters within the Balancing Mechanism’
- xiii. BSC modification P373
- xiv. GC0068: Grid Code New and Revised Unit Data and Instructions
- xv. GC0126: Implementing Profiled Stable Import and Export Limits, and reversing unimplemented aspects of GC0068
- xvi. Super SEL.

k. I request that future DFMRs state the number of pages to be read in the document suite to avoid misleading readers that this is a 30-minute read.

3. An Annex states “No changes to the Grid Code are to be made because of this Modification;” which adds to the confusion created by the Mod.

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	Neutral	Neutral	Neutral	Neutral	Neutral	Yes	Yes	Yes	Yes	Yes
Voting Statement										
This modification will allow the removal of unimplemented elements of GC0068, allowing any future implementation of similar activities through the future balancing programme to be produced without pretence.										

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	Neutral	Neutral	Neutral	Neutral	No	Neutral	No	Neutral	No	No
Voting Statement										
It is understood that this modification proposes to delete unimplemented aspects of GC0068, however, these aspects have previously been approved. I am voting against this proposal as I believe it is better to retain the text (albeit unimplemented) so that the previous modifications are not lost until an updated implementation is proposed.										

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	Neutral	Neutral	Neutral	Neutral	Neutral	Yes	Yes	Yes	Yes	Yes
Voting Statement										
Reversing the unimplemented aspects of GC0068 will provide an appropriate base from which to further develop the relevant systems.										

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	Neutral	Neutral	Neutral	Neutral	Neutral	Yes	Yes	Yes	Yes	Yes

Voting Statement

Reversing the unimplemented aspects of GC0068 provides a fresh starting point for future modifications aimed at incorporating dynamic data into the balancing system.

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	No	No	Yes	Neutral	Yes	No

Voting Statement

The suggested changes within the grid code legal text are considered generic enough to facilitate/support any new developments which might be suggested in the future balancing project. There has been benefits mentioned in the previous mod proposal and it is unclear how they will be taken into account within the new framework. In addition, the current legal text requires consideration of changes to NGET usage after the separation.

Vote 2 – Which option is the best?

Panel Member	BEST Option?	Which objectives does this option better facilitate? (If baseline not applicable).
Alan Creighton	Original	(e)
Alastair Frew	Baseline	
Christopher Smith	Original	(e)
Guy Nicholson	Baseline	
Jamie Webb	Original	(e)
John Harrower	Baseline	
Robert Longden	Original	(e)
Roddy Wilson	Original	(e)
Sigrid Bolik	Baseline	

Panel conclusion

The Panel, by a narrow majority, 5 votes to 4 votes, determined that the Proposer's solution should be implemented.

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

06 December 2022

Date decision required by

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
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

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.