

GC0182 : Metering Polarity

Workgroup 8, 6 August 2026

Online Meeting via Teams

WELCOME

Agenda

Topics to be discussed	Lead
Introduction	Chair
Timeline	Chair
Action log review	All
Workgroup Consultation Response Review	Proposer
Legal Text Review	NESO Representative
Review Terms of Reference	All
AOB	Chair
Next Steps • Workgroup Report Review • Workgroup Vote	Chair

Objectives and Timeline

Ren Walker– NESO Code Administrator

GC0182 Timeline

Milestone	Date	Milestone	Date
Modification presented to Panel	24/07/25	Code Administrator Consultation	06/10/26 - 06/11/26
Workgroup Nominations (15 business days)	29/07/25 - 18/08/25	Draft Final Modification Report (DFMR) issued to Panel (5 business days)	18/11/26
Workgroups 1, 2, 3, 4, 5 and 6	• 15/09/25 • 20/10/25 • 25/11/25 • 20/01/26 • 09/02/26 • 23/03/26	Panel undertake DFMR recommendation vote	26/11/26
Workgroup Consultation (21 business days)	13/04/26 - 12/05/26	Final Modification Report issued to Panel to check votes recorded correctly	01/12/26 - 08/12/26
Workgroups 7,8,9,and 10	• 07/07/26 • 23/07/26 • 06/08/26 • TBC	Final Modification Report issued to Ofgem	09/12/26
Workgroup report issued to Panel	16/09/26	Ofgem decision needed by	TBC
Panel sign off that Workgroup Report has met its Terms of Reference	24/09/26	Implementation Date	TBC

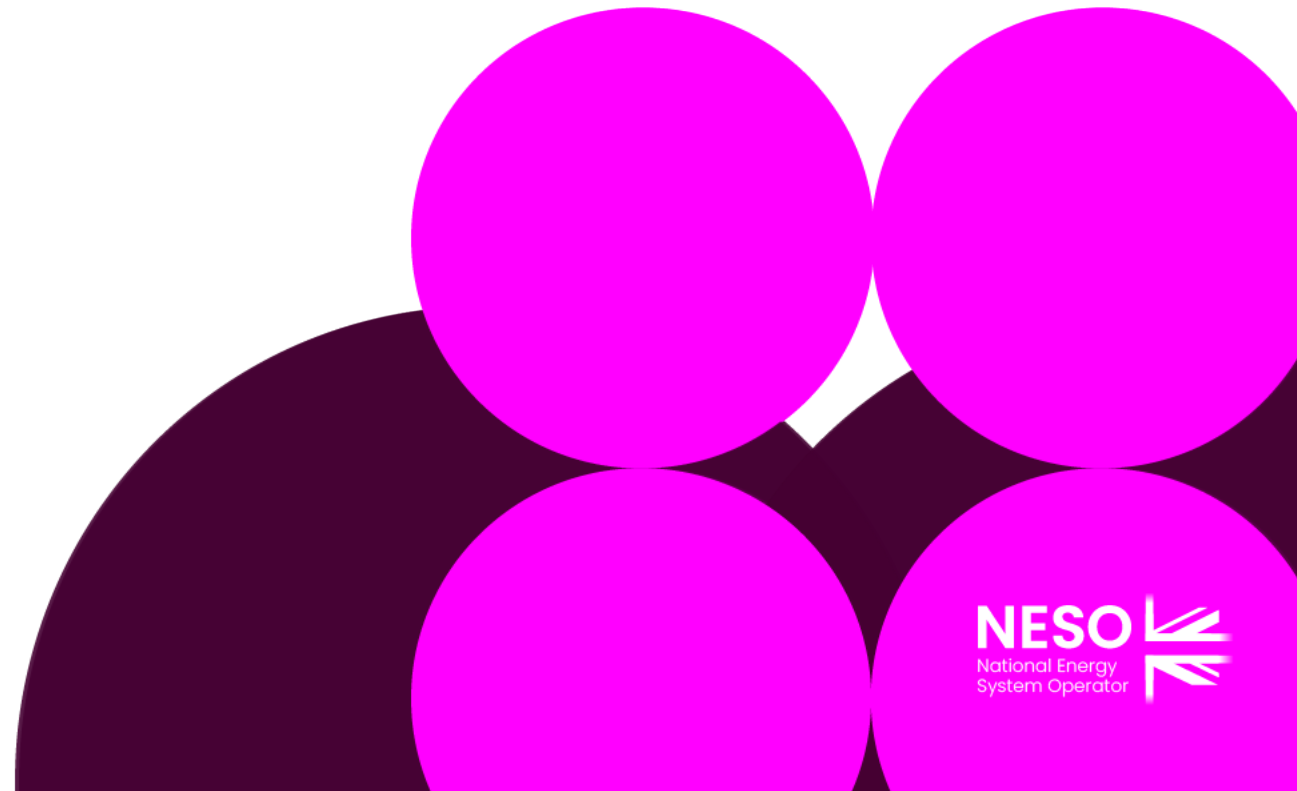
Action Log

Ren Walker– NESO Code Administrator

Action Number	Workgroup Raised	Owner	Action	Due by
46	WG7	PE/KSH	Investigate the missing Northern Power Grid consultation response, confirm whether it was received within the consultation window, and ensure it is reviewed at the next workgroup meeting if valid. A further check will be carried out to confirm whether this was the only response missed.	WG8
47	WG7	PE	To prepare and include a slide pack for the next meeting covering the Northern Power Grid Response and any new points it raises.	WG8
48	WG7	TG/HG	To clarify whether the proposed legal text has any impact on regulated sections of the Grid Code, including Appendix B, and confirm that there are no unintended conflicts.	WG8
49	WG7	PE	To circulate the latest draft legal text with the papers for the next meeting so members can review and prepare any questions and or comments	WG8
50	WG7	PP	To investigate the appropriate approach and permissions for contacting affected parties about metering polarity issues, including how to communicate relevant guidance and potential impacts.	WG8

Workgroup Consultation Response Review

Thomas Goss – Proposer



Workgroup Consultation Responses Review

NESO comments to NPG responses:

Q2: Do you support the proposed implementation approach?

[NPG]

- We have responded 'yes', however, it would seem reasonable to include checking the operational metering polarity as part of the Compliance Process to confirm that equipment has been commissioned in accordance with the Electrical Standard. This may require changes to the CP part of the grid Code.

[NESO] Grid Code Compliance Processes (CP) / European Compliance Processes (ECP) do not go to this level of detail such as op metering polarity convention for power flow in this case, and the newly added requirement will be included in the Operational Notification Compliance Checklist (ONCC) which the NESO Compliance Account Managers deal with.

NESO Compliance have confirmed that under the ONCC check list, metering checking is already carried out so it will be captured then. This modification (GC0182) reflects Operational Metering checks including meter polarity so in future the obligations are clearer. This will be applicable for new projects going forward and historic projects which undergo a Modification or upgrade.

Changes to the ECPs and CPs are thus not required as it should be picked up as part of the ONCC process.

Workgroup Consultation Responses Review

NESO comments to NPG responses:

Q5: Does the draft legal text satisfy the intent of the modification?

[NPG]

- No. We have made comments and suggestions that are embedded in the attached versions of the legal text, which form part of our consultation response.

Whilst there are two versions of the General Conditions (GC) presented in the consultation pack, one with the proposed GC0103 changes and one without, it is worth noting that GC0103 also propose changes to CC.6.2.1.2 and ECC.6.2.1.2, hence for completeness there should be GC0103 aligned versions of the CC and ECC, not just the GC.

[NESO] We have updated the GC0182 legal text in CC and ECC and will circulate before the next Workgroup meeting.

(1) For GC0103, if GC0182 is implemented without GC0103 approved, the term Electrical Standard is still defined as “A standard listed in the Annex to the General Conditions”.

The entry of the proposed meter polarity convention will be added to the Annex to the General Conditions and can then be referred to as provided in the Electrical Standards.

If GC0103 is approved, it will introduce the term Relevant Electrical Standards and Applicable Electrical Standards whilst change the definition of Electrical Standards.

- ❑ Relevant Electrical Standards: A standard listed in Part I of the Annex to the General Conditions and as published on The Company’s Website.
- ❑ Applicable Electrical Standards: A standard listed in Part II of the Annex to the General Conditions and as published on The Company’s Website.
- ❑ Electrical Standards: An Applicable Electrical Standard or a Relevant Electrical Standard

The entry of the proposed meter polarity convention will be added to both Part I and Part II of the Annex to the General Conditions and can then be referred to as provided in the Electrical Standards regardless of if it is a Relevant or Applicable Electrical Standard.

For legal text of GC0182 in both CC and ECC, we already make the statement general by referring to “Metering Polarity Convention for Power Flow Data as provided for in the Electrical Standards” and thus it should not be tied to GC0103.

Workgroup Consultation Responses Review

NESO comments to NPG responses:

Q5: Does the draft legal text satisfy the intent of the modification?

[NPG]

- No. We have made comments and suggestions that are embedded in the attached versions of the legal text, which form part of our consultation response.
Whilst there are two versions of the General Conditions (GC) presented in the consultation pack, one with the proposed GC0103 changes and one without, it is worth noting that GC0103 also propose changes to CC.6.2.1.2 and ECC.6.2.1.2, hence for completeness there should be GC0103 aligned versions of the CC and ECC, not just the GC.

[NESO] We have updated the GC0182 legal text in CC and ECC and will circulate before the next Workgroup meeting.

- (f) **GB Code Users** shall ensure the operational metering signals from their **Plant** and **Apparatus** conforms to the Operational Metering Polarity Convention for Power Flow Data as provided for in the **Electrical Standards** when sent to **The Company**, where:

CC.6.5.6(f)

- (f) **EU Code Users** shall ensure the operational metering signals from their **Plant and Apparatus** conforms to the Operational Metering Polarity Convention for Power Flow Data as provided for in the **Electrical Standards** when sent to **The Company**, where:

ECC.6.5.6.4(f)

Workgroup Consultation Responses Review

NESO comments to NPG responses:

Q5: Does the draft legal text satisfy the intent of the modification?

[NPG]

- No. We have made comments and suggestions that are embedded in the attached versions of the legal text, which form part of our consultation response.

Whilst there are two versions of the General Conditions (GC) presented in the consultation pack, one with the proposed GC0103 changes and one without, it is worth noting that GC0103 also propose changes to CC.6.2.1.2 and ECC.6.2.1.2, hence for completeness there should be GC0103 aligned versions of the CC and ECC, not just the GC.

[NESO] We have updated the GC0182 legal text in CC and ECC and will circulate before the next Workgroup meeting.

(1) In the CC and ECC legal text, NPG queried why 540 is the appropriate number of days. NESO thought that the Compliance process typically starts 18 months (540 days) before the Completion Date and using the 540 days after GC0182 implementation date can ensure the obligation to follow the meter polarity convention will be captured at the beginning of the compliance process, even though the Connection Agreement (signed before the implementation of GC0182) did not include this requirement.

(2) In the ECC legal text, NPG queried that why not just refer to the installation (or possibly the commissioning) of the relevant operational metering equipment when specifying the scenarios in clause i and ii.
NESO discussed with NPG and was reminded of a possible situation where existing DNOs can have a new Grid Supply Point but are still classed as an GB Code User. So NESO proposed to make the CCs consistent with ECCs by adding clause ii to CC.
Please see the updated legal text.

Workgroup Consultation Responses Review

NESO comments to NPG responses:

Q7: Do you have any specific comments on the draft Metering Polarity Electrical Standard (Annex 05)?

[NPG]

- Yes. We have made comments and suggestions that are embedded in the attached versions of the legal text, which form part of our consultation response.

[NESO] We have updated the Metering Polarity Convention (Electrical Standard) based on NPG's comments.

There is a comment from NPG suggesting the following terms should be uncapitalised: Feeders, Transformers, Shunt Connected Reactive Compensation, Series Connected Reactive Compensation and Generator/Demand Connections.

NESO originally based the wording of the proposed Electrical Standard on a National Grid Construction Design Handbook, in which these terms were capitalised. The exact reason these terms were capitalised is not known, but the thought process from NESO was that this should be maintained (and that it helps the asset types to stand out and be more easily identifiable).

NESO discussed with NPG and understand the reason to use lower case for all these terms is that the audience of Electrical Standard would treat upper case terms as defined terms in Grid Code by default and using lower case ones can minimise confusion. In addition, take Generator as an example, it is a defined term in Grid Code and refers to generating plants with generation licence. But there are also other very small embedded generators which might not need a generation licence and using the lower case terms may cover more units/situations than the upper case terms.

Workgroup Consultation Responses Review

NESO comments to NPG responses:

Q9: There is a concern on signing the BCA this Standard may not actually exist and creates the potential for there to be a minor conflict between the BCA and the Grid Code concerning Generators. Do stakeholders agree that this is a reasonable low risk approach?

[NPG]

- The date that the Bilateral Agreement is signed dictates which version of the Electrical Standards is the one that applies to that connection. If, at that date, there is no Electrical Standard relating to Metering Polarity Convention for Power Flow data, then there would be no requirement to for User to comply with such a standard. We think this would be the case irrespective of the proposed change to CC/ECC6.5.6.4 (f) as the Grid Code would require for compliance with an Electrical Standard which simply didn't exist.

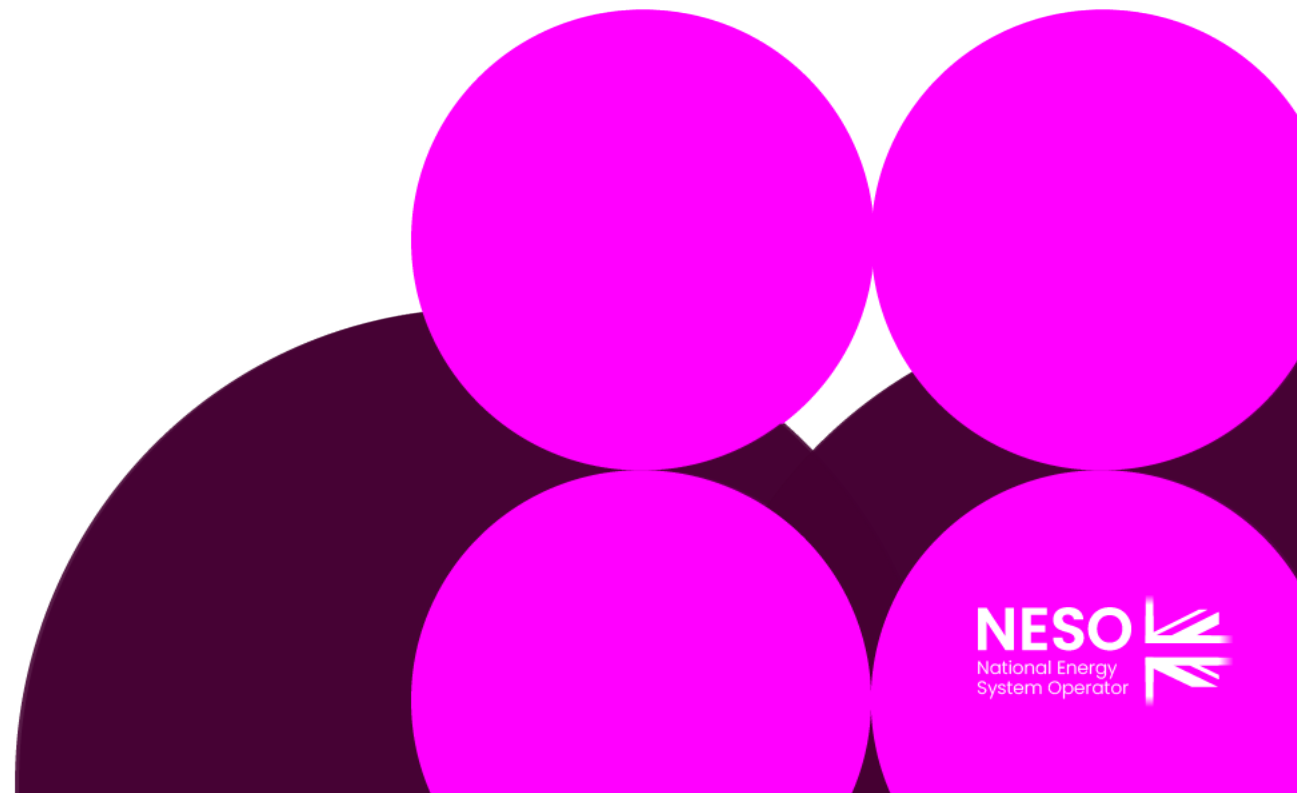
[NESO] The Grid Code will supersede the BCA when code modifications come into effect, however the Connection Offer also indicates that "The SPTS/SHETS/RES are updated periodically. If the SPTS/SHETS/RES are updated in the period between issuing the Connection Offer and the EU Code User completing the connection to the National Transmission System then The Company will seek agreement with the EU Code User to use the updated RES/SPTS/SHETS as the standard for plant and apparatus at the Connection Point" ([Synchronous Plant Direct Connection \(BCA\)](#)).

This states that it will be up to the Connectees with existing Connection Offers to agree with NESO if they are ok to follow the standard.

In addition, the legal text provides an 18 month window before the actual enforcement so that users who have already signed connection offers whilst waiting to complete their Plant and Apparatus can better prepare to comply with the new metering polarity requirements if they agree with NESO.

Legal Text Review

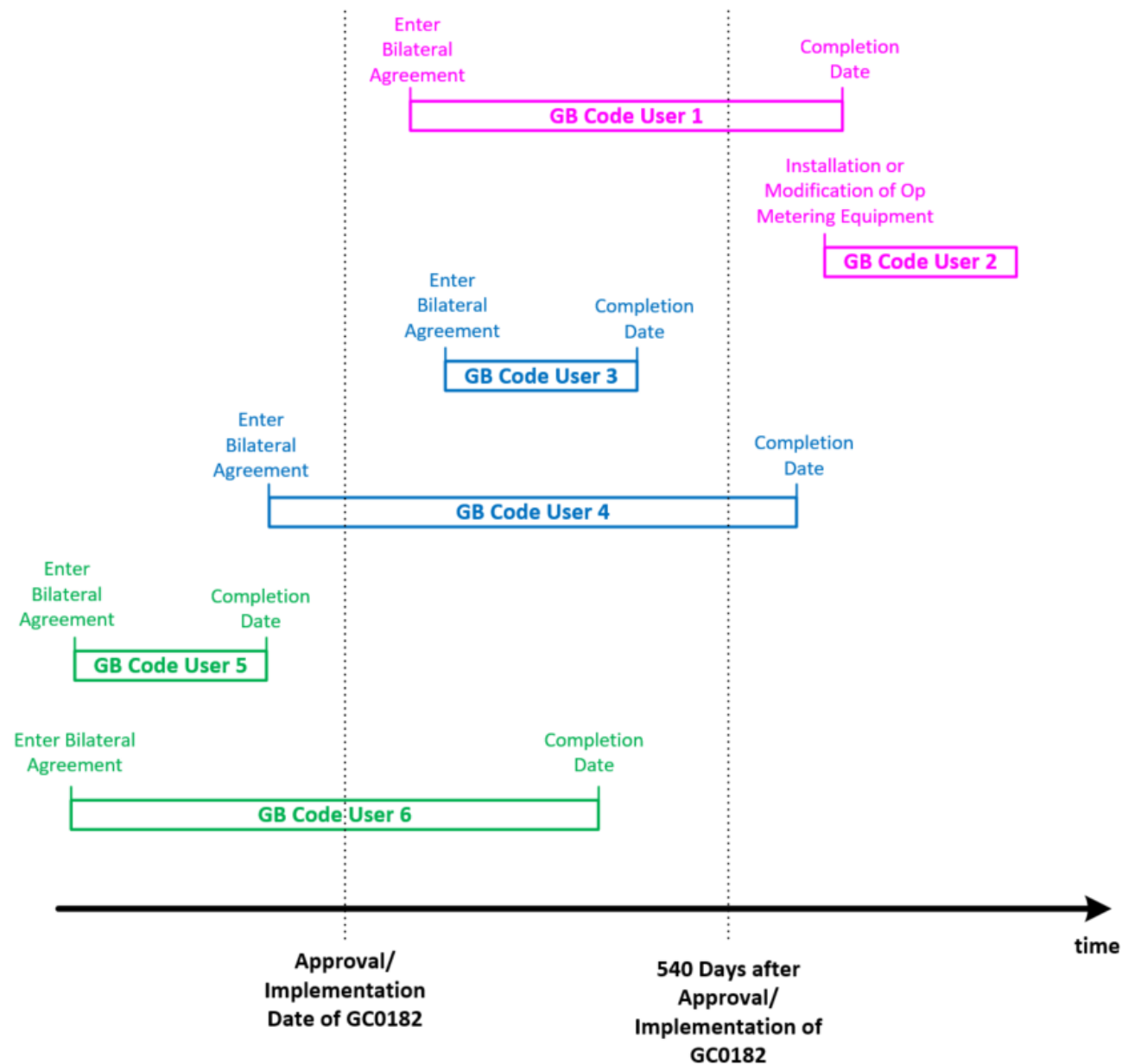
Hao Guo– NESO Representative



Legal Text – Updated as July 2026

Different Scenarios for GB Code User

- GB Code User 1: obligation to follow polarity standard
- GB Code User 2: obligation to follow polarity standard
- GB Code User 3: NESO shall seek mutual agreement with GB Code User
- GB Code User 4: NESO shall seek mutual agreement with GB Code User
- GB Code User 5: no obligation
- GB Code User 6: no obligation



Legal Text – Updated as July 2026

CC.6.5.6(f)

GB Code Users shall ensure the operational metering signals from their **Plant** and **Apparatus** conforms to the Operational Metering Polarity Convention for Power Flow Data as provided for in the **Electrical Standards** when sent to **The Company**, where:

- i. The **GB Code User** enters into a **Bilateral Agreement** on or after DD/MM/YYYY (i.e. implementation of GC0182) and its **Plant** and **Apparatus** has a **Completion Date** on or after DD/MM/YYYY (i.e. 540 days after implementation of GC0182); or
- ii. the **GB Code User's** operational metering equipment is installed or subject to a **Modification** or upgrade on or after DD/MM/YYYY (i.e. 540 days after implementation of GC0182).

The **GB Code User** shall confirm they have provided the operational metering signals in accordance with the requirements of the **Bilateral Agreement**. **The Company** shall validate and check the operational metering signals provided.

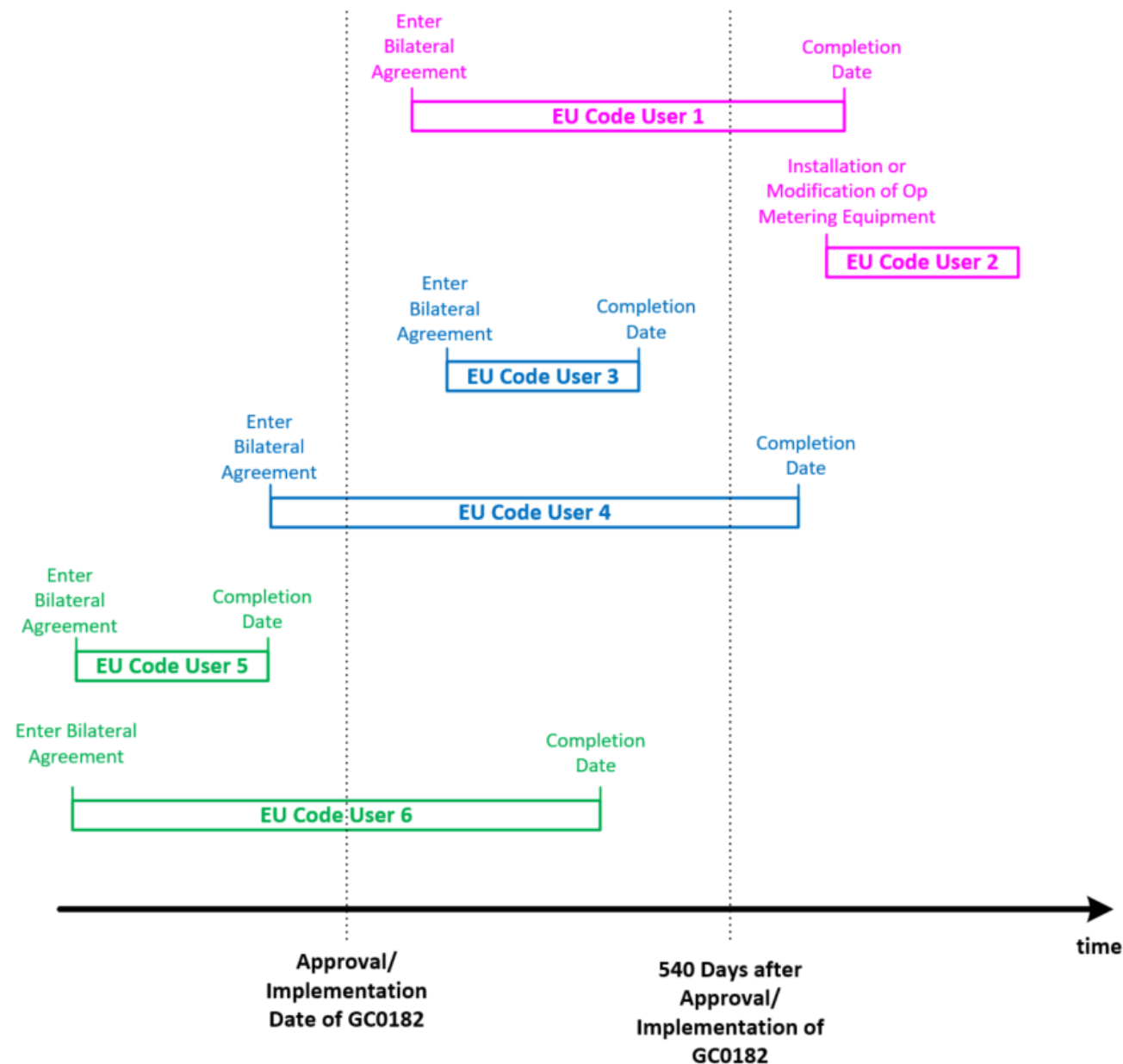
The Company shall seek mutual agreement with **GB Code Users** if it is deemed the operational metering signals from their **Plant** and **Apparatus** should conform to the Operational Metering Polarity Convention for Power Flow Data as provided for in the **Electrical Standards** when sent to **The Company**, where:

- iii. The **GB Code User** enters into a **Bilateral Agreement** on or after DD/MM/YYYY (i.e. implementation of GC0182) and its **Plant** and **Apparatus** has a **Completion Date** before DD/MM/YYYY (i.e. 540 days after implementation of GC0182); or
- iv. The **GB Code User** enters into a **Bilateral Agreement** before DD/MM/YYYY (i.e. implementation of GC0182) and its **Plant** and **Apparatus** has a **Completion Date** after DD/MM/YYYY (i.e. 540 days after implementation of GC0182).

Legal Text – Updated as July 2026

Different Scenarios for EU Code User

- EU Code User 1: obligation to follow polarity standard
- EU Code User 2: obligation to follow polarity standard
- EU Code User 3: NESO shall seek mutual agreement with GB Code User
- EU Code User 4: NESO shall seek mutual agreement with GB Code User
- EU Code User 5: no obligation
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Legal Text – Updated as July 2026

ECC.6.5.6.4(f)

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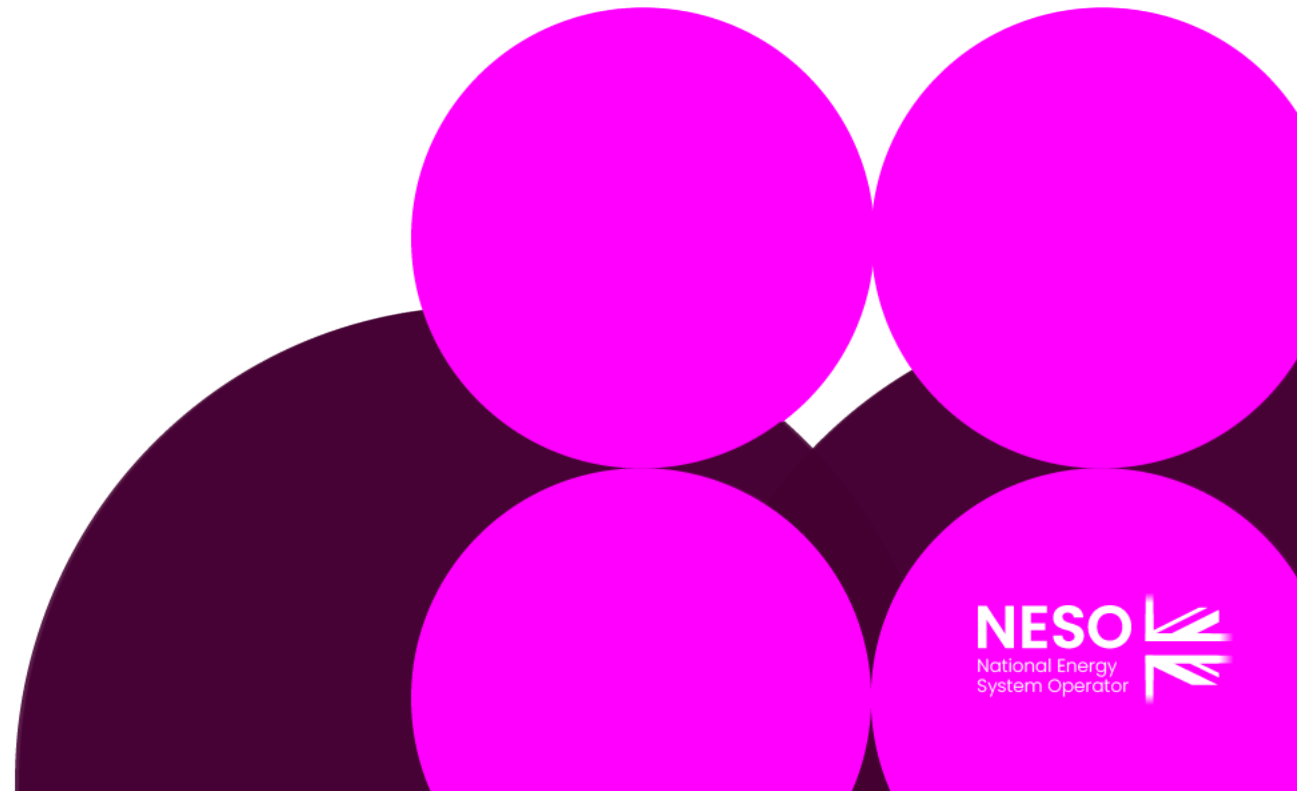
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Review Terms of Reference

Ren Walker – NESO Code Administrator

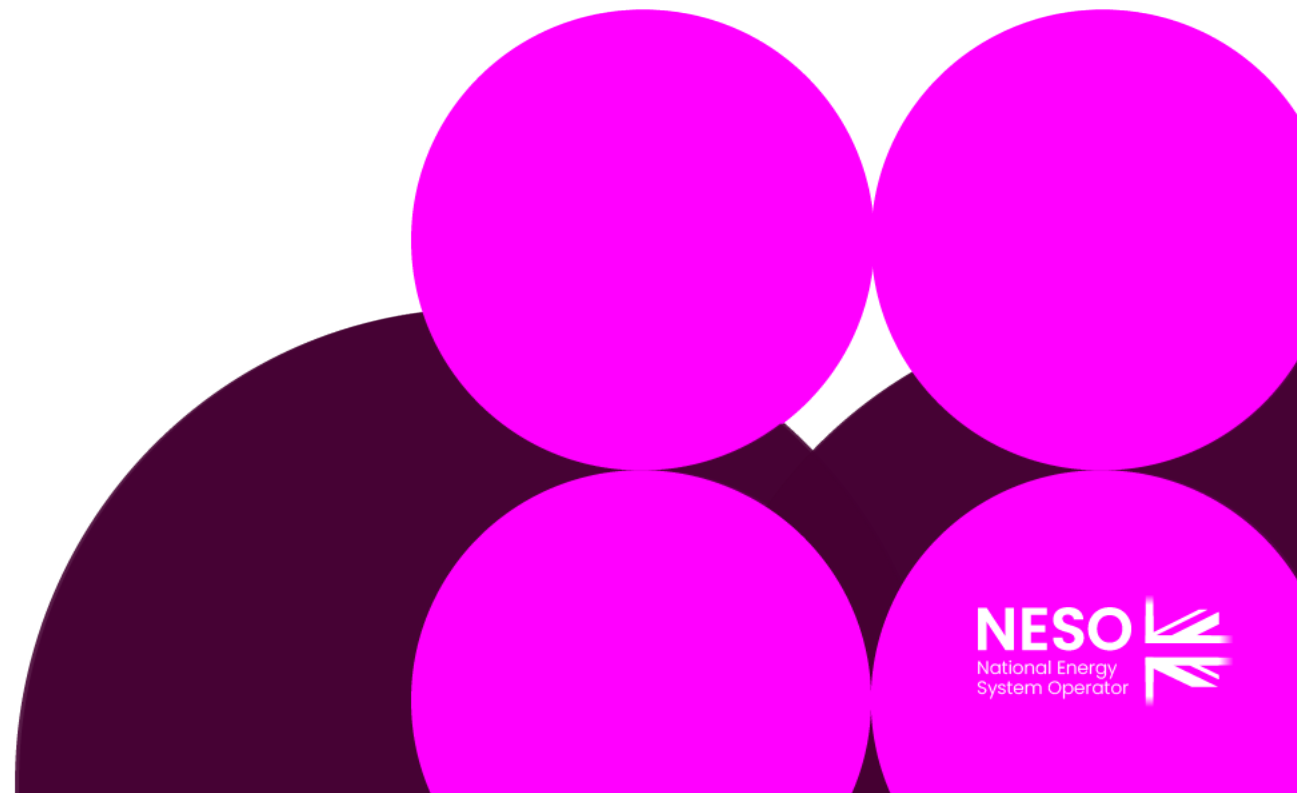


GC0182 Terms of Reference

- a) Implementation and costs; These points have been central to the Work group discussions, and have driven the proposal in terms of scope, expectations and start date of the modification.
- b) Review draft legal text should it have been provided. If legal text is not submitted within the Grid Code Modification Proposal the Workgroup should be instructed to assist in the developing of the legal text. The legal text and its proper adjustment has also been a key part of all Work group discussions, we have consistently taken on board feedback and made changes where it improves clarity and ensures the obligations on all parties are clearly defined.
- c) Consider whether any further Industry experts or stakeholders should be invited to participate within the Workgroup to ensure that all potentially affected stakeholders have the opportunity to be represented in the Workgroup.
- d) Consider implications to sections linked to the Regulated Sections of the Grid Code
- e) Assess and form a view whether there are material effects or not from the modification and provide a view to the Panel on whether the Governance Route should change.
- f) Consider the recommendations of Ofgem's data best practice guidance and energy data taskforce
- g) Consider the current granularity of frequency data and duration post event for publishing and evaluate options for change. This should include a review of existing available data and consideration of costs and impacts on Grid Code parties
- h) Consider cross code impacts of the modification, particularly on the STC
- i) Consider relevant Electrical Standards as necessary, including but not limited to TS.3.24.70 and TS.3.24.95.

Any Other Business

Ren Walker– NESO Code Administrator



Next Steps

Ren Walker– NESO Code Administrator

