# POC SELF-DETERMINATION AND SELF-DESIGN APPROVAL GUIDANCE

	POC Self-Determination and Self-Design Approval Guidance		Applies to	
REF-NET-COM-001			Distribution	Transmission
			✓	
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#### 1 Introduction

This guidance document is for Independent Distribution Network Operators (IDNOs) and Independent Connection Providers (ICPs) that are suitably accredited under the National Electricity Registration Scheme (NERS) looking to self-determine their own Point of Connection (POC) onto our distribution network and/or to self-approve their own contestable designs. It sets out when they can self-determine their own POC and sets out when they can self-approve their own contestable designs.

#### 2 References

The documents detailed in Table 2.1 – Scottish and Southern Electricity Networks Documents, Table 2.2 – Miscellaneous Documents, should be used in conjunction with this document.

Table 2.1 – Scottish and Southern Electricity Networks Documents

Reference	Title
TG-NET-ENG-005	SSEN Standard Design Matrix for POC Assessment

Table 2.2 - Miscellaneous Documents

Title	
Standard Conditions of the Electricity Distribution Licence – Standard Licence Condition 15 (SLC 15) – Standards for the provision of Non-Contestable Connection Services	
Energy Networks Association (ENA) – Competition in Connections Code of Practice (CiCCoP)	

## 3 Determining the POC

- 3.1 The appointed ICP can either request for us (SSEN) to determine the POC, or in certain circumstances self-determine their own POC, as set out in this guidance document.
- 3.2 The ICP will generally be able to self-determine their own POC where:
  - we can make all necessary network data available to them; and
  - they can assess the demand load to be connected themselves; and
  - they have the relevant NERS accreditations to undertake design activities i.e.,
     'Electrical Design of Distribution Networks' scopes that cover: 'Self Determination of Point of Connection (POC)' with voltage as relevant up to and including 132kV

Caution: We limit this to specific market segments, voltages, and capacities.

- 3.3 If the criteria set out in 3.2 above are met the ICP can then carry out POC self-determination for the following market segments: -
  - Demand market segments: all demand connection projects where distribution works at Low Voltage (LV) or High Voltage (HV) are involved; and
  - Unmetered Supplies (UMS) market segments: all unmetered connection projects for new connections, transfers, and disconnections of unmetered supplies, where distribution works at LV are involved

**Note:** An ICP can self-determine their own POC for all unmetered connection projects, though the POC determination process is not applicable for UMS market segments



Refer to Appendix A of this guidance document for information on the market segments where an ICP can self-determine their own POC (see **Table 1**), and the criteria by which an ICP can self-determine their own POC (see **Table 2**).

Note: These tables are to be published as per Ofgem's CiC CoP 0001 decision letter dated 27<sup>th</sup> April 2016 [CiC CoP Modification 0001 – Self Determination of Point of Connection by ICPs].

Caution – SSEN's Out of Area (OOA) networks: As embedded networks are not in the scope of the Competition in Connections Code of Practice ("the CoP"), we currently do not allow ICPs to self-determine their own POC for all connection projects which are outside our two Distribution Service Areas (DSAs), and this applies for all demand, DG, and UMS market segments regardless of the voltage level. We will continue to determine the POC for those embedded networks.

- 3.4 We will continue to carry out the determination of the POC for:
  - **Demand market segments:** all larger demand connection projects where distribution works at Extra High Voltage (EHV) or 132kV are involved; and
  - Distributed Generation (DG) market segments: all DG connections projects where:
    - ENA EREC G98 type of micro-generating plant is present (including electricity storage devices)
    - ENA EREC G99 type of power generating plant is present (including electricity storage devices); and
    - o where distribution works at LV or HV or EHV (or above) are involved
  - Out of Area (OOA) networks Demand, DG, and UMS market segments: all
    connection projects which are outside our two Distribution Service Areas (DSAs)
    regardless of the voltage level, as stated in 3.3 above
- Where the ICP is considering undertaking design activities for self-determining their own POC, they shall refer to our Standard Design Matrix (the "Matrix") that is published on our website (TG-NET-ENG-005 SSEN Standard Design Matrix for POC Assessment). This Matrix details where generic design is acceptable for self-determining a POC, and where more detailed analysis is required, such as technical studies (e.g., network studies). This is highlighted in yellow in the Matrix.
- Once the ICP has assessed whether they can self-determine the POC, they shall then review the following network information that is published on our <u>website</u>:
  - Geographical network records showing the location, size, and type of assets
  - Load information for the Distribution System, including guidance on the rules to be applied when allocating demand diversity of new and existing customers to circuits
  - Relevant planning and design standards, and other specifications e.g., the Energy Network Association (ENA) Engineering Recommendation (EREC) G81
  - Asset sizes and ratings
  - Network operation diagrams
- 3.7 Once the ICP has assessed that they can self-determine the POC, and has reviewed the above information, they will be in a position to submit an online POC notice to us via our website.
- 3.8 Once the ICP has submitted the POC notice to us, including a POC map (confirming the location of the POC they have self-determined), we will aim to provide the following information free of charge within **five Working Days** from receiving the POC notice:



- Details of any Electricity Connection Charges Regulations 2017 (ECCR) second comer charges relating to connection assets
- Details of any ECCR second comer charges relating to reinforcement works
- Details of any contracted additional loads
- Timescales for any upstream reinforcement that is planned but not available online
- Any network constraints that may impinge on the connection
- Any interactivity (as it occurs at the time of the POC notice)
- 3.9 Where the POC notice is for small LV demand connections (up to four properties), we will aim to provide the following information free of charge within **two Working Days** from receiving the POC notice:
  - Details of any ECCR second comer charges relating to connection assets
  - Details of any ECCR second comer charges relating to reinforcement works
- 3.10 Where the POC notice is for a demand load ≤ 250kVA, our Network Connections Design team will advise if any additional load information is identified for the ICP to undertake their own HV network study. We will aim to confirm this within five Working Days from receiving the POC notice.
- 3.11 Where the POC notice is for a demand load > 250kVA but ≤ 500kVA, our Network Planning team will be notified by our Network Connections Design team and will advise if any additional load information is identified for the ICP to undertake their own HV network study. We will aim to confirm this within five Working Days from receiving the POC notice.
  - **Note:** We will not undertake the HV network study as the ICP will be required to undertake such network study themselves.
- 3.12 Where the POC notice is for a demand load > 500kVA, our System Planning team will be notified by our Network Connections Design team and will advise if any EHV/132kV network study is required and/or any additional load information is identified. See below the three potential outcomes:
  - No EHV/132kV network study required and no additional load information identified for the ICP to undertake their own HV network study. We will aim to confirm this within five Working Days from receiving the POC notice
  - 2) **No** EHV/132kV network study required but additional load information is identified for the ICP to undertake their own HV network study. We will aim to confirm this within **five Working Days** from receiving the POC notice
  - 3) EHV/132kV network study is required. As EHV/132kV network data information is not made available on our website, the ICP will not be able to undertake such network study themselves and will not be able to self-determine their own POC either. We would then have to undertake the EHV/132kV network study and determine the POC. We will aim to confirm this within five Working Days from receiving the POC notice

**Note:** The POC Notice would then be processed as a standard POC application and the ICP would be asked if they would like to receive a formal POC Offer from us or if they would like to cancel the application. Connection Offer Expenses (COE)\* would apply if the ICP wishes to proceed with the standard POC application.

\*Connection Offer Expenses are the costs that we incur in producing your Connection Offer. This includes processing the application; assessing the impact of the connection on the Distribution system; designing and costing the connection, including any reinforcement; and preparing the Connection Offer. Refer to our <a href="www.website">website</a> where our COE guide is published.

#### 3.13 Next steps:

- Where the ICP has self-determined their own POC successfully, they will advise us when their customer has accepted their Connection Offer which they have issued them with
- The ICP will then need to formalise a POC application with their already submitted POC plan (confirming the location of the POC they have self-determined)
- Where the ICP has identified their own POC, Connection Offer Expenses will not apply
- A formal POC Offer is required to secure the capacity requested for the connection.
   The ICP should also advise us whether they wish to do the self-approval of their own contestable design

### 4 Approving Designs

- 4.1 The appointed ICP can either request for us (SSEN) to approve their contestable designs, or in certain circumstances self-approve their own contestable designs, as set out in this quidance document.
- 4.2 The ICP will generally be able to self-approve their own contestable designs where they have the relevant NERS accreditations to undertake design activities i.e., 'Electrical Design of Distribution Networks' scopes that cover:
  - 'LV Cable Networks to Domestic and Industrial/Commercial Properties'
     This also covers the domestic properties on a hierarchal basis.
  - 'HV Overhead Networks' with voltage as relevant up to and including 132kV
     It can also specify 'Overhead Wooden Pole' and/or 'Overhead Steel Tower'.
  - 'HV Cable Networks' with voltage as relevant up to and including 132kV
  - 'Substation Layouts' with voltage as relevant up to and including 132kV

**Caution:** We limit this to specific market segments, voltages, and capacities.

- 4.3 If the criteria set out in 4.2 above are met the ICP can then carry out self-design approval for the following market segments:
  - **Demand market segments:** all demand connection projects where distribution works at LV or HV are involved; and
  - **DG market segments:** all DG connection projects where:
    - ENA EREC G98 type of micro-generating plant is present (including electricity storage devices) for single and multiple premises [single or multi-phase, 230/400 Volts (V), Alternating Current (AC) up to and including 16 Amps (A) per phase]; and
    - distribution works at LV or HV are involved

This includes mixed demand/generation sites where, for example, solar photovoltaic (PV) panels or Combined Heat and Power (CHP) systems are installed.

**Note:** For HV DG market segments, this is only available where the POC may be at HV, or where HV works are involved for network reinforcement, but the microgenerating plant is connected at LV.

 UMS market segments: all unmetered connection projects for new connections, transfers, and disconnections of unmetered supplies, where distribution works at LV are involved

**Note:** An ICP can self-approve their own contestable designs for all unmetered connection projects, though the design approval process is not applicable for UMS market segments

Refer to Appendix B of this guidance document for information on the market segments where an ICP can self-approve their own designs (see **Table 3**), and the qualifying criteria that will apply to allow an ICP to move between the different levels of design approval (see **Table 4**).

**Note:** These tables are published as per Ofgem's **CiC CoP 0002 decision letter** dated 27<sup>th</sup> April 2016 [**CiC CoP Modification 0001 – Self-Design Approval Processes**].

Caution – SSEN's Out of Area (OOA) networks: As embedded networks are not in the scope of the Competition in Connections Code of Practice ("the CoP"), we currently do not allow ICPs to self-approve their own contestable designs for all connection projects which are outside our two Distribution Service Areas (DSAs), and this applies for all demand, DG, and UMS market segments regardless of the voltage level. We will continue to approve all the contestable designs submitted to us for those embedded networks.

- 4.4 We will continue to carry out the design approval of contestable designs submitted to us by the appointed ICP for: -
  - Demand market segments: all larger demand connection projects where distribution works at EHV or 132kV are involved; and
  - **DG market segments:** all DG connection projects where:
    - ENA EREC G99 type of power generating plant is present (including electricity storage devices), and distribution works at LV or HV are involved; and
    - ENA EREC G98 type of micro-generating plant is present (including electricity storage devices), and distribution works at EHV (or above) are involved; and
    - ENA EREC G99 type of power generating plant is present (including electricity storage devices), and distribution works at EHV (or above) are involved
  - Out of Area (OOA) networks Demand, DG, and UMS market segments: all
    connection projects which are outside our two Distribution Service Areas (DSAs)
    regardless of the voltage level, as stated in 4.3 above
- 4.5 Where the ICP is considering undertaking the self-approval of their own contestable designs: -
  - they must still submit the complete design pack to us for review where their client wishes for us to adopt the contestable assets, or
  - they may still submit the complete design pack to us for information where their client wishes for an IDNO to adopt the contestable assets
- 4.6 Once the complete design pack has been received for our review, we will provide the ICP with any constructive feedback of their design within the timescales set out in 4.8 below, where we adopt any contestable assets.

**Note:** Where an IDNO will adopt the contestable assets, there may still be some assets to be adopted by us at the site boundary (i.e., any assets installed to connect the IDNO site onto our network).

Where the ICP is requesting that we undertake the approval their contestable designs, or where the ICP cannot self-approve their own contestable designs:

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- they must pay the related design approval fee; and
- they must submit the complete design pack to us for approval
- 4.8 Once the complete design pack has been received for our approval, we will approve or reject the design submitted by the ICP within:
  - 10 Working Days of receiving the proposed design (unless any part of it would require or directly affect the use of EHV assets) for LV and HV connections, or
  - 20 Working Days of receiving the proposed design for EHV and other connections.

Note: The above timescales are in line with the services and standards under Standard Licence Condition 15 (SLC 15) as set out in the Standard Conditions of the Electricity Distribution Licence. Refer to the Services and Standards under SLC 15 document published on our website.

#### 4.9 **Next steps**

- Once a complete design pack has been submitted to us for our approval or review (as appropriate), and we have completed the associated tasks and the Adoption Agreement is in place (where applicable), the ICP may begin construction of the contestable assets in line with the approved or agreed design, keeping us informed of their progress by submitting their Programme of Works (also known as the "Whereabouts")
- If we identify any issues with the design and installation of the contestable assets to be adopted by us (where applicable), we shall notify the ICP accordingly
- Once we are satisfied that the Contestable Works and installed assets are compliant with our G81 planning and design standards, and other specifications, we will proceed with the adoption process (where applicable)

**Note:** Any outstanding corrective actions to be resolved by the ICP may result in delays in asset adoption (where applicable) and energisation.

## 5 Revision History

No	Overview of Amendments	<b>Previous Document</b>	Revision	Authorisation
01	Original guidance document updated with new SSEN branding; controlled document reference number; and minor wording amendments.	REF-NET-COM-001	1.00	Gwen McNaughton
02	Revised guidance document updated with latest public document template (including latest SSEN branding), and major content amendments. These include enhanced guidance for POC self-determination and for self-design approval; relevant NERS accreditations information; creation of Appendix A for Table 1 and Table 2 with enhanced guidance for POC self-determination; and creation of Appendix B for Table 3 and Table 4 with enhanced guidance for self-design approval (i.e., revised guidance on which additional market segments we now allow the appointed ICP to undertake self-design approval of their own contestable designs).	REF-NET-COM-001 (Rev 1.00)	2.00	Daniel Mellis

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# **Appendix A** POC Self-Determination by Market Segment

**Table 1** sets out the market segments where an ICP can self-determine their own POC, and **Table 2** sets out the criteria by which an ICP can self-determine their own POC.

Table 1 – The Market Segments Where an ICP can Self-determine their Own POC

Market Segment	Self-determination available (Yes/No)	Comment	
LV demand	Yes	Available for demand connection projects where distribution works at LV are involved.	
HV demand	Yes	Available for demand connection projects where distribution works at HV are involved.	
HVEHV demand	No	Not available for demand connection projects where distribution works at EHV are involved.	
EHV132 demand	No	Not available for demand connection projects where distribution works at EHV or 132kV are involved.	
DG LV	No	<ul> <li>Not available for DG connection projects where:</li> <li>ENA EREC G98 type of micro-generating plant is present (including electricity storage devices).</li> <li>ENA EREC G99 type of power generating plant is present (including electricity storage devices).</li> <li>Distribution works at LV are involved.</li> </ul>	
DG HVEHV	No	Not available for DG connection projects where:  ENA EREC G98 type of micro-generating plant is present (including electricity storage devices.  ENA EREC G99 type of power generating plant is present (including electricity storage devices).  Distribution works at HV or EHV are involved.	
UMS LA	Yes		
UMS Other	Yes	Available for unmetered connection projects where distribution works at LV are involved, though the POC determination process is not applicable for UMS market segments.	
UMS PFI	Yes		

#### Table 2 - Criteria by which an ICP can Self-determine Their Own POC

Criteria	Measurement	Comment
Connection capacity	Up to 1MVA	Dependent on POC voltage.
Distance to substation	N/A	Design assessment using suitable analysis tools required for any extension greater than 10m.
Service cable length	Service length <30m	Longer lengths require design assessment using suitable analysis tools.
Transformer capacity	Transformer capacity >50kVA	Existing transformer load assessment required where connection is greater than 23kVA (after diversity maximum demand – ADMD).
Asset types excluded	Connections involving EHV or 132kV assets. DG connections.	ENA EREC G98 type of micro-generating plant (including electricity storage devices).  ENA EREC G99 type of power generating plant (including electricity storage devices).

**Note:** For the criteria by which an ICP can self-determine their own POC, refer to the Matrix that is published on our <u>website</u> (TG-NET-ENG-005 SSEN Standard Design Matrix for POC Assessment).

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# **Appendix B** Self-Design Approval by Market Segment

**Table 3** sets out the market segments where an ICP can self-approve their own designs, and **Table 4** sets out the qualifying criteria that will apply to allow an ICP to move between the different levels of design approval.

Table 3 - The Market Segments Where an ICP can Self-approve Their Own Designs

Market Segment	Self-approval of designs available (Yes/No)	Comment	
LV demand	Yes	Available for demand connection projects where distribution works at LV are involved.	
HV demand	Yes	Available for demand connection projects where distribution works at HV are involved.	
HVEHV demand	No	Not available for demand connection projects where distribution works at EHV are involved.	
EHV132 demand	No	Not available for demand connection projects where distribution works at EHV or 132kV are involved.	
DG LV	Yes	<ul> <li>DG LV – Available for DG connection projects where:</li> <li>ENA EREC G98 type of micro-generating plant is present (including electricity storage devices) for single and multiple premises [single or multi-phase, 230/400 V, AC up to and including 16 A per phase].</li> <li>Distribution works at LV are involved.</li> </ul>	
DG LV	No	DG LV – Not available for DG connection projects where:  ENA EREC G99 type of power generating plant is present (including electricity storage devices).  Distribution works at LV are involved.	
	Yes	<ul> <li>DG HV – Available for DG connection projects where:</li> <li>ENA EREC G98 type of micro-generating plant is present (including electricity storage devices) for single and multiple premises [single or multi-phase, 230/400 V, AC up to and including 16 A per phase].</li> </ul>	
DG HVEHV	No	<ul> <li>Distribution works at HV are involved.</li> <li>DG EHV – Not available for DG connection projects where:</li> <li>ENA EREC G98 type of micro-generating plant is present (including electricity storage devices).</li> <li>Distribution works at EHV are involved.</li> </ul>	
	No	DG HV and DG EHV – Not available for DG connection projects where:  ENA EREC G99 type of power generating plant is present (including electricity storage devices).  Distribution works at HV or EHV are involved.	
UMS LA	Yes	Available for unmetered connection projects where	
UMS Other	Yes	distribution works at LV are involved, though the design approval process is not applicable for UMS	
UMS PFI	Yes	market segments.	

#### Table 4 - Qualifying Criteria that will Apply to Allow an ICP to Move Between the Different Levels of Design Approval

Level	Criteria
1	If an ICP has suitable NERS accreditation (i.e. relevant 'Electrical Design of Distribution Networks' scopes), the ICP is fully able to self-approve their own contestable designs.  Caution: We limit this to specific voltages and defined capacities.
2	N/A
3	N/A
etc.	ICP fully able to self-approve contestable designs*
*If applicable	