GC0168: Submission of Electro Magnetic Transient (EMT) Models

Workgroup Number 9 – 04 November 2025

Online Meeting via Teams

NESO
National Energy
System Operator

WELCOME

Agenda

Topics to be discussed	Lead
Welcome	Chair
Introduction	Chair
Summary of Panel referral back to Workgroup	Chair
Discussion on cost recovery	Proposer
Legal Text review	Proposer
Discussion on potential derogations	Proposer
Terms of Reference Review	All
Any Other Business	All

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Expectations of a Workgroup Member

Contribute to the discussion	Be respectful of each other's opinions	Language and Conduct to be consistent with the values of equality and diversity	Do not share commercially sensitive information
Be prepared – Review Papers and Reports ahead of meetings	Complete actions in a timely manner	Keep to agreed scope	Email communications to/cc'ing the .box email

Your Roles

Help refine/develop the solution(s)	Bring forward alternatives as early as possible	Vote on whether or not to proceed with requests for Alternatives	Vote on whether the solution(s) better facilitate the Code Objectives

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Workgroup Membership

Role	Name	Company
Proposer	Frank Kasibante	NESO
Workgroup Member	Akshay Prajapati	Orsted Power UK Limited
Workgroup Member	Alan Mason	Ocean Winds
Workgroup Member	David Monkhouse	National Grid Ventures
Workgroup Member	Dr. Isaac Gutierrez	Scottish Power
Workgroup Member	Graeme Vincent	SP Energy Networks
Workgroup Member	Hooman Andami	Elmya Energy
Workgroup Member	Krishna Talasila	Siemens-Energy Limited
Workgroup Member	Martin Aten	Uniper
Workgroup Member	Ranjan Sharma	Siemens Gamesa Renewable Energy
Workgroup Member	Ross Strachan	EDF Renewables
Workgroup Member	Srinivas Edla	SSEN- Transmission
Authority Representative	Arsalan Zaidi	Ofgem

What is the Alternative Request?

What is an Alternative Request? The formal starting point for a Workgroup Alternative Modification to be developed which can be raised up until the Workgroup Vote.

What do I need to include in my Alternative Request form? The requirements are the same for a Modification Proposal you need to articulate in writing:
- a description (in reasonable but not excessive detail) of the issue or defect which the proposal seeks to address compared to the current proposed solution(s);
- the reasons why the you believe that the proposed alternative request would better facilitate the Applicable Objectives compared with the current proposed solution(s) together with background information;
- where possible, an indication of those parts of the Code which would need amending in order to give effect to (and/or would otherwise be affected by) the proposed alterative request and an indication of the impacts of those amendments or effects; and
- where possible, an indication of the impact of the proposed alterative request on relevant computer systems and processes.

How do Alternative Requests become formal Workgroup Alternative Modifications? The Workgroup will carry out a Vote on Alternatives Requests. If the majority of the Workgroup members or the Workgroup Chair believe the Alternative Request will better facilitate the Applicable Objectives than the current proposed solution(s), the Workgroup will develop it as a Workgroup Alternative Modification.
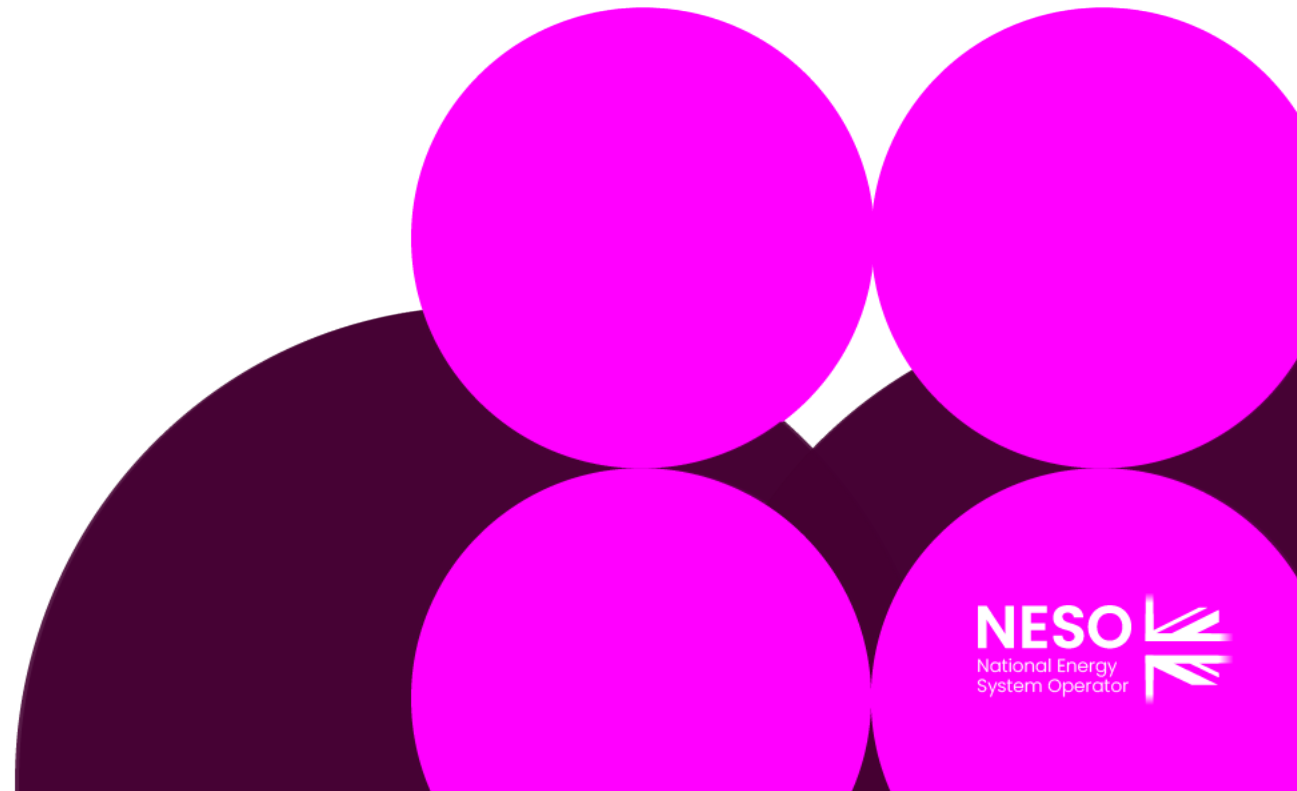
Who develops the legal text for Workgroup Alternative Modifications? NESO will assist Proposers and Workgroups with the production of draft legal text once a clear solution has been developed to support discussion and understanding of the Workgroup Alternative Modifications.

Timeline for GC0168 as of 07 November 2025

Milestone	Date	Milestone	Date
Modification presented to Panel	21 March 2024	Code Administrator Consultation (1 calendar month)	04 June 2025 – 04 July 2025
Workgroup Nominations (15 Working Days)	03 May 2024 to 28 May 2024	Draft Final Modification Report issued to Panel (5 working days)	16 July 2025
Workgroup 1 and 2 *Agree timeline, Terms of Reference, discuss solution and legal text* Workgroup 3 *Draft Workgroup Consultation/ Approve Workgroup Consultation*	23 September 2024 28 October 2024 11 November 2024	Panel undertake DFMR Recommendation vote	24 July 2025
Workgroup 4	17 December 2024	Final Modification Report issued to Panel to check votes recorded correctly	29 July 2025 – 05 August 2025
Workgroup 5	20 January 2025	Final Modification Report issued to the Authority	07 August 2025
Workgroup Consultation (1 Month)	23 January 2025 to 21 February 2025	Implementation Date	TBC
Workgroup 6 – *review consultation responses* Workgroup 7 – *finalise workgroup report and legal text* Workgroup 8 – *Workgroup vote*	31 March 2025 30 April 2025 9 May 2025	**Workgroup 9 – Restart discussions, review legal text, discuss potential derogations.** Workgroup 10 – review legal text, Workgroup Report and potential derogations Workgroup 11 – finalise legal text and workgroup report, confirm the Workgroup Vote	**7 November 2025** Remaining Workgroups TBC
Workgroup report issued to Panel (5 working days)	22 May 2025		
Panel sign off that Workgroup Report has met its Terms of Reference	26 June 2025		

Summary of Panel Referral back to Workgroup

Kat Higby - NESO Code Administrator

Discussion on Cost Recovery

Frank Kasibante - NESO

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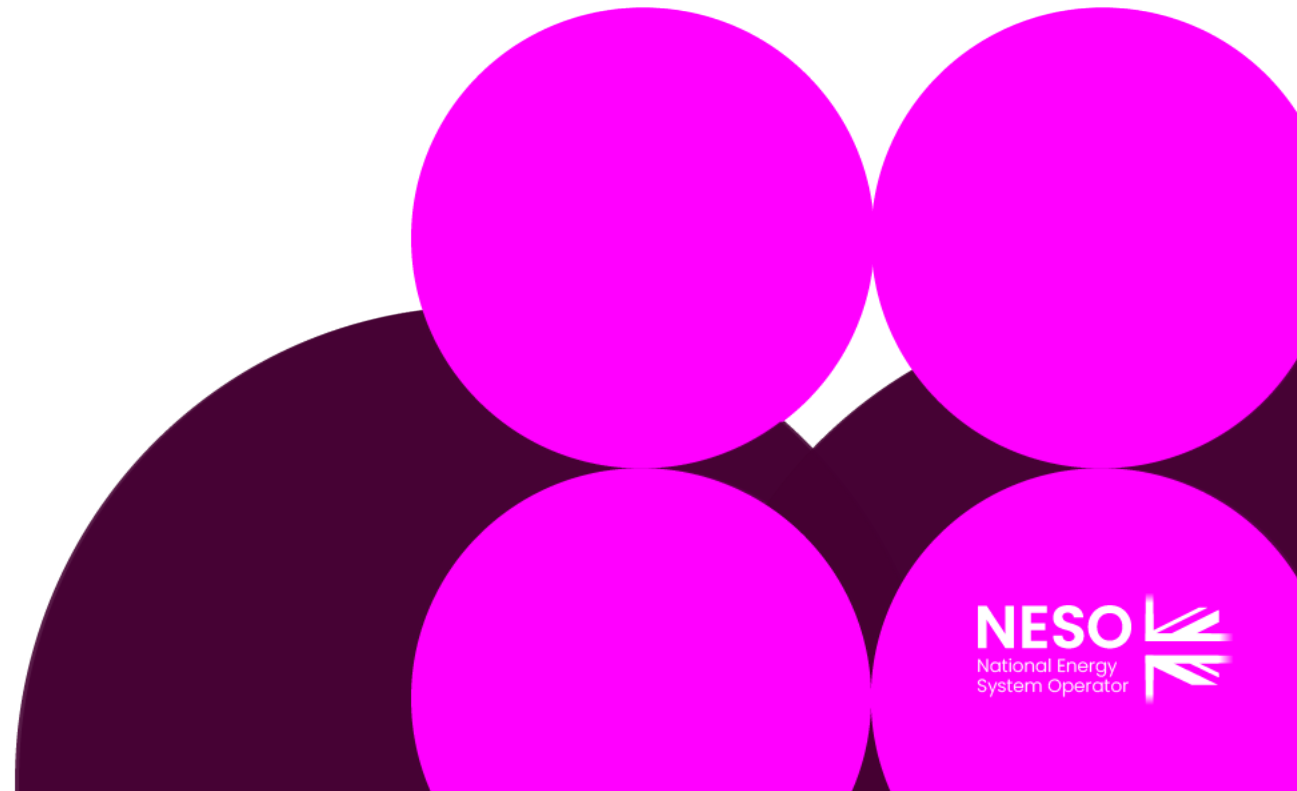
Legal Text Review

Frank Kasibante - NESO

Discussion on Potential Derogations

Frank Kasibante - NESO

Terms of Reference Review

All

Terms of Reference

Workgroup Term of Reference	Related Workgroup Consultation question	Feedback
a) Implementation and costs;	Questions 2, 9 and 12	Some respondents note that they would not support this Modification unless the cost recovery mechanism is in place first, which requires a CUSC Mod.
b) Review draft legal text;	Question 5	Responses indicate that further work is needed on the legal text. Four sections still to update. Workgroup members to review to confirm.
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. Demonstrate what has been done to cover this clearly in the report.	No questions	Good representation in the Workgroup from all sections of the industry.
d) Consider EBR implications.	Question 6	All responses note there is no impact on EBR
e) Consider a cost recovery mechanism to receive the model data required to share with a CUSC Workgroup	Questions 9 and 14	Proposer has spoken to some industry parties to ask if they can propose a change to the CUSC as SMEs. Work is still ongoing until Mod raised.
f) Consider the use/introduction into the Legal Text of generator classifications types C, D as opposed to Medium and Large.	No questions	Discussed during the Workgroup and agreed that it would add unnecessary complexity to add these definitions.
g) Consider approach on collecting models and reference to published guidance/phased application of approach.	Question 10	Introducing an Electrical Standard, which talks about the process of model collection.

Terms of Reference

Workgroup Term of Reference	Related Workgroup Consultation question	Feedback
h) Consider codifying the list of Users who are required to submit EMT models.	Questions 5, 7 and 13	Completed and included within the draft legal text.
i) Consider the scenario where a User is unable to provide an EMT model.	Questions 5, 7 and 13	Completed and included within the draft legal text.
j) Consider whether there is a need for any consequential changes to the DCode and / or DCUSA.	No questions	Considered by the Workgroup and noted that this is not a D-Code issue. This could be flagged to the DCUSA administrator by the possible CUSC Workgroup.
k) Consider whether there is a need to obtain EMT models from medium power stations embedded in distribution networks and, if so, the mechanism for engaging with the host DNO and the Generator and the process to be followed in the event that the Generator is unable to provide the EMT models or would incur significant costs in doing so.	No questions	This has been discussed at the Workgroup, and the cost recovery issues will be discussed during CUSC Workgroup.
l) Consider if we are reflecting international practice including observation of the modelling developments proposed for RfG 2.0 and HVDC 2.0	No questions	Considered by the Workgroup and included within the Workgroup consultation report.

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Any Other Business

Kat Higby - NESO Code Administrator

Next Steps

Kat Higby – NESO Code Administrator