












BSC Modification Proposal Form		At what stage is this document in the process?
<h1>P408</h1> <h2>Mod Title: Simplifying the Output Usable Data Process as a consequence of GC0130</h2>		<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="border: 1px solid green; background-color: #2e8b57; color: white; padding: 5px; display: flex; align-items: center; justify-content: space-between;">01 Modification</div> <div style="border: 1px solid blue; padding: 5px; display: flex; align-items: center; justify-content: space-between;">02 Workgroup Report</div> <div style="border: 1px solid purple; padding: 5px; display: flex; align-items: center; justify-content: space-between;">03 Draft Modification Report</div> <div style="border: 1px solid orange; padding: 5px; display: flex; align-items: center; justify-content: space-between;">04 Final Modification Report</div> </div>
<p>Purpose of Modification:</p> <p>Grid Code (GC) Modification GC0130 seeks to simplify the process for Generators to submit outage information to National Grid Electricity System Operator (NGESO), and to reduce duplication in the data submission process. This data is used by NGESO to calculate National Output Usable¹, as well as Margin and Surplus data which is published on the Balancing Mechanism Reporting Service (BMRS) as required by Section Q of the Balancing and Settlements Code (BSC). As part of GC0130, some additional data will be published, and other data that is not widely used by industry will no longer be published. This Modification seeks to modify Section Q to reflect the Grid Code changes: removing the obligations on NGESO in the BSC to publish data that is no longer mandated to be published by the Grid Code; adding obligations to publish the new data; and simplifying the obligations around the existing data.</p>		
	<p>The Proposer recommends that this Modification should:</p> <ul style="list-style-type: none"> be a Self-Governance Modification Proposal be sent directly into the Report Phase <p>This Modification will be presented by the Proposer to the BSC Panel on 14 May 2020. The Panel will consider the Proposer's recommendation and determine how best to progress the Modification.</p>	
	<p>High Impact:</p> <p>None</p>	

¹ NGESO receive data from individual generators to aggregate and provide data on total generation availability

	Medium Impact: NGESO, Balancing Mechanism Reporting Agent (BMRA)
	Low Impact: Generators, BMRS Users

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3 Relevant Objectives	8	 020 7380 4304
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5 Governance	12	Proposer's representative: <i>Will Jones</i>
Timetable		 <i>william.jones4@nationalgrid.com</i>
The Proposer recommends the following timetable:		 01189363365
Initial Written Assessment presented to Panel	14/05/2020	Proposer's alternative: <i>Milo Paris-Jones</i>
Report Phase Consultation	18/05/2020 - 01/06/2020	 <i>Milo.Paris-Jones@nationalgrid.com</i>
Draft Modification Report presented to Panel	11/06/2020	 07826513913
Final Modification Report published	15/06/2020	

1 Why Change?

What is the issue?

Grid Code Modification GC0130: “OC2 Change for simplifying ‘output useable’ data submission and utilising REMIT data” seeks to simplify the process for Generators to submit outage information to NGENSO, and to reduce the need for data to be entered into more than one system. This data is used by NGENSO to calculate National Output Usable, as well as margin and surplus data. This data is sent by NGENSO to ELEXON, for publication on the BMRS as required by Section Q of the BSC.

The current process, defined in [Grid Code OC2](#), is highly complex, with different data for different time frames being supplied by generators at different times of the year and on different days of the week. Data is currently submitted to NGENSO through a web based application called TOGA (Transmission Outage and Generator Availability). This is now obsolete and NGENSO are looking to decommission the system and the Generator availability function will be replaced by a new system called electricity Generator Availability & Margin Analysis (eGAMA)

Once NGENSO have received the data from individual generators they aggregate the data and provide data on total generation availability (“Output Usable”) to the BMRA, along with generation margin and surplus as well as Output Usable by fuel type and by Balancing Mechanism (BM) Unit. The data is provided for 2-14 days ahead at daily resolution and for 2-52 weeks ahead at weekly resolution. NGENSO also send Output Usable data for up to five years ahead to the BMRA twice a year. Output Usable is currently provided at both a national level and broken down by constraint zones.

In addition to the TOGA process, which runs every working day, Generators are also required by the [EU Regulation on Energy Market Integrity and Transparency \(No 1227/2011\)](#) (REMIT) to submit similar outage data to the [European Network of Transmission System Operators for Electricity \(ENTSO-E\)](#). Most GB Generators covered by the REMIT regulations use ELEXON’s REMIT platform to submit the data to ENTSO-E. There are some Generators and Interconnectors who use alternative methods to submit the data, and some smaller Generators that are required to provide data to NGENSO under OC2 are not required to provide data under REMIT.

Under GC0130, most Generators providing data to the ELEXON REMIT platform will no longer be required by the Grid Code to submit data directly to NGENSO as well. NGENSO will use the Application Program Interface (API) on the REMIT platform to obtain the data they require. Other users will only be required to submit data via eGAMA upon change rather than the current process which requires them to submit the data on a daily basis.

It should be noted that while GC0130 discusses the use of TOGA, the OC2 legal text only places obligations on the provision of data and not the delivery method.

Under the current process, the Grid Code requires NGENSO to provide Generators with the Output Usable, margin and surplus data, and the BSC requires NGENSO to publish to the market the same data that they send to Generators. Both codes have separate obligations relating to each timescale.

Under the GC0130 proposal, there will be a single requirement in the Grid Code for NGENSO to publish Output Usable (including by fuel type and BM unit), margins and

surpluses daily to the BMRA. The data will be sent for just two timescales, 2-14 days ahead at daily resolution and 2 weeks to 156 weeks (three years) ahead at weekly resolution.

The GC0130 Modification Proposal form raised by NGENSO states that the Zonal Output Usable process is out of date and no longer used, and also states that data beyond 3 years ahead is very inaccurate and therefore not adding value. Also 3 years ahead is in line with the REMIT requirements. Consequently, GC0130 proposes data beyond 3 years and zonal information is removed.

This BSC Modification is being raised to ensure continuing alignment of Grid Code and BSC processes.

If GC0130 is approved, but this Modification is not made, then NGENSO will be required to publish data under the BSC code that they do not have, and that they would have no rights under the Grid Code to obtain.

The change is being driven by Grid Code Modification GC0130, which itself is driven by a desire from the industry to simplify an overly complex and burdensome process, removing unnecessary duplication of effort and a requirement from NGENSO to replace an obsolete IT system.

NGESO and the BMRA are directly impacted by this Modification. NGENSO; through changes in the obligations to publish data, and the BMRA through the need to process the changed data flows.

Users of the BMRS system will see some changes to the data available on the website, with the loss of Zonal Output Usable and four and five year ahead Output Usable, and the addition of margin, surplus and Output Usable by fuel type and by BM unit data for two and three years ahead. They will also see increased frequency of data refresh, from working day for 2-14 day ahead data, weekly for 2-52 week ahead data and twice yearly for the 2-3 ahead data to daily for all timescales.

Generators are impacted by the Grid Code Modification, as this changes how they provide data to NGENSO. There is less impact directly from this BSC Modification, although due to the decommissioning by NGENSO of the TOGA system Generators will now need to access Output Usable data through the BMRS rather than having the option to access the data through TOGA, meaning that they are impacted by the changes to the BMRS in the same way as all current BMRS users.

Desired outcomes

1. Continued alignment of Grid Code and BSC processes
2. Improved market transparency and efficiency through provision of additional Output Usable, Margin and Surplus data in the two to three year ahead timescale.

2 Solution

Proposed Solution

Changes to BSC

Modify Section Q 6.1 of the BSC to align the obligations with those in the Grid Code. Specifically:

1. Remove references to Zonal Output Usable from 6.1.1
2. Move references to Surplus and Margin from 6.1.2 to 6.1.2A. This is because 6.1.2 refers to publication of Demand Forecast which are governed by Grid Code OC1 which is not being changed by GC0130, and so publication of demand forecasts will remain at weekly frequency, while publication of Surplus and Margin are governed by OC2 and so are moving to daily frequency. Paragraph 6.1.2 now relates to publication of data in OC1, and paragraph 6.1.2A covers publication of data from OC2. Also simplify language in 6.1.2 to be the same as 6.1.2A. This paragraph relating to 2 to 52 weeks is retained in order to minimise impact on the BMRS. The BMRS Change Board have stated that they wish to retain the existing 2-52 week screens, and so the current 2-52 week data flows will be maintained in parallel with the 2 week to 156 week (3 Year) Ahead data flow specified by GC0130.
3. Change the frequency of publication in 6.1.2A from 1700 hours on the last Business Day of the week to at least daily (up to hourly) by 1600 hours each day, to align with Grid Code. Add Surplus and Margin as noted above. Delete references to Zonal Output Usable
4. Delete 6.1.2B as this relates to a 2-49 Day Ahead process not run by NGENSO for many years.
5. Combine 6.1.4 and 6.1.4A to cover 2-14 Day Ahead for Output Usable, including by Fuel Type and by BM Unit, Margin and Surplus. Set frequency to at least once a day (by 1600) and up to once an hour.
6. Mark 6.1.4A as Not Used
7. Modify 6.1.4B to refer to 2 to 156 Week Ahead rather than 1 to 2 year ahead and 3 to 5 year ahead. Remove references to Zonal Output Usable and add references to Output Usable by Fuel Type and by BM Unit, Margin and Surplus. Change frequency from not less than twice each calendar year to at least once a day (by 1600) and up to once an hour.

Delete the definition of Zonal Output Usable from Section X-2.

Changes to BMRS

Changes will be required to the BMRS to reflect the changes in the data supplied from NGENSO.

The table below shows the data flows that are impacted by GC0130. In summary, the data is simplified so that all five sets of data (Output Usable, margin, surplus, Output Usable by fuel type and Output Usable by BMU) will all be sent every day for both 2-14 days at daily resolution, and 2 weeks to 156 weeks (three years) ahead at weekly resolution. Zonal Output Usable, will no longer be sent.

	2-14 Day	2-49 Day	2-52 Week	Year 1	Year 2	Year 3	Year 4	Year 5	2-156 Weeks
National Output Usable	Unchanged	Already Obsolete	Unchanged	Delete	Delete	Delete	Delete	Delete	New
	NOU2T14D	NOU2T49D	NOU2T52W	NOUY1	NOUY2	NOUY3	NOUY4	NOUY5	NOU2T3YW
Zonal Output Usable	Delete	Already Obsolete	Delete	Delete	Delete	Delete	Delete	Delete	
	ZOU2T14D	ZOU2T29D	ZOU2T52W	ZOUY1	ZOUY2	ZOUY3	ZOUY4	ZOUY5	
National Surplus	Unchanged		Unchanged						New
	OCNMFD		OCNMF2W						OCNMF3Y
National Margin	Unchanged		Unchanged						New
	OCNMF2D		OCNMF2W						OCNMF3Y2
Output Usable by Fuel Type	Unchanged		Unchanged						New
	FOU2T14D		FOU2T52W						FOU2T3YW
Output Usable by BMU & Fuel Type	Unchanged		Unchanged						New
	UOU2T14D		UOU2T52W						UOU2T3YW
National Demand	Unchanged		Unchanged						
	NDFD		NDFW						
Transmission System Demand	Unchanged		Unchanged						
	TSDFD		TSDFW						

The existing 2-52 week files will continue to be sent by NGENSO, in order to have minimum impact on the BMRS. In addition five new files will be sent covering 2-156 weeks. Each file will be in the same format as the corresponding 2-52 week file.

The following changes will be made to individual screens on the BMRS:

Generation – 2-14 Day Ahead Output Usable	Delete Zonal Tab
Generation – 2-52 Week Ahead Output Usable	Delete Zonal Tab
Generation – 1-5 Year Ahead Output Usable	Change name to 2 to 156 Week Ahead Output Usable Delete Zonal Tab Delete 1 Year Ahead to 5 Year Ahead buttons Delete Table Retain XML/CSV download buttons for NOU. Add XML/CSV download buttons for National Surplus Add XML/CSV download buttons for National Margin Add XML/CSV download buttons for OU by Fuel Type Add XML/CSV download buttons for OU by BM Unit
Demand – 2-14 Day Ahead	Unchanged. Retain Surplus and Margins on this screen
Demand – 2-52 Week Ahead	Unchanged. Retain Surplus and Margins on this screen

An API will also be added to download 2-156 week data for Output Usable, margin, surplus, Output Usable by Fuel Type and Output Usable by BMU.

Changes to Code Subsidiary Documents

As a consequence of the changes to the BMRS and the data flows from NGENSO, it will be necessary to update the NETA Interface Definition and Design: Part 1, Interfaces with BSC Parties and their Agents document to reflect the changes to data flows from NGENSO to BMRA. Specifically:

1. in Section 4.2 delete paragraphs on Zonal Output Usable (OU) 2-14 Day; delete National and Zonal OU 2-49 day; delete zonal 2-52 week; delete national OU 4 and 5 year ahead; delete zonal OU 1 to 5 year ahead; insert Nat OU by fuel type and BM unit for 2 to 156 weeks; insert Generating Plant Demand Margin 2 to 156 weeks; insert Nat Surplus forecast for 2 to 156 weeks.
2. In Section 4.12.1 add rows for BMRA-I005 for OU by Fuel Type; OU by Fuel Type and BM Unit; Surplus Forecast and Generating Plant Demand Margin for 2 to 156 Weeks Ahead.
3. Add entries for 2-156 Weeks Ahead for 4.12.4.52, 4.12.4.77, 4.12.4.87, 4.12.4.111 and 4.12.4.147
4. Add entries for 2 -156 Weeks Ahead mirroring sections 4.12.5.2, 4.12.5.60, 4.12.5.63 and 4.12.5.64 which all refer to 2 to 52 Week Ahead.
5. Add duplicate of 4.13.5.4 and 4.13.5.5 covering 2-156 Weeks Ahead rather than 2 – 52 Weeks Ahead
6. Delete section 4.13.6.2 (refers to 2-49 Day Ahead which is now obsolete)
7. Replace 4.13.6.4 (National Output Usable (1 year ahead) with equivalent for 2-156 Weeks ahead
8. Delete 4.13.6.5 and 4.13.6.6 National OU (2 years ahead)
9. Delete 4.13.6.7 National OU (3 years ahead)
10. Delete 4.13.6.8 National OU (4 years ahead)
11. Delete 4.13.6.9 National OU (5 years ahead)
12. Delete sections 4.13.6.10 to 4.13.6.17 inclusive - all relate to Zonal Output Usable
13. Add duplicates of 4.13.6.20 and 4.13.6.21 covering 2-156 Weeks Ahead rather than 2 – 52 Weeks Ahead

In addition, NGENSO will update their BMRA & SAA Interface Specification document.

Benefits

This Modification is a necessary consequence of Grid Code Modification GC0130. Taken together these modifications improve efficiency by removing the need for most Generators to enter outage data into two separate systems (REMIT and TOGA).

The TOGA system is obsolete and needs to be replaced. These Modifications offer a route whereby most Generators will not need to develop IT systems to interface with eGAMA (the TOGA replacement system), providing a saving to Generators. Creating a new, automated TOGA replacement system also provides a cost saving to NGENSO.

The provision of additional data for two and three years ahead, and the increased frequency of updating the data improves market transparency and efficiency.

3 Relevant Objectives

Impact of the Modification on the Relevant Objectives:	
Relevant Objective	Identified impact
a) The efficient discharge by the Transmission Company of the obligations imposed upon it by the Transmission Licence	Positive
(b) The efficient, economic and co-ordinated operation of the National Electricity Transmission System	Positive
(c) Promoting effective competition in the generation and supply of electricity and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity	Positive
(d) Promoting efficiency in the implementation of the balancing and settlement arrangements	Neutral
(e) Compliance with the Electricity Regulation and any relevant legally binding decision of the European Commission and/or the Agency [for the Co-operation of Energy Regulators]	Neutral
(f) Implementing and administrating the arrangements for the operation of contracts for difference and arrangements that facilitate the operation of a capacity market pursuant to EMR legislation	Neutral
(g) Compliance with the Transmission Losses Principle	Neutral

Objective (a)

The [Standard Condition C17 of the Transmission Licence](#) requires NGENSO to comply with the [Security and Quality of Supply Standards \(SQSS\)](#). Section 5 of the SQSS requires NGENSO to operate the system such that it is secured against a range of fault outages. The analysis necessary to meet this condition requires generator outage data that is provided to NGENSO by Generators under Grid Code OC2. Ensuring timely, high quality outage data through the changes introduced by these modifications thus supports NGENSO in the efficient discharge of the obligations imposed on it by the Transmission Licence.

In addition, Appendix C of the SQSS refers to Plant Margins, which are determined from the Output Usable data obtained via OC2. Ensuring timely, high quality Output Usable data through the changes introduced by these modifications thus also supports NGENSO in the efficient discharge of the obligations imposed on it by the Transmission Licence.

Objective (b)

The Introduction to Grid Code OC2, Operational Planning and Data Provision, states that OC2 is concerned with the co-ordination of the release of Power Generating Modules ... for construction, repair and maintenance. Improving the efficiency of the

OC2 process through these modifications thus supports NGENSO in the efficient, economic and co-ordinated operation of the National Electricity Transmission System.

Objective (c)

Transparency supports market efficiency and competition. The publication of additional market information in the 2-3 year ahead timescales will improve transparency and thus promote effective competition in the generation and supply of electricity. Customer feedback to NGENSO and analysis of BMRS usage statistics suggests that the zonal data and year 4 and 5 Output Usable data are not significantly used by industry, and so their removal is unlikely to have any adverse impact on competition.

4 Potential Impacts

Impacts on Core Industry Documents

Impacted Core Industry Documents			
<input type="checkbox"/> Ancillary Services Document	<input type="checkbox"/> Connection and Use of System Code	<input type="checkbox"/> Data Transfer Services Agreement	<input type="checkbox"/> Use of Interconnector Agreement
<input type="checkbox"/> Master Registration Agreement	<input type="checkbox"/> Distribution Connection and Use of System Agreement	<input type="checkbox"/> System Operator Transmission Owner Code	<input type="checkbox"/> Supplemental Agreements
<input type="checkbox"/> Distribution Code	<input checked="" type="checkbox"/> Grid Code	<input type="checkbox"/> Transmission License	<input type="checkbox"/> Other (please specify)

This Modification is being raised as a consequence of a Grid Code Modification and so there is an impact on the Grid Code.

Impacts on BSC Systems

Impacted Systems				
<input type="checkbox"/> CRA	<input type="checkbox"/> CDCA	<input type="checkbox"/> PARMS	<input type="checkbox"/> SAA	<input checked="" type="checkbox"/> BMRS
<input type="checkbox"/> EAC/AA	<input type="checkbox"/> FAA	<input type="checkbox"/> TAAMT	<input type="checkbox"/> NHHDA	<input type="checkbox"/> SVAA
<input type="checkbox"/> ECVAA	<input type="checkbox"/> ECVAA Web Service	<input type="checkbox"/> ELEXON Portal	<input type="checkbox"/> Other (Please specify)	

As detailed above, the Grid Code Modification will change the data available to be published on the BMRS, and so this consequential Modification will have an impact on the BMRS.

Impacts on BSC Parties

Impacted Parties			
<input type="checkbox"/> Supplier	<input type="checkbox"/> Interconnector User	<input type="checkbox"/> Non Physical Trader	<input checked="" type="checkbox"/> Generator
<input type="checkbox"/> Licensed Distribution System Operator	<input checked="" type="checkbox"/> National Electricity Transmission System Operator	<input type="checkbox"/> Virtual Lead Party	<input checked="" type="checkbox"/> Other (Please specify) BMRS Users

This Modification in conjunction with Grid Code Modification GC0130 will ease the burden of data provision to NGENSO by Generators. It will allow NGENSO to build an automated replacement system for TOGA. It improves the data available to all BMRS Users.

Legal Text Changes

The legal text changes are outlined in Section 2. Full legal text changes are attached to this proposal.

5 Governance

This proposal should be treated as a Self-Governance proposal, as in isolation it does not materially impact any of the Self-Governance criteria. This modification makes some minor changes to the BSC and BMRS as a consequence of Grid Code Modification GC0130. The Grid Code modification was approved as Self-Governance by the Grid Code Review Panel.

Self-Governance

<input type="checkbox"/> Not Self-Governance – A Modification that, if implemented materially impacts:	
<input type="checkbox"/> the Code's governance or modification procedures	<input type="checkbox"/> sustainable development, safety or security of supply, or management of market or network emergencies
<input type="checkbox"/> competition	<input type="checkbox"/> existing or future electricity consumers
<input type="checkbox"/> the operation of national electricity Transmission System	<input type="checkbox"/> likely to discriminate between different classes of Parties
<input checked="" type="checkbox"/> Self-Governance – A Modification that, if implemented:	
Does not materially impact on any of the Self-Governance criteria provided above	

The modification has no impact on the Code's governance or modification procedures or existing or future electricity consumers, and is not likely to discriminate between different classes of Parties. It will not impact sustainable development or management of market or network emergencies.

In isolation the BSC Modification does not have a material impact on security of supply as all the data covered by the Modification is already available to NGENSO. Similarly in isolation it does not materially impact the operation of the National Electricity Transmission System as the data available to NGENSO for the operation does not change. The modification facilitates an improvement in the efficiency of how this information is obtained, but does not impact or change the existence of the information.

There will be some impact on competition through improved market transparency in years 2 and 3, however this is not judged to be material so as to justify not treating the modification as Self-Governance.

Progression route

<input type="checkbox"/> Submit to assessment by a Workaroup –:A Modification Proposal which:	
does not meet any criteria to progress via any other route.	
<input checked="" type="checkbox"/> Direct to Report Phase – A Modification Proposal whose solution is typically:	
<input checked="" type="checkbox"/> of a minor or inconsequential nature	<input type="checkbox"/> deemed self-evident

Fast Track Self-Governance – A Modification Proposal which meets the Self-Governance Criteria and:

is required to correct an error in the Code as a result of a factual change including but not limited to:

updating names or addresses listed in the Code

correcting minor typographical errors

correcting formatting and consistency errors, such as paragraph numbering

updating out of date references to other documents or paragraphs

Urgent – A Modification Proposal which is linked to an imminent issue or current issue that if not urgently addressed may cause:

a significant commercial impact on Parties, Consumers or stakeholder(s)

a Party to be in breach of any relevant legal requirements.

a significant impact on the safety and security of the electricity and/or gas systems

It is recommended that this modification be progressed direct to the Report Phase. This modification makes the consequential changes necessary to the BSC as a result of Grid Code modification GC0130 i.e. GC0130 determines what needs to be published. The Grid Code modification went through the Work Group phase, and so industry has already had the opportunity through the work group and the work group consultation to feed into the overall solution across the codes. It would be inefficient to ask the industry to resource a second Workgroup to discuss the same topic, particularly where the BSC changes are minor.

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

This modification does not impact a Significant Code Review (SCR) or other significant industry change project.

Does this modification impact on end consumers or the environment?

This modification does not impact on end consumers or the environment.

Implementation approach

NGESO have requested that if possible this modification be implemented in the November 2020 release. The BMRA, CGI, have advised that the current earliest achievable implementation date for the changes to the BMRS is February 2021 at a cost of £148k. Work is ongoing to ensure that BMRS implementation will be aligned with the NGESO replacement platform go-live date.