

eSmart Networks Response to:  
**The Workgroup Consultation on CMP434**  
**Implementing Connections Reform**



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**Contact:**

eSmart Networks Grid Consultancy Team

eSmart Networks, The Innovation Centre, Queens Rd, Belfast, BT3 9DT

[grid@esmartnetworks.co.uk](mailto:grid@esmartnetworks.co.uk)



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## 1. Introduction

### 1.1. Who are eSmart Networks?

eSmart Networks Limited (eSN) is a leading provider of smart grid infrastructure and large grid connections across the UK. We combine expert grid connection consultancy with a NERS accredited ICP design and delivery service ranging from LV through to 132kV. eSmart Networks has energised over 400 projects across the Renewable, EV, and Industrial and Commercial sectors. Additionally, our Grid Consultancy Directorate has provided consultation on more than 1,000 projects.

### Our Sectors

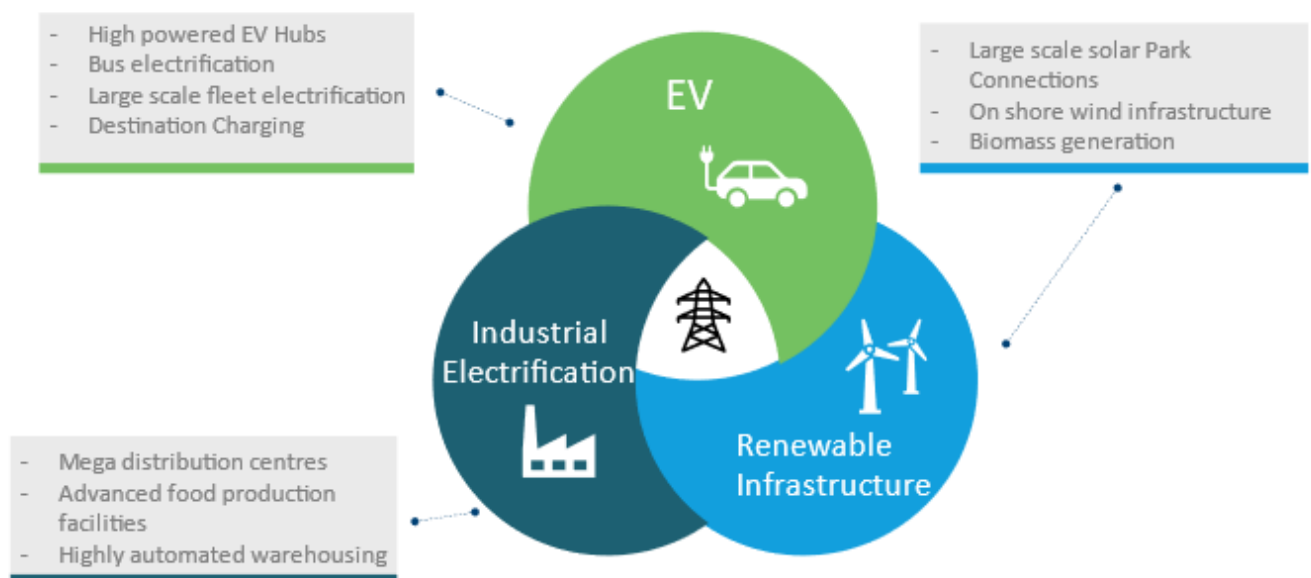


Figure 1 - eSmart Networks Projects Overview

### 1.2. About the authors & relevant background experience

Nathan Taylor, Senior Grid Consultant at eSmart Networks, previously worked as a Senior Transmission System Planner in EIRGRID, planning demand, interconnector and generation projects on the Irish transmission system as part of the Enduring Connection Policy (ECP) process.



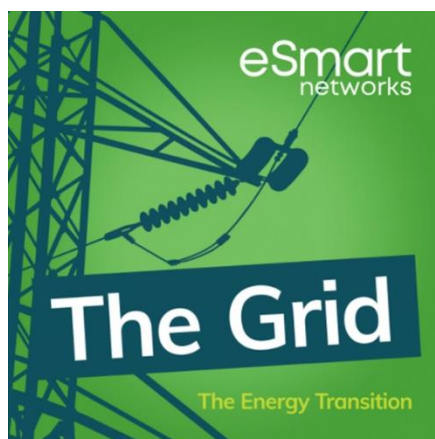
Brian Moorhead, Grid Consultancy Director, previously worked in NIE Networks, a DNO and Transmission Asset Owner, and was involved in designing and implementing Connection Reform in Northern Ireland when the connection queue significantly outgrew remaining transmission capacity.

Both have significant experience of working across the Transmission-Distribution boundary with respect to connection queues in other similar jurisdictions, as well as representing a wide array of customers from different sectors on their GB grid connections.

### 1.3. Knowledge Sharing

Given the increasingly central role that our electricity networks have in our transition to net zero; to help share our knowledge of the grid and the challenges faced on our transition, eSmart Networks hosts and produces a podcast to help inform stakeholders.

<https://esmartnetworks.co.uk/the-grid-podcast/>





## 2. Our Response to the workgroup consultation on CMP434:

### Implementing Connections Reform

Respondent details	Please enter your details	
Respondent name:	eSmart Networks Ltd	
Company name:	eSmart Networks Ltd	
Email address:	grid@esmartnetworks.co.uk	
Phone number:	01376 332 689	
Which best describes your organisation?	<input type="checkbox"/> Consumer body <input type="checkbox"/> Demand <input type="checkbox"/> Distribution Network Operator <input type="checkbox"/> Generator <input type="checkbox"/> Industry body <input type="checkbox"/> Interconnector	<input type="checkbox"/> Storage <input type="checkbox"/> Supplier <input type="checkbox"/> System Operator <input type="checkbox"/> Transmission Owner <input type="checkbox"/> Virtual Lead Party <input checked="" type="checkbox"/> Other – ICP and Grid Consultancy

#### 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*)

**Standard Workgroup Consultation questions**

1	Do you believe that the Original Proposal better facilitates the Applicable Objectives?	Mark the Objectives which you believe the original solution better facilitates:  Original <input type="checkbox"/> A <input type="checkbox"/> B <input checked="" type="checkbox"/> C <input checked="" type="checkbox"/> D
<p>eSN believes that this proposal does not facilitate objectives A and B on the basis that the proposed criteria for Gate 2 Applications do not go far enough to contribute towards reforming the connections process.</p> <p>Please see our high-level response to this consultation on the following pages.</p>		
2	Do you support the proposed implementation approach? (see pages 59-61)	<input type="checkbox"/> Yes  <input checked="" type="checkbox"/> No
Click or tap here to enter text.		
3	Do you have any other comments?	
<i>Due to the limited timeframe available to respond to this consultation during the peak summer holiday period: This response is therefore limited in its detail and provides a high-level commentary on the proposed approach and the associated elements.</i>		
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 Section</a> )  <input checked="" type="checkbox"/> No
Click or tap here to enter text.		



### 3. Summary of Key Areas of Concern:

In the section below, we summarise three key high-level areas of concern from within the current proposal. These are:

- Embedded Demand being out of scope
- Gate 2 criteria
- Distribution – Transmission Interface arrangements

#### 3.1. Embedded Demand being out of scope

eSmart Networks serves developers in the EV, Industrial, and Commercial sectors and offers representation of these customers to the working group via this consultation response.

Embedded demand projects are becoming increasingly subject to the Transmission Impact Assessment process and connection queues at GSP's. Consequently, these projects are often delayed by the Transmission Connection Queue. eSmart Networks is aware of embedded demand connection offers with dates extending to 2037.

Large delays to demand schemes is also more likely to become a political issue if housing, factories and other developments are being blocked. This could fuel stronger opposition to the transition to electrification and net zero initiatives. Developing a solution for embedded demand would help to "Get Britain Building" and ensure timely development across the nation to meet net zero targets.

We are seeing a significant increase in speculative developments 'securing' large amounts of demand capacity via the highest distribution voltages, and we expect this issue to grow significantly over the coming months. Where embedded demand is excluded from the new gate process, we would expect speculative large scale demand developers to increasingly pivot towards embedded demand applications if they are perceived to 'dodge' the new gated approach.

In summary, a mechanism or process is needed to prevent speculative large capacity demand schemes from blocking schools, factories, EV charging stations and all sorts of other electrification & demand schemes that are key to Britain's economy and the transition to net zero.



We would however note that the current proposed Gate 2 process is likely to be unsuitable for embedded demand as it has largely been designed for the Generation & Storage sector, where demand projects encompass a much larger range of sectors. Therefore, an alternate or altered approach is likely to be required. We believe this issue requires further consideration.

### 3.2. Gate 2 Criteria

Element 11 establishes the criteria for Gate 2 applications, primarily focusing on land rights. eSmart Networks believes that the current criteria for Gate 2 is insufficient to efficiently reduce the existing transmission queue and to mitigate the impact of speculative transmission connection applications that are currently congesting the system. This inefficiency potentially hinders Great Britain's net zero targets and does not help "Get Britain Building."

We recommend that the working group consider more stringent criteria for Gate 2 to prioritise 'shovel ready projects'. Regarding CMP435, the criteria should be amended to prioritise releasing existing "shovel-ready" projects, ensuring that those which meet the criteria are genuinely capable of contributing towards Great Britain's Net Zero targets in the shorter term. The overall aim of this proposal is to shift from a First Come, First Serve basis to a First Ready, First Connected approach.

For example, prioritising projects with planning consent, (even as a temporary measure where consideration could then be given to relaxing the criteria at a later date), would release shovel ready projects that could increase Britain's renewable capacity faster, invigorate supply chains involved in project delivery and be overall positive for Britain's economy and energy goals in the nearer term.

We believe consideration should be given to a more robust approach, whether on a temporary basis until all shovel ready projects have left the queue, or on an enduring basis (the merits of both should also be explored).

### 3.3. Distribution – Transmission Interface arrangements

We believe there is a lack of clarity around the DFTC mechanism and a lack of clarity on guaranteed standards on how distribution projects will be treated by both Transmission and Distribution Operators. More information on the Distribution-Transmission Interface arrangements are required before we can comment further.





## 4. Specific Workgroup Consultation Questions

Specific Workgroup Consultation questions																					
5	<p>Do you agree with the elements of the proposed solution?</p> <p>Element 7 has been de-scoped and Element 10 is proposed to be codified within the STC through modification <u>CM095</u>.</p> <p>Please provide rationale for your answer and any suggestions for improvement to each element?</p>																				
	<table><tr><td><b>Element 1:</b> Proposed Authority approved methodologies and ESO guidance (see pages 9-10, 55)</td><td><input type="checkbox"/> Yes <input type="checkbox"/> No</td></tr><tr><td colspan="2"></td></tr><tr><td><b>Element 2:</b> Introducing an annual application window and two formal gates, which are known as Gate 1 and Gate 2 (i.e. the Primary Process) (see pages 11, 35-36)</td><td><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</td></tr><tr><td colspan="2">Please see Section 3.2</td></tr><tr><td><b>Element 3:</b> Clarifying which projects go through the Primary Process (see pages 11-12, 35-36)</td><td><input type="checkbox"/> Yes <input type="checkbox"/> No</td></tr><tr><td colspan="2">Please see Section 3.1</td></tr><tr><td><b>Element 4:</b> Significant Modification Applications concept, including the proposed criteria and the proposed level of codification (see pages 12-13, 36-39)</td><td><input type="checkbox"/> Yes <input type="checkbox"/> No</td></tr><tr><td colspan="2"></td></tr><tr><td><b>Element 5:</b> Clarifying any Primary Process differences for customer groups (see pages 13-14, 35-36)</td><td><input type="checkbox"/> Yes <input type="checkbox"/> No</td></tr><tr><td colspan="2">Please see Section 3.1</td></tr></table>	<b>Element 1:</b> Proposed Authority approved methodologies and ESO guidance (see pages 9-10, 55)	<input type="checkbox"/> Yes <input type="checkbox"/> No			<b>Element 2:</b> Introducing an annual application window and two formal gates, which are known as Gate 1 and Gate 2 (i.e. the Primary Process) (see pages 11, 35-36)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Please see Section 3.2		<b>Element 3:</b> Clarifying which projects go through the Primary Process (see pages 11-12, 35-36)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Please see Section 3.1		<b>Element 4:</b> Significant Modification Applications concept, including the proposed criteria and the proposed level of codification (see pages 12-13, 36-39)	<input type="checkbox"/> Yes <input type="checkbox"/> No			<b>Element 5:</b> Clarifying any Primary Process differences for customer groups (see pages 13-14, 35-36)	<input type="checkbox"/> Yes <input type="checkbox"/> No	Please see Section 3.1	
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Please see Section 3.1																					



<b>Element 6:</b> Setting out the process and criteria in relation to Application Windows and Gate 1, including introducing an offshore Letter of Authority equivalent as a Gate 1 application window entry requirement for offshore projects (see pages 15-16, 39-40)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
<b>Element 7:</b> Fast Track Disagreement Resolution Process (de scoped from this modification – see pages 16, 58)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
<b>Element 8:</b> Longstop Date for Gate 1 Agreements (see pages 16, 40-41)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
<b>Element 9:</b> Project Designation (see pages 17-18, 48-49)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
<b>Element 10:</b> Connection Point and Capacity Reservation (proposed to not be codified within the CUSC, but is intended to be codified within the STC through modification <u>CM095</u> – see pages 18-20 and the <u>CM095 Workgroup Consultation, pages 6-10</u> )	<input type="checkbox"/> Yes  <input type="checkbox"/> No
<b>Element 11:</b> Setting out the criteria for demonstrating Gate 2 has been achieved and setting out the obligations imposed once Gate 2 has been achieved (see pages 20-24, 42-46)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
Please see Section 3.2	



<b>Element 12:</b> Setting out the general arrangements in relation to Gate 2 (see pages 25-26, 47)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
Please see Section 3.2	
<b>Element 13:</b> Gate 2 Criteria Evidence Assessment (see pages 26-27, 47-48)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
Please see Section 3.2	
<b>Element 14:</b> Gate 2 Offer and Project Site Location Change (see pages 28, 46)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
<b>Element 15:</b> Changing the offer and acceptance timescales to align with the Primary Process timescales (e.g. a move away from three months for making licenced offers) (see pages 29, 42-46)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
<b>Element 16:</b> Introducing the proposed Connections Network Design Methodology (CNDM) (see pages 29, 53-55)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
<b>Element 17:</b> Introducing the concept of a Distribution Forecasted Transmission Capacity (DFTC) submission process for Distribution Network Operators (DNOs) and transmission connected Independent Distribution Network Operators (iDNOs) to forecast capacity on an anticipatory basis for Relevant Embedded Small Power Stations or Relevant Embedded Medium Power Stations aligned to the Gate 1 Application Window (see pages 30-33, 51-53)	<input type="checkbox"/> Yes  <input type="checkbox"/> No



	Please see Section 3.3	
	<b>Element 18:</b> Set out the process for how DNOs and transmission connected iDNOs notify the ESO of Relevant Embedded Small Power Stations or Relevant Embedded Medium Power Stations which meet Gate 2 criteria (see pages 33-34, 51-53)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
	Please see Section 3.3	
6	Are there any elements of the proposal which you believe should not be included as part of this proposed solution, which the Proposer believes represents the 'Minimum Viable Product' reforms required to the connections process? If not, why not? (Please note the element number in each of your responses if applicable)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
7	As per question 6, are there any additional features which you believe should be included as part of Minimum Viable Product reform to the connections process?	<input type="checkbox"/> Yes  <input type="checkbox"/> No
8	Do you agree that the Gate 1 process should be a mandatory process step, or do you think Gate 1 should be an optional process step with projects being able to apply straight into the Gate 2 process if the project meets both the relevant Gate 2 and Gate 1 criteria?	<input type="checkbox"/> Yes  <input type="checkbox"/> No
9	Do you believe that the proposed Gate 1 and Gate 2 process could duly or unduly discriminate against any types of projects? If so, do you believe this is justified?	<input type="checkbox"/> Yes  <input type="checkbox"/> No



10	Please provide your views on the proposed options ((a) to (e) on page 45) to mitigate the risk of requiring a developer to submit their application for planning consent earlier than they would in their development cycle (with the risk this consent could expire and any extension from the Planning Authority is not automatic).	<input type="checkbox"/> Yes  <input type="checkbox"/> No
11	Do you agree that DFTC should be included as part of CMP434? If not, do you believe that the reformed connections process can function without DFTC? Please justify your answer. (see pages 30-34, 51-53)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
	Please see Section 3.3	
12	The Proposer intends to set out supporting arrangements for TMO4+ via a combination of guidance and methodologies (e.g. DFTC, CNDM, Project Designation, Gate 2 Criteria). Do you anticipate any issues with having these outside of Code Governance?  (see Pages 9-10, 55)	<input type="checkbox"/> Yes  <input type="checkbox"/> No
	Please see Section 3.3	