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## Workgroup Consultation Response Proforma

### GC0139: Enhance Planning-Data Exchange to Facilitate Whole System Planning

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@nationalenergyso.com](mailto:grid.code@nationalenergyso.com) by **5pm on 21 January 2025**. 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 [grid.code@nationalenergyso.com](mailto:grid.code@nationalenergyso.com)

| Respondent details                             | Please enter your details   |   |
|--|---|---|
| <b>Respondent name:</b>                        | Phil Moseley  |   |
| <b>Company name:</b>                           | National Grid Electricity Distribution  |   |
| <b>Email address:</b>                          | pjmosley@nationalgrid.co.uk   |   |
| <b>Phone number:</b>                           | +44 (0)7709 838074  |   |
| <b>Which best describes your organisation?</b> | <input type="checkbox"/> Consumer body<br><input type="checkbox"/> Demand<br><input checked="" type="checkbox"/> Distribution Network Operator<br><input type="checkbox"/> Generator<br><input type="checkbox"/> Industry body<br><input type="checkbox"/> Interconnector | <input type="checkbox"/> Storage<br><input type="checkbox"/> Supplier<br><input type="checkbox"/> System Operator<br><input type="checkbox"/> Transmission Owner<br><input type="checkbox"/> Virtual Lead Party<br><input type="checkbox"/> Other |

#### I wish my response to be:

(Please mark the relevant box)

☒ **non-confidential** (*this will be shared with industry and the Panel for further consideration*)

☐ **Confidential** (*this will be disclosed to the Authority in full but, unless specified, will not be shared with the Workgroup, Panel or the industry for further consideration*)

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**For reference the Applicable Grid Code Objectives are:**

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

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### 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? | Mark the Objectives which you believe the Original Solution better facilitates:  |
|   |  | Original <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input checked="" type="checkbox"/> E   |
|   |  | Yes, although the benefits are unlikely to be realised immediately after implementation.   |
| 2 | Do you support the proposed implementation approach?   | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No   |
|   |  | Click or tap here to enter text.   |
| 3 | Do you have any other comments?  | Yes, please see the table provided under Other Comments.   |
| 4 | Do you wish to raise a Workgroup Consultation Alternative Request for the Workgroup to consider?                         | <input type="checkbox"/> Yes (the request form can be found in the <a href="#">Workgroup Consultation</a> Section)<br><input checked="" type="checkbox"/> No |
|   |  | Click or tap here to enter text.   |
| 5 |  | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No   |

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|   | Does the draft legal text satisfy the intent of the modification?   | Several minor typographical errors that require correction are noted.  |
| 6 | Do you agree with the Workgroup's assessment that the modification does not impact the Electricity Balancing Regulation (EBR) Article 18 terms and conditions held within the Code? | <input checked="" type="checkbox"/> Yes<br><input type="checkbox"/> No |

## Specific Workgroup Consultation questions

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|---|--|--|
| 7 | Do you agree that Option 4 represents to the best solution to providing an enhanced data exchange without a significant increase in the number of forecasting schedules exchanged?       | Yes, although NESO and/or TOs may wish some Network Operators to provide BSP demand (option 1) in certain cases. This could be where the behaviour of sub-transmission and transmission systems are highly dependent on each other. This appears to be provided for in PC.9.3.1. |
| 8 | Adoption of the GSR029 definitions and reporting against these definitions ahead of approval of the GSR029 proposals represents a risk that PC annual exchanges will not be aligned with | Yes, I agree there is a risk but it is marginal and can be effectively managed with ad-hoc data exchanges, where necessary.  |

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|    | existing SQSS requirements. Do you agree that the risk is minimal and can be managed with ah-hoc data exchanges?  |  |
| 9  | This modification proposal relates to annual planning data exchanges only. The provision of data to support a new connection (PC.4) will remain unchanged and not directly supported with CIM models. This is because the data requirements within PC.4 are not covered by CGMES v3 and would require significant extensions not justified by the benefits. Do you agree with this position of the Workgroup? | Yes, in principle.   |
| 10 | Is the delivery timescale of January 2026 to transition to a CIM data exchange methodology reasonable and practically achievable?   | <p>We feel it important to highlight that Network Operators' ability to implement the CIM data exchange methodology, specified in GC0139, is critically dependent on suitable implementations being made available by software vendors sufficiently in advance of the implementation deadline. We request the following be considered and inform a revised implementation date.</p> <p><b><u>GB-CIM Implementations</u></b></p> <p>We are aware of only three software vendors having started to implement support for GB CIM. These</p> |

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|    |  | <p>implementations are still in active development and may not support all the required CIM layers/profiles by the proposed GC0139 implementation deadline.</p> <p>Additionally, support for GB-CIM will be required in software familiar to the Network Operators, and with sufficient time for them to implement the necessary internal data and processes to support the GC0139 CIM data exchange methodology.</p> <p>Therefore, we recommend engaging relevant software vendors to establish their GB-CIM implementation timescales, and for this to inform a suitable GC0139 implementation deadline.</p> <p><b><u>GB-CIM Interoperability</u></b></p> <p>Interoperability of GB-CIM files has proven challenging due to software vendors' different interpretations of GB-CIM, and of the underlying CGMES 3.0 standard.</p> <p>Establishment of a governing body for GB-CIM is seen to be crucial in overcoming these challenges, as highlighted by the consultation document and LTDS CIM and Technical CIM Working Groups.</p> <p>Whilst effort is currently being made to establish a governing body for GB-CIM, it may come with insufficient time to provide software vendors the time needed to amend their GB-CIM implementations and ensure interoperability.</p> |
| 11 | <p>Do you envisage that any costs would be incurred to implement these proposals over and above any changes associated with implementing other CIM data exchanges and those associated with the existing data exchanges?</p> | <p>GC0139 proposes Network Operators and NESO exchange enhanced levels of planning data. Whilst most of this data may be available or captured as part of existing business processes, some of the enhanced data will be specific to GC0139 and will require modification and extension of existing business processes.</p>  |

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## Other Comments

| Annex   | Document              | Section / Clause                  | Comment   | Proposal  |
|---------|-----------------------|-----------------------------------|---|---|
| N/A     | Consultation Document | Executive Summary                 | List of interactions does not include reference to LTDS Reform, who have adopted the governance role for the “GB CIM” (the informal name for CGMES 3.0 plus extensions less deviations intended) intended for grid model data exchange in the LTDS and Grid Code. Other key interacts listed later on in the document are also missing. | Consider adding interaction with LTDS Reform and other missing interactions included later on in the document.  |
| N/A     | Consultation Document | What is the solution?             | There is a figure labelled as a table, which is also too small to interpret.  | Relabel as a table and ensure readability.  |
| N/A     | Consultation Document | When will this change take place? | Have power system software vendors been consulted regarding the implementation date of 1 <sup>st</sup> January 2026?  | Clarify if consideration has been given to power system software vendors’ abilities to implement GB CIM’s requirements, and if vendors have confirmed this is realistic.  |
| Annex 1 | Proposal              | No comment                        |   |   |
| Annex 2 | Terms of Reference    | Membership                        | Table of membership is inaccurate.  | <p>If the table is intended to represent those originally involved in the workgroup then the following amendments are required:</p> <ul style="list-style-type: none"> <li>David Tuffery represented Western Power Distribution, not NGET.</li> </ul> <p>If the table is intended to represent current workgroup membership</p> |



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|               |                                  |   |   | <p>then the following amendments are required:</p> <ul style="list-style-type: none"> <li>• David Tuffery removed;</li> <li>• Liam McSweeney removed;</li> <li>• Phil Moseley (NGED) added</li> </ul> <p>References to Western Power Distribution should be replaced with National Grid Electricity Distribution.</p> |
| Annexes 3 & 7 | Various                          | Various   | Misalignment between references to schedules in legal text and those available in Annex 7. For example, 21h and 24; 21g and 23. | Provide a list of schedules and ensure correct references in legal text.  |
| Annex 3       | Glossary and Definitions (Draft) | Latent Demand                                   | Latent Demand definition uses inconsistent formatting.  | Adopt consistent formatting.  |
| Annex 3       | Glossary and Definitions (Draft) | National Electricity Transmission System Demand | National Electricity Transmission System Demand definition is presumably not indented properly.                                 | Indent last bullet point if intended.   |
| Annex 3       | Planning Code (Draft)            | PC.9.3.3.8                                      | Typographical error – no schedule number mentioned.   | Add correct schedule number, presumably 26 was intended.  |
| Annex 3       | Planning Code (Draft)            | PC.9.4.2.2.3                                    | References to PC.G.8.2, which seemingly does not exist.   | Correct – perhaps PC.G.8.1 was intended?  |
| Annex 3       | Planning Code (Draft)            | PC.10.3.1.2 & PC.10.3.1.3                       | Date and time of most recent summer NETS minimum and winter NETS peak may be available in advance of weeks 43 and 17.           | Consider altering wording to permit earlier communication of dates and times from NESO, where possible.   |
| Annex 3       | Planning Code (Draft)            | PC.G.1.3.2.1                                    | Short-circuit currents are ambiguous.   | Consider adoption of defined short-circuit current terms from IEC60909, e.g. “Initial   |

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|         |                       |                        |  | symmetrical short-circuit current ( $I''_k$ ). These clarify the format (i.e. Peak or RMS) and the time period the current is requested at. |
| Annex 3 | Planning Code (Draft) | PC.G.1.3.2.1 a) vi     | Decaying component current in ambiguous  | Clarify intended data.  |
| Annex 3 | Planning Code (Draft) | PC.G.1.3.3 a) iii) i)  | DC time constant not applicable to BS116 rated switchgear.   | Consider clarifying what ought to be provided where a DC TC is not necessarily valid/available.   |
| Annex 3 | Planning Code (Draft) | PC.G.1.3.4 a) ii) iii) | Type of tap changer is unlikely to be known in the majority of cases and is unlikely to be required where the reverse power limit is provided. | Consider removal of this requirement.   |
| Annex 3 | Planning Code (Draft) | PC.G.1.3.5 a) b)       | Length of circuit not applicable to equivalent circuits (e.g. those determined by network reduction).  | Consider making this an optional requirement.   |
| Annex 3 | Planning Code (Draft) | PC.G.1.3.5 a) c)       | Max permitted temperature at the end of the short circuit not known in many cases.   | Consider removal of this requirement.   |
| Annex 3 | Planning Code (Draft) | PC.G.1.3.5 a) g)       | Negative sequence impedance is the same as positive sequence, apart from equivalent circuits (e.g. those determined by network reduction).     | Consider making this an optional requirement.   |
| Annex 3 | Planning Code (Draft) | PC.G.1.3.5             | Zero sequence mutual coupling does not include the 'other' circuit.  | Add the 'other' circuit to which 'this' circuit is coupled.   |
| Annex 3 | Planning Code (Draft) | PC.G.1.4.1 a)          | Several parameters unavailable in many cases – v) vi) vii) viii) x) xi)  | Consider making this an optional requirement.   |

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| Annex 3 | Planning Code (Draft)     | PC.G.1.4.1  | Several parameters unavailable in many cases – xii) xiii) xv)   | Consider making this an optional requirement.   |
| Annex 3 | Planning Code (Draft)     | PC.G.1.4.2 & PC.G.1.4.3 & PC.G.1.4.4 & PC.G.1.4.5 | Insufficient attributes to fulfil the requirements of PC.9.4.1.1 b) – short-circuit calculations in accordance with EREC G74. | Add necessary attributes to fulfil requirements of PC.9.4.1.1.  |
| Annex 3 | Planning Code (Draft)     | PC.G.1.4.6 v)                                     | Load response components often unknown or assumed.  | Consider making this an optional requirement.   |
| Annex 3 | Planning Code (Draft)     | PC.G.1.4.7 a) ii)                                 | Aggregate fault current is vague and deviates from use of “short-circuit current” elsewhere in the document.                  | Elaborate on the actual short-circuit currents which are required.  |
| Annex 3 | Planning Code (Draft)     | PC.G.1.5.1 a) iii) & iv)                          | Format of required short-circuit currents is ambiguous.   | Elaborate on the actual short-circuit currents which are required.  |
| Annex 3 | Planning Code (Draft)     | PC.G.1.5.2 a) ii) & iii)                          | Format of required short-circuit currents is ambiguous.   | Elaborate on the actual short-circuit currents which are required.  |
| Annex 3 | Planning Code (Draft)     | PC.G.9.1  | Planning Code Data Exchange Timeline is very helpful, but could be simplified.  | There are a few lines that are unnecessarily crossed (e.g. Previous Winter MD Date & Time overlaps the Week 28 data flow). Remove unnecessary overlaps. |
| Annex 3 | DRC (Draft)               | (PC.9) Schedules 23 to 30B                        | Title of the screenshot in the document does not align with the title of the document itself.                                 | Correct the titles for all schedules as appropriate, paying particular attention to the inclusion or exclusion of generation equalling 1 MW.            |
| Annex 4 | Consultation Presentation | Various   | Diagrams and tables useful to understand proposal and changes.  | Consider further use of such diagrams and table when explaining the change.   |
| Annex 5 | Costs and Implementation  | No comment  |   |   |

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| Annex 6 | Data Exchange Options | N/A                             | It was only clear what each option was intending to optimise after reviewing all four.   | Consider adding a summary slide.   |
| Annex 6 | Data Exchange Options | 28 User's Total System Active   | No comment   |  |
| Annex 6 | Data Exchange Options | 29a Auto Low Freq Disconn       | No comment   |  |
| Annex 7 | DRC Schedules         | 12B High Risk Dem Reduc         | Appears to be a duplicate of 29b High Risk Demaand [sic] Red   | Remove from Annex.   |
| Annex 7 | DRC Schedules         | 27a, 27b, 27c                   | Heading in document PC Table states 'Power Levels (MW)' but states 'Active Power (MW)' in schedules. States 'Active Power Demand' in PC Legal text | Standardise wording in PC and schedule.  |
| Annex 7 | DRC Schedules         | 29b High Risk Demaand [sic] Red | Demand is misspelled.  | Correct spelling.  |
| Annex 7 | DRC Schedules         | 29c Emerg Man Dem Disconn       | No comment   |  |
| Annex 7 | DRC Schedules         | 21a, 21b, 21c, 21d, 21e, 22     | Schedule is misaligned with output from SCG BSC Subgroup 6.  | Consider alignment with findings SCG BSC Subgroup 6 output, particularly ESS access rights under transmission circuit outages. |
| Annex 7 | DRC Schedules         | 21a, 21b, 21c, 21d, 21e, 22     | Missing reference to PC clause for "Applicable Energy Source" so uncertain what is 'applicable'.   | Add reference to relevant PC clause.   |
| Annex 7 | DRC Schedules         | 21b, 22                         | Defined terms are not always fully bolded, e.g. "PSM Scenario Document".   | Review formatting of defined terms.  |
| Annex 7 | DRC Schedules         | 21i                             | Despatch is misspelled.  | Correct spelling   |
| Annex 7 | DRC Schedules         | 21i                             | Use case is not immediately clear.   | Provide justification for inclusion and example of where this data is necessary from a DNO.                                    |

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| Annex 7 | DRC Schedules | 21j | No comment |
|---------|---------------|-----|------------|