



Competition in Connections Code of Practice

Reporting Requirements

2021/22

**Electricity
Distribution**

nationalgrid

Introduction

A requirement of the Competition in Connections Code of Practice is that DNOs report annually to demonstrate its compliance with the Code of Practice as required by Standard Licence Condition 52.

This template has been developed in conjunction with stakeholders to help facilitate common reporting. It is deemed that completion of this template shows that the DNO has fulfilled the specific requirements identified in the Code of Practice in the following paragraphs:

9.1. Each DNO shall publish an annual report by the end of September each year to demonstrate their compliance with this code of practice. This report shall include reporting on the volume of inspections by the DNO on connections completed by all parties (including the DNO's own business or affiliates and competitors).

9.2. The report will include such detail on processes and procedures and available metrics to demonstrate the DNO is providing the equivalent level of service to independents as to them undertaking connection activities themselves for each of the Input Services.

National Grid Electricity Distribution (NGED) (Previously Western Power Distribution) has published the CIC Code of Practice and Annual Report at

<http://www.nationalgrid.co.uk/connections-landing/competition-in-connections/competition-in-connections-code-of-practice>

DNOs must also meet Ofgem obligations on reporting included in Standard Licence Condition 45, Data Assurance requirements. This condition requires the DNO to undertake processes and data assurance activities. These are to reduce the risk (and subsequent impact and consequences) of any inaccurate or incomplete reporting or misreporting of information to Ofgem. The DNO must undertake a risk assessment of each submission and set out its data assurance activities to manage the risk, which may include independent review. The DNO must have in place and maintain appropriate systems, processes, and procedures to enable it to perform its obligations.

To ensure consistency of reporting, quantitative information included in this report will generally relate to the previous regulatory year (1 April to 31 March inclusive). In the first year of reporting (September 2016), the information will only include part year information due to the implementation date of the obligation. Information on processes should be as contemporary as possible to the date of publication.

The format of the template includes the specific obligations that DNOs must report on as a direct extract from the Code of Practice, shown in a blue box. Note that the subsequent paragraph references contained in this document relate to those in the Code of Practice and are therefore not sequential. DNOs should complete the black part of the template to demonstrate compliance. This could include narrative, examples, reference to other documents, web links etc.

Change Control

Version number	Date	Brief description of change
1.0	11/07/2016	Reporting Requirements template approved by Ofgem
2.0	18/01/2017	Changes made to text to bring in line with changes made within the main Competition in Connections Code of Practice document.

Updated Content

Year of Report	Clause	Brief Description of Change
16/17	Introduction	Reference to webpage where the CIC COP and Report are published.
16/17	4.3.2	CIC Awareness survey results
16/17	4.6.1	Planning Data Portal updated to Version 2
16/17	5.2.3	Details of Option 4 trial
17/18	4.9	Extended scope for designing the point of connection using a matrix or simplified process
17/18	4.16	Revised process to improve ICP's ability to move between inspection levels
17/18	5.2.3	Removed the restriction on overhead from physical connection works to the existing network carried out by an ICP
17/18	6.2	Inspection performance reports
20/21	4.9.2	Network Capacity Map
20/21	4.11	Enquiry Tracker Portal
20/21	4.16.4	Enquiry Tracker Video Guide
21/22	All with Web links	Web links updated to new URL links as updated website.

4.3 The Connection Application

4.3.2 On receiving a Connection request, the DNO will provide the Customer with a detailed explanation of the competitive Connections market and ICPs that may be available in their Distribution Services Area.

We advise customers that they have a choice with regards to who delivers their connection requirements in multiple locations:

- Our application section of the website, available to view at <https://connections.nationalgrid.co.uk/get-connected/> contains a section on Competition in Connections.
- Within our “new to Connections” page of our website, which is available at <https://connections.nationalgrid.co.uk/new-to-connections/> also contains a Competition in Connections section.
- Our application forms, available to be posted or emailed on request and available to download from the website, contains the following paragraph on the front page:
*“Did you know?
You can get a quotation from an Independent Connections Provide (ICP) or Independent Distribution Network Operator (IDNO) for your electricity connection. We can provide you with a complete connection service but you may also ask an ICP or IDNO to undertake some of the works (known as the ‘contestable works’).*
- Our connection offers include a CiC Factsheet. This leaflet is available by post, email and on our website at <https://connections.nationalgrid.co.uk/information-for-customers>

Our call handlers in our contact centres have guidance information to provide customers with relevant information regarding competitive connection options and are able to direct customers to further information, such as the website.

We publish useful information on our website, such as “What is an ICP?”, “What is an IDNO?”, “Where can I find an ICP” and an illustration of contestability. All information is available to view at <https://connections.nationalgrid.co.uk/information-for-customers> We also include a link to the LRQA website and provide a list of ICPs who have requested inclusion as currently active in NGED’s regions. At present, there are 56 ICPs who have requested inclusion on this list.

We carry out an annual survey to measure customer awareness of competitive connection providers. The survey showed that, in 2021-22, 88% of customers who obtained a connection were aware of other providers.

See Appendix A - CiC Factsheet

4.3.3 In addition, each DNO will ensure that its website contains consistent and clear information for Connection Customers that enables them to access the competitive Connections' market.

We have a dedicated Competition in Connection section within our website, <http://www.nationalgrid.co.uk>. From the home page, you can navigate in two clicks via firstly clicking 'Connections' link and then 'Competition in Connections'. Within the Competition in Connections section, there are sub-pages to enable visitors to obtain more detailed information, such as information for customers, information for ICPs, policy documents and the Competition in Connections Code of Practice.

Our website includes a link to the LRQA Register website to find a list of ICPs and the Ofgem website to find a list of IDNOs. This can be found under within the following link: <https://connections.nationalgrid.co.uk/information-for-customers>. There is an additional link to a list of ICPs that have requested inclusion as currently active in NGED's area. At present, there are 56 ICPs who have requested inclusion on this list.

The Competition in Connections leaflet is available on our website at: <https://connections.nationalgrid.co.uk/information-for-customers>

4.3.4 Where the Customer makes a request to the DNO for a Connection in a Relevant Market Segment, the DNO shall provide the Customer with a Convertible Quotation. The Customer can either accept the Convertible Quotation or provide the Point of Connection to an ICP in order to obtain a competitive quote for the Contestable Works. The Customer can then choose whether it wants the DNO or an ICP to carry out all or some of the Contestable Work.

NGED's Estimating and Charging system enables all connection offers provided to customers in relevant market segments to be provided on a convertible basis via the Dual Offer process, such that the customer may appoint an ICP to carry out some or all of the contestable works, or accept the offer on the basis that NGED carries out both the non-contestable and contestable works. ICPs can continue to request an offer for non-contestable works only. This is reported to Ofgem as part of the Connections Reporting Pack CR7 table.

See Appendix B – Dual Offer

4.3.5 As part of producing a Convertible Quotation the DNO will determine:

- ☐ *the Point of Connection to its Distribution System;*
- ☐ *whether any reinforcement of the existing Distribution System is required;*
- ☐ *whether part of the Distribution System needs to be diverted;*
- ☐ *the Convertible Quotation the DNO issues shall contain details of:*
 - *the charges for the Non-Contestable Works;*
 - *the charges for Contestable Works;*
 - *the work and costs of providing the new Connection; and*
 - *the options the Customer has for accepting the quotation or progressing with an ICP.*

NGED's Dual Offer letters, as referenced in 4.3.4, include these elements.

See Appendix B – Dual Offer

4.3.6 The charges for the Non-Contestable Works in a Convertible Quotation shall be comparable irrespective of whether an ICP or the DNO undertakes the Contestable Works.

The non-contestable physical works costs will be identical regardless of which option the customer chooses. However, assessment and design fees will differ depending on whether NGED or the ICP are designing the contestable works (and subject to the ICP undertaking self-design approval and/or self-determination of the point of connection processes).

4.5 Determining whether ICP can undertake assessment of POC

4.5.2 The DNO will publish circumstances, and the reasons why, where an Accredited ICP cannot undertake the assessment of the Point of Connection. The ICP will be unable to determine the Point of Connection because the DNO:

- *has not made sufficient information available; and/or*
- *has stated that only it can undertake the assessment.*

NGED's Standard Technique ST:SD1F specifies the procedure for NGED and ICP's where an ICP is to determine the Point of Connection and/or self-approve the scheme design. Section 6 of this ST sets out the connection types for which self-determination of the POC is available and details the circumstances where an ICP cannot undertake the assessment of the POC. ST:SD1F is available both internally to NGED staff and externally to ICPs/IDNOs and customers at <https://www.nationalgrid.co.uk/tech-info> in the Design Standards section.

See Appendix C – SD1F

4.6 DNO Input Services where the ICP determines the POC

4.6.1 The DNO will make available access to such information as the ICP is reasonably likely to require in order to assess the Point of Connection. This information will be available on an equivalent basis as it is to the DNO, normally on a 24/7 basis. The information will enable ICPs to either:

- i) self-select a Point of Connection in combination with the Standard Design Matrix (see section 4.9 below); or*
- ii) carry out assessment and design of the Point of Connection using the DNO's standards and process utilising the technical competency of the ICP's design team (see section 4.10 below).*

To enable self-determination of a point of connection, ICP's have access to data, equivalent to that available internally to NGED, where applicable to the scope of the self-determination procedures. The majority of this is available on a 24/7 basis as set out below, with some information provided directly by the local team on request and in a timely manner.

1. Network information is available to registered users via the NGED Planning Data Portal2 on a 24/7 basis. Guidance to mapping information is also available. Relevant links to register for the data portal and view guidance documents or plans are available at <http://www.nationalgrid.co.uk/our-network/network-plans-and-information>
2. Substation and plant details can be accessed by IDNOs & ICPs via the Data Portal2 on a 24/7 basis.
3. Some information is available from local teams; HV feeder demand data (via Data Logger), earthing arrangements and IDNO Agreed Supply Capacities;
4. Information at higher voltages is available from NGED Primary System Design; Primary Substation protection data, automatic voltage control settings, earthing arrangements close to Primary Substations. Where information is readily available from NGED systems, it is provided within 5 working days. If on-site monitoring is required it may take up to 6 weeks.

4.6.2 Such information will include:

- - *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 design standards and documents (e.g. the Energy Network Association's engineering recommendation G81);*
- - *asset sizes and ratings;*
- - *network operational diagrams.*

The relevant information required is available via the resources set out below:

1. Network information is available via the NGED Planning Data Portal, for which users can register at www.nationalgrid.co.uk/our-network/network-plans-and-information
2. Substation and plant details can be accessed by IDNOs & ICPs via the DataPortal2 system.
3. Some information is available from local team; HV feeder demand data (via Data Logger), earthing arrangements and IDNO Agreed Supply Capacities;
4. Information at higher voltages is available from NGED Primary System Design; Primary Substation protection data, automatic voltage control settings, earthing arrangements close to Primary Substations.
5. Design standards and documents for G81 are available on NGED's website at <https://connections.nationalgrid.co.uk/technical-policy-and-engineering-documents>

NGED developed a technical information section on our website at <https://www.nationalgrid.co.uk/tech-info>. This provides online access to technical specifications and policy documents. Users can register for access to receive regular notifications of updates to the documents available on the website.

4.8 Point of Connection Accreditation

4.8.2 Each DNO will, at least annually, assess the areas where accreditation is not available and ensure that the NERS Accreditation Body is aware of these omissions from the overall NERS scheme. Once these have been identified the DNOs will work with NERS to put in place the appropriate scope changes or additions to increase areas of accreditation where practicable.

NGED, together with other DNOs, is a member of NERSAP and the NERS Provider Forum. These are regular meetings with the inclusion of DNO's, ICP's, IDNO's and LRQA which helps to collectively identify gaps in the accreditation processes or the need for further refinement.

As an example, the NERSAP Panel requested that LRQA provide clarification on what the Self Determination of PoC scopes cover. In addition, the NERS Guidance Document has been amended.

4.9 POC assessment Using Standard Design Matrix

4.9.1 Some Point of Connection designs can be determined using a Standard Design Matrix. To facilitate this, the DNO shall publish an up-to-date Standard Design Matrix for use by the ICP. Figure 3 below sets out the key process steps in using the Standard Design Matrix.

NGED previously published a summary of the arrangements under which a low voltage connection up to 200kW could be designed with minimal network analysis. This was set out in Standard Technique SD5B. NGED have since expanded the scope of 'matrix' or simplified connections as set out in the following standard techniques:

ST:SD5F relating to connecting multiple small low voltage connections, specifying the procedure for connecting multiple street furniture connections (metered or unmetered) with a demand of up to 5kVA with minimal design analysis and minimal input services from NGED;

ST:SD4D for the use of simplified load flow techniques for 11kV network design, specifying the requirements for using simplified load flow analysis techniques by both NGED planners and ICPs where the relevant criteria are met; and

ST:SD4E relating to High Voltage connections with minimal network analysis, specifying the requirements for using matrix type load flow analysis techniques by both NGED planners and ICPs where the relevant criteria are met.

These design standard technique can be found on NGED's Technical Information micro website <https://www.nationalgrid.co.uk/tech-info>

**See Appendices D – SD5B
E - SD4D
F – SD5F
G – SD4E**

4.9.2 To allow the ICP to use the Standard Design Matrix the DNO will provide the following;

- *the process to be applied when using the Standard Design Matrix;*

- *a Standard Design Matrix that will assist in assessing the capacity that can be connected to an existing network;*
- *capacity data to be used within the Standard Design Matrix; and*
- *geographical network data to allow the ICP to check where the Point of Connection is to be located on the DNO's Distribution System.*

The standard techniques referred to in 4.9.1 can be found on NGED's technical information section of our website under Design Standards.

They include:

- (1) the process to be applied by both NGED staff and ICP staff when using the Standard Design Matrix
- (2) an explanation of the maximum demand and load requirements within the Standard Design Matrix

The Data Portal2 online system provides substation & customer details.

Our Long Term Development Statement is data is available via the NGED Partners webpage. This data includes data at EHV to 11kV to assist with network planning for ICP's

Full access to our LTDS data can be requested on the NGED Partners webpage here <http://www.nationalgrid.co.uk/account/login>

The Network Capacity Map details both demand and generation (reverse power) headroom available on NGED's substations via in interactive map. This allows ICP's to ascertain the available capacity at any NGED transformer substation.

The Network Capacity Map can be found here <https://www.nationalgrid.co.uk/our-network/network-capacity-map/>

Detailed geographical network data is also available from the NGED Planning Data Portal (<http://www.nationalgrid.co.uk/planningdata>)

See Appendices D to G as referenced in 4.9.1

4.11 Information Exchanges

4.11.1 The ICP and DNO shall each use their reasonable endeavours to exchange information required to determine the Point of Connection. The information from the ICP will be provided at the following stages:

- *Point of Connection Notice – when the ICP commences investigating a Point of Connection;*
- *Point of Connection Issue – when the ICP issues a quotation to a Customer; and*
- *Point of Connection Acceptance – when the Customer accepts the quotation issued by the ICP.*

4.11.4 The DNO will ensure that all relevant information is made available to the ICP either on-line or on request.

ICPs and IDNOs are able exchange information via the online Enquiry Tracker Portal (ET) system. This system was developed closely with ICPs and Customers. The Enquiry Tracker Portal provides an ICP with the ability to submit applications, track the application progress in real-time, view and be notified of any time dependant updates for both the Customer and NGED, upload and download documents specific to the enquiry (such as Contestable Designs) and have the confirmed contact details for the point of contact for the application. Relevant substation and plant details can still be accessed by IDNOs & ICPs via the DataPortal2 system.

We also continue to offer an email process which can be used as an alternative to the Enquiry Tracker for submitting connection applications. Using either Enquiry Tracker or the email process, ICPs must notify NGED at the following stages:

- **Point of Connection Notice** – *when the ICP commences investigating a Point of Connection; within 5 days, NGED will provide the ICP with any relevant information relating to network constraints, upstream reinforcement, interactivity, regulatory payments such as potential refunds or apportionments which would preclude the ICP/IDNO from POC design, as it is not compliant with the Code of Practice.*

Local NGED teams will provide the ICP with requested data on agreed supply capacities for existing embedded networks, earthing arrangements for substations, protection arrangements for substations, earthing arrangements for the LV network and feeder load data for HV networks. Primary System Design will provide the relevant data about earthing arrangements close to Primary substations, protection data for Primary substations and HV feeders, and data required for the calculation of the Rise of Earth Potential at Distribution Sites.

If a scheme does not progress to the Issue stage after 20 working days, NGED will close the enquiry.

- **Point of Connection Issue** – *when the ICP issues a quotation to a Customer; NGED will log the details for future reference for further associated connection applications. Where a quote becomes interactive with a subsequent NGED or ICP quote, NGED will notify that a requote would no longer be compliant with the Code of Practice.*

Offers are valid for 90 days from the date of the Offer letter, after which it will automatically expire.

- **Point of Connection Acceptance** – when the Customer accepts the quotation issued by the ICP, the ICP notifies us and NGED considers the accepted capacity as being committed on the network.

4.12 Self Determination Information

4.12.1 Each DNO will publish when an ICP can self-determine their own POC utilising the common template below.

Market Segment	Self Determination Available (Yes/No)	Comment
LV demand		
HV demand		
HVEHV demand		
EHV132 demand		
DG LV		
DGHVEHV		
UMS LA		
UMS Other		
UMS PFI		

The populated common table, as shown below, identifies the Market Segments for which ICP's can self-determine their own Point of Connection (POC). This table is available to view on our website at <https://connections.nationalgrid.co.uk/agreements-for-cic-schemes>. In addition, it is published within our Standard Technique SD1F which is available on the Technical Information website.

Market Segment	Self Determination Available (Yes/No)	Comment
LV demand	Y	Matrix available
HV demand	Y	Simplified design process available in accordance with ST:SD1F
HVEHV demand	N	
EHV132 demand	N	
DG LV	N	
DGHVEHV	Y	Limited to 50kW on DGHV schemes (installed generation capacity)
UMS LA	Y	
UMS Other	Y	
UMS PFI	Y	

See Appendix C – SD1F

4.12.2 Each DNO will publish the criteria by which an ICP can determine their own POC utilising a Standard Design Matrix utilising the common template below.

Criteria	Measurement	Comment
Connection capacity		
Distance to substation		
Service cable length		
Transformer Capacity		
Asset types excluded		

The populated common table, as shown below, identifies the criteria by which an ICP can determine their own Point of Connection (POC) utilising a Standard Design Matrix. This table is available to view on our website at <https://connections.Nationalgrid.co.uk/agreements-for-cic-schemes> In addition, it is published within our Standard Technique SD1F which is available on the Technical Information micro website.

Criteria	Measurement	Comment
Connection capacity	200kVA maximum	Reduced to 150kVA maximum for 6.6kV networks
Distance to substation	200m	Increased to 250m for capacity less than 150kVA
Service cable length	30m	
Transformer Capacity	315kVA and above	Restriction on total load on single LV fuse way
Asset types excluded	None	

See Appendix C – SD1F

Table 1: Information on Self Determination of Points of Connection Regulatory Year 2021/22 NGED East Midlands

Market Segment	Self Determination Available (Yes/No)	Comment	Number of DNO Quotes Issued 2021/22	Number of SLC15 Quotes Issued 2021/22	Number of Self Determined by Standard Design Matrix	Number of Self Determined by Technical Competence
LV demand	Y	Matrix available	10,238	1,447	4	5
HV demand	Y	Simplified design available	291	2,026	0	0
HVEHV demand	N		24	103	-	-
EHV132 demand	N		10	36	-	-
DG LV	N		47	9	-	-
DG HVEHV	N		240	23	-	-
UMS LA	Y		61	n/a	-	-
UMS Other	Y		261	n/a	-	-
UMS PFI	Y		0	n/a	-	-

The DNO quotes issued include dual offers with an Option 1 for NGED to carry out all of the works and an Option 2 for NGED to carry out only the non-contestable works. The customer may accept either option and appoint an ICP if they proceed with Option 2. DG HVEHV includes DG requiring works at 132kV.

Table 1: Information on Self Determination of Points of Connection Regulatory Year 2021/22 NGED West Midlands

Market Segment	Self Determination Available (Yes/No)	Comment	Number of DNO Quotes Issued 2021/22	Number of SLC15 Quotes Issued 2021/22	Number of Self Determined by Standard Design Matrix	Number of Self Determined by Technical Competence
LV demand	Y	Matrix available	9,841	1,302	3	2
HV demand	Y	Simplified design available	270	1,471	0	0
HVEHV demand	N		12	33	-	-
EHV132 demand	N		7	22	-	-
DG LV	N		19	3	-	-
DG HVEHV	N		214	7	-	-
UMS LA	Y		83	n/a	-	-
UMS Other	Y		215	n/a	-	-
UMS PFI	Y		0	n/a	-	-

The DNO quotes issued include dual offers with an Option 1 for NGED to carry out all of the works and an Option 2 for NGED to carry out only the non-contestable works. The customer may accept either option and appoint an ICP if they proceed with Option 2. DG HVEHV includes DG requiring works at 132kV.

Table 1: Information on Self Determination of Points of Connection Regulatory Year 2021/22 NGED South Wales

Market Segment	Self Determination Available (Yes/No)	Comment	Number of DNO Quotes Issued 2021/22	Number of SLC15 Quotes Issued 2021/22	Number of Self Determined by Standard Design Matrix	Number of Self Determined by Technical Competence
LV demand	Y	Matrix available	4,483	123	2	3
HV demand	Y	Simplified design available	68	202	0	0
HVEHV demand	N		3	1	-	-
EHV132 demand	N		10	1	-	-
DG LV	N		21	1	-	-
DG HVEHV	N		79	0	-	-
UMS LA	Y		130	n/a	-	-
UMS Other	Y		234	n/a	-	-
UMS PFI	Y		0	n/a	-	-

The DNO quotes issued include dual offers with an Option 1 for NGED to carry out all of the works and an Option 2 for NGED to carry out only the non-contestable works. The customer may accept either option and appoint an ICP if they proceed with Option 2. DG HVEHV includes DG requiring works at 132kV.

Table 1: Information on Self Determination of Points of Connection Regulatory Year 2021/22 NGED South West

Market Segment	Self Determination Available (Yes/No)	Comment	Number of DNO Quotes Issued 2021/22	Number of SLC15 Quotes Issued 2021/22	Number of Self Determined by Standard Design Matrix	Number of Self Determined by Technical Competence
LV demand	Y	Matrix available	9,789	379	3	3
HV demand	Y	Simplified design available	72	814	0	1
HVEHV demand	N		15	38	-	-
EHV132 demand	N		4	23	-	-
DG LV	N		44	1	-	-
DG HVEHV	N		187	3	-	-
UMS LA	Y		211	n/a	-	-
UMS Other	Y		471	n/a	-	-
UMS PFI	Y		0	n/a	-	-

The DNO quotes issued include dual offers with an Option 1 for NGED to carry out all of the works and an Option 2 for NGED to carry out only the non-contestable works. The customer may accept either option and appoint an ICP if they proceed with Option 2. DG HVEHV includes DG requiring works at 132kV.

4.13 Connection Design

4.13.2 In designing the Connection the ICP shall take account of any reasonable requirements of the DNO, and all of the DNO's design standards in place at the time. All relevant design standards and specifications, such as G81, will be made available.

ICPs are provided with technical information to assist them with the site design and procurement and installation of materials. The relevant documentation is available on NGED's website and is referenced in the Connection Offer:

ICPs are required to work to the National Framework documents, Electricity Association Engineering Recommendation G81 and the associated NGED Framework Appendices.

G81 National Framework documents and NGED's Design Framework Appendix are available on NGED's website at <https://connections.nationalgrid.co.uk/technical-policy-and-engineering-documents>

The technical information section of our website provides online access to technical specifications and policy documents. Users can register for access to receive regular notifications of updates to the documents available on the website.

4.13.3 Where the Connection Works are to be adopted by an IDNO, the DNO shall not require unduly onerous boundary requirements between the IDNO's network and the DNO's Distribution System. Where the DNO requires additional assets to be provided at the boundary (other than those it would require if it was connecting the Connection Works to its own Distribution System) the DNO shall set out the reasons.

It is NGED policy not to require a link box at the interface between NGED's distribution system and the IDNO network, under normal circumstances. There is also no requirement for a physical joint. In instances where cable terminates directly to NGED assets (e.g. substations/feeder pillars), the DNO/IDNO boundary will be an agreed specified location, usually 1m from the boundary of NGED's asset to allow the IDNO room to carry out works on their network without impeding into NGED's working areas.

On the rare occasion that NGED does require a link box, NGED will procure and install one at no cost to the IDNO.

If the IDNO contests the procurement and installation of the link box in accordance with Competition in Connection rules the IDNO may invoice NGED for its reasonable costs.

Where an IDNO requires a link box or feeder pillar, the IDNO will procure and install one at their own expense.

See Appendix H – NC6A

4.16 Design Approval

4.16.3 DNOs shall complete and publish the following standard tables on their website.

The proposed tables would be set out as follows:

Table One – The market segments where the ICP is able to self-approve its designs

Market Segment	Self Approval Available (Yes/No)	Comment
LV demand		
HV demand		
HVEHV demand		
EHV132 demand		
DG LV		
DG HVEHV		
UMS LA		
UMS Other		
UMS PFI		

Table Two - Qualifying criteria that will apply to allow an ICP to move between the different levels of design approval

Level	Criteria
1	
2	
3	
Etc	ICP fully able to self-approve contestable designs*

*If applicable

The populated common tables, as shown below, identify the Market Segments for which ICP's can self-approve their own designs and the criteria by which they can move between audit levels. These tables are available to view on our website at <https://connections.nationalgrid.co.uk/agreements-for-cic-schemes> In addition, they are published within our Standard Technique SD1F_3 which is available on the Technical Information website.

We carried out a review of the requirements to move between inspection levels following ICP feedback. As a result, we have reduced the number of successful audits required to move from Level 2 to Level 3, or from Self-audit level 1 to Self-audit level 2. In addition we have reduced the number of inspections to be carried out for ICP's who achieve inspection level 3 from 25% to 5%.

Market Segment	Self Approval Available (Yes/No)	Comment
LV demand	Y	
HV demand	Y	
HVEHV demand	N	
EHV132 demand	N	
DG LV	N	
DG HVEHV	N	
UMS LA	Y	
UMS Other	Y	
UMS PFI	Y	

Level	Criteria
1	100% Audit, 20 audits to move to level 2
2	50% Audit, 5 audits to move to level 3
3	5% Audit
Self-audit level 1	5% Audit, 5 Audits to move to self-audit level 2
Self-audit level 2	2% audits

See Appendix C – SD1F

4.16.4 Where an ICP, having met the criteria set out by the DNO, undertakes design approval of the Connection Works the ICP shall not require design approval from the DNO. However, the ICP may still ask the DNO to approve or validate the design.

An ICP who meets the criteria for design self-approval can still ask NGED to approve the design.

If the ICP is requesting to Self-approve their own design, they must be signed up to the Framework Network Access and Adoption Agreements and they must submit their enquiry via the Enquiry Tracker route or alternatively the email process.

NGED's ICP Operating Manual, available on the technical information section of our website, provides an explanation of CROWN Process and Design Approval where the ICP is not self-approving their design.

The enquiry route for enabled enquiries is illustrated in our Enquiry Tracker video guide on our online services webpage here <https://connections.nationalgrid.co.uk/online-services>

NGED's Standard Technique ST:NC2F and ST:SD1F on Design approval are available on the technical information section of our website.

See Appendix J - NC2F and Appendix C – SD1F

4.16.6 Where the design approval for Contestable Works is to be undertaken by an Accredited ICP, the ICP shall nevertheless submit the approved design to the DNO for inspection. As construction shall not need to wait to commence, such inspection shall not unduly delay the ICP in carrying out its works. Such inspection shall not exceed the level of inspection the DNO employs in its own connection services. To assist the inspection, the DNO may request the ICP to provide additional information. Where the inspection identifies non-conformance with the DNO's design standards or there was an issue with the POC, the DNO shall notify the ICP of such non-compliances and any required corrective actions. The DNO shall be entitled to re-inspect the design following completion of the corrective actions by the ICP.

Where the ICP undertakes self-approval of its designs, they shall submit their design to NGED for inspection. The inspection itself would not be required to be completed prior to works commencing and therefore the ICP will not be unduly delayed in proceeding with the works. Inspections are also carried out on the physical works to construct the network.

As audits are completed, ICP's will move through the differing levels of inspection which decrease the percentage of inspections required. Once they have attained level 3 in all areas, in which 5% of schemes will be inspected, ICP's can apply to move to a self-inspection level which is consistent with NGED's own inspection level.

Where failures occur, they shall be recorded on the appropriate form. Failures are pre-allocated a severity Category:

Category 1: is a severe or dangerous defect where there is a serious non-compliance with NGED's policies and procedures or the Framework Network Access and Adoption Agreement. Such defect will result in immediate suspension of that specific activity of work by the ICP on that site.

Category 2: is a serious defect where there is a serious non-compliance with NGED's policies and procedures or the Framework Network Access and Adoption Agreement. Such defect may not be recoverable at the time of inspection, may result in failure to adopt the asset until rectified. Further inspections will normally be required. In this instance NGED may determine the action required to rectify the defect.

Category 3: is a minor defect resulting from a minor non-compliance with NGED's policies and procedures or the Framework Network Access and Adoption Agreement. Such defect will normally be recoverable at the time of inspection and will not require further inspections.

The process for managing failures is included within the ICP Operating Manual, Standard Technique NC2N. This operating manual adheres to the inspection and monitoring regime, as detailed in Standard Technique NC2M. Both of these documents are available to ICP's on the Technical Information website.

See Appendix I – NC2M and Appendix K – NC2N

4.16.8 If the DNO has any concerns as to the competency of the Accredited ICP this must be highlighted to the NERS service provider and the ICP.

As per the processes outlined within Standard Techniques NC2M and NC2N, failures are recorded within NGED's Crown system within the Inspection and Monitoring regime tables. The inspectors report will be submitted to the ICP, with photographs where appropriate, within 2 working days following the issue of an automated email from the Crown system. The site inspection forms and any supporting evidence, such as photos, are electronically stored for future referral, as and when required. This evidence will support the escalation processes detailed in the Standard Techniques.

See Appendix I – NC2M and Appendix K – NC2N

Table 2: Information on Self Approval of Designs 2021/22 NGED East Midlands

Market Segment	Self Approval Available (Yes/No)	Comment	Number of SLC15 Designs Approved 2021/22	Number of Self Approved Designs 2021/22
LV demand	Y		245	90
HV demand	Y		153	31
HVEHV demand	N		3	N/A
EHV132 demand	N		0	N/A
DG LV	N		1	N/A
DG HVEHV	N		2	N/A
UMS LA	Y		N/A	N/A
UMS Other	Y		N/A	N/A
UMS PFI	Y		N/A	N/A

The number of SLC15 designs approved includes only those which were successfully approved and excludes any submissions which were rejected. Unmetered connections are not required to go through the formal design approval process, therefore no volumes for unmetered design self-approval have been recorded.

Table 2: Information on Self Approval of Designs 2021/22 NGED West Midlands

Market Segment	Self Approval Available (Yes/No)	Comment	Number of SLC15 Designs Approved 2021/22	Number of Self Approved Designs 2021/22
LV demand	Y		224	73
HV demand	Y		134	48
HVEHV demand	N		3	N/A
EHV132 demand	N		0	N/A
DG LV	N		0	N/A
DG HVEHV	N		0	N/A
UMS LA	Y		N/A	N/A
UMS Other	Y		N/A	N/A
UMS PFI	Y		N/A	N/A

The number of SLC15 designs approved includes only those which were successfully approved and excludes any submissions which were rejected. Unmetered connections are not required to go through the formal design approval process, therefore no volumes for unmetered design self-approval have been recorded.

Table 2: Information on Self Approval of Designs 2021/22 NGED South Wales

Market Segment	Self Approval Available (Yes/No)	Comment	Number of SLC15 Designs Approved 2021/22	Number of Self Approved Designs 2021/22
LV demand	Y		17	18
HV demand	Y		16	15
HVEHV demand	N		0	N/A
EHV132 demand	N		0	N/A
DG LV	N		0	N/A
DG HVEHV	N		1	N/A
UMS LA	Y		N/A	N/A
UMS Other	Y		N/A	N/A
UMS PFI	Y		N/A	N/A

The number of SLC15 designs approved includes only those which were successfully approved and excludes any submissions which were rejected. Unmetered connections are not required to go through the formal design approval process, therefore no volumes for unmetered design self-approval have been recorded.

Table 2: Information on Self Approval of Designs 2021/22 NGED South West

Market Segment	Self Approval Available (Yes/No)	Comment	Number of SLC15 Designs Approved 2021/22	Number of Self Approved Designs 2021/22
LV demand	Y		75	22
HV demand	Y		58	18
HVEHV demand	N		3	N/A
EHV132 demand	N		0	N/A
DG LV	N		0	N/A
DG HVEHV	N		3	N/A
UMS LA	Y		N/A	N/A
UMS Other	Y		N/A	N/A
UMS PFI	Y		N/A	N/A

The number of SLC15 designs approved includes only those which were successfully approved and excludes any submissions which were rejected. Unmetered connections are not required to go through the formal design approval process, therefore no volumes for unmetered design self-approval have been recorded.

4.19 Final Connection

4.19.1 The DNO shall set out the processes for facilitating the provision and registering of MPANs for premises that will connect to Connection Works that the DNO will adopt.

4.19.2 The DNO will provide this service in the same manner that it would provide to either a customer directly or its own business.

4.19.3 The ICP will be provided with any data or contact details of the DNO's MPAN creation team.

Within the Connection Offer letter, customers are advised that the MPAN (supply numbers) will be provided following acceptance. NGED do not have an MPAN creation team, they are generated, as required, by the local teams in discussion with the customer. This process is the same for both NGED and ICP delivered connections.

5.1 Accreditations

5.1.3 In all cases where NERS accreditation is not available DNOs will work with the scheme administrator to implement a scope change to cover the relevant activity consistent with the Relevant Objectives in section 2.3.

As identified in question 4.8, NGED is a member of NERSAP and the NERS Provider Forum to ensure scope changes are implemented to cover the relevant activity consistent with the Relevant Objectives in section 2.3.

5.2. Authorisations

5.2.2. Training and / or authorisations relating to G39 authorisations accepted by a given DNO shall be accepted by other DNOs

NGED do not authorise Lighting Authority Personnel.

STANDARD TECHNIQUE:OS6C "Co-ordination of Electrical Safety of Work on Street Furniture in the Vicinity of the NGED Distribution System" section 1.2 states:

1.2 In order to allow lighting authority personnel to operate NGED owned cut-outs, NGED require that the lighting authority ensures that their personnel are competent and equipped to do so in safety. It is therefore expected that lighting authorities shall train, certificate, audit and maintain a register of their personnel, who are required to operate NGED owned cut-outs, in accordance with G39/2.

NGED accept that this training can be provided by NGED, 3rd party training provider or other DNO without prejudice.

See Appendix L – OS6C

5.2.3. The following options for authorisation of ICP employees will be available, subject to agreement between the ICP and the DNO in consideration of the type of work being undertaken and in accordance with the specific DNO requirements for each option and published on its website:

- Option 1 - ICP authorisation of ICP Employees and Contractors
- Option 2 - DNO authorisation of ICP Employees
- Option 3 - Transfer of Control

Accredited ICPs are able to nominate which Option they will be complying with when working on the NGED network from the following table:

	Option 1	Option 2	Option 3	Option 4
	ICP Work to their own DSRs procedures and Policy. ICP Authorise their own Staff.	ICP works to NGED DSRs procedures and Policy. NGED Authorise ICP Staff.	NGED transfers control of a specific part of the distribution system to ICP control Only available with Option 1	ICP Senior Authorised Person switches to NGED DSRs procedures and policy. Work on 'Defined System' under ICP DSRs procedures and policy.

In addition during 16/17 as part of its ICE Connections Stakeholder programme, NGED trialled a new Option 4 in response to stakeholder feedback. Option 4 is for the ICP to work to NGED's DSRs for HV switching and to their own DSRs for carrying out the connection works. Following a successful trial with interested ICPs, NGED now offers the arrangement to all. The arrangements apply to high voltage (underground works only) and live low voltage mains and service connections for metered and unmetered connections (overhead and underground).

Any operatives who are required by the ICP to carry out physical work on NGED's distribution system must:

- ☐ hold a current NERS passport or an approved alternative with the relevant scopes and accreditation;
- ☐ be suitably competent and authorised by the ICP for the various stages of the intended works or activity under the ICP's DSRs and;
- ☐ have received basic health and safety training (i.e. avoidance of danger and risk assessment) and emergency first aid training including resuscitation.

In order to participate in this process the ICP shall either:

- ☐ be Fully Accredited, with an Framework Network Access and Adoption Agreement in place and the ICP operatives must have appropriate Lloyd's scopes and accreditations or;
- ☐ where the ICP holds only Partial Accreditation the ICP shall also be following the appropriate NERS process leading to Full Accreditation.

During 2018/19, as part of its ICE Connections Stakeholder programme, NGED has amended Standard Technique ST:NC2L lift the restriction of overhead high voltage works.

See Appendix M – NC2L

Table 3: Information on Authorisations

Activities	Option 1- ICP (Yes/No)	Option 2 – DNO (Yes/No)	Option 3 – Transfer of control (Yes/No)	Comments
LV Works	Yes	Yes	No	Live Jointing New Connections (LJNC) process
LV Operations	No	No	No	NGED shall: <ul style="list-style-type: none"> • Provide cable identification service • Install generation & back-feeds • Switch parallels
HV Works	Yes	Yes	Yes	As per HV operations
HV Operations	Yes	Yes	Yes	NGED shall: <ul style="list-style-type: none"> • Install generation and back-feeds • Switch parallels (unless under Option 4)
EHV Works	No	No	No	
EHV Operations	No	No	No	
Unmetered Works	Yes	Yes	No	Live Jointing New Connections (LJNC) process
Unmetered Operations	No	No	No	Cable identification service available from NGED

This information is available via a link to what operational activities an ICP is permitted to undertake on the NGED network on our website at <https://connections.nationalgrid.co.uk/information-for-customers>

6.1 Auditing

6.1.2. Auditing is undertaken to assess and validate the ability of ICPs to undertake specified NERS activities. ICPs Accredited under NERS will be subject to the audit provisions of NERS. DNOs are not required to, and will not, without reasonable cause, undertake additional audits of NERS accredited ICPs.

NGED can confirm that we would not, without reasonable cause, carry out audits to validate an ICP's ability to undertake specified activities where they have been accredited under NERS and subject to the audit provisions of NERS. As per Standard Technique NC2L, NGED will check to ensure the ICP holds appropriate accreditation under NERS, ask the ICP to nominate the DSR Code of Practice option they will be complying with when working on the NGED network and to provide a detailed Safety Management System (SMS) to NGED's Safety Team.

See Appendix M – NC2L

6.1.3. Where a DNO elects to provide its own ICP Accreditation (either where there is no accreditation available under NERS for particular activities or as an alternative to NERS in agreement with the ICP) the DNO shall undertake its own surveillance and assessment. In these cases the arrangements should be consistent with the arrangements used by the DNO for its own Connection Works and for its sub-contracted works and shall be not more onerous than that used by NERS.

NGED does not provide its own ICP Accreditation.

STANDARD TECHNIQUE: NC2L_10 "Relating to Independent Connection Provider (ICP) High and Low Voltage Connections under ICP or NGED DSRs" section 2.1 requires NERS or Partial NERS Accreditation is held by the ICP and has no option for NGED Accreditation.

2.1 Prior to NGED allowing an ICP to carry out any physical works NGED must ensure that the ICP:

- holds appropriate accreditation under the NERS;*
- has Partial Accreditation in NGED's distribution area or nationally applicable Full Accreditation.*

See Appendix M – NC2L

6.2. Inspection

6.2.1. DNOs shall be entitled to inspect ICP works. However, DNOs should be mindful of their obligations in respect of competition in Connections, and should therefore consider appointing independent inspectors to undertake this activity. In any case, such inspection should not unduly restrict or delay the Accredited ICP from undertaking work and must be no more onerous than the quality assurance regime used for the DNO's own Connections' activities.

6.2.3. If the DNO identifies a non-conformance, the DNO shall specify what the non-conformance is and set out the corrective actions that need to be undertaken. On completion of the corrective actions, the ICP shall advise the DNO and the DNO shall be entitled to revisit the site and carry out a further inspection.

Inspections, including those for network design, self-determined points of connection, design approval and physical on site works, are undertaken using the same inspection and monitoring regime for both ICP's and NGED's own connections business. The results are recorded in NGED's Crown database.

Inspections, where required, take place around the ICP's programme of works and, as such, the ICP will not be unduly restricted or delayed in undertaking their work. As the same regime is used for both ICP's and NGED's own connections business, the inspection of ICP's is no more onerous than the quality assurance regime used for NGED's own connections activities.

As described in 4.16.6, non-conformances are escalated in line with Standard Technique NC2M and NC2N, both of which are available on the NGED Technical Information website.

As part of its ICE Connections Stakeholder programme, NGED has improved the visibility and transparency of the inspection and monitoring regime. A monthly report is issued to ICPs detailing their own inspection performance including number of inspections carried out, number of passes and any failures incurred. In 2018/19 NGED developed a table of inspections which is anonymised and published on the NGED website. This includes NGED's own performance for each of the four licence areas.

See Appendix I – NC2M and Appendix K – NC2N

Table 4: Information on Inspections

	Number of Inspections Made	% of inspections made	Number of Connections made (exit points)	Comments
DNO	4539	54%	3782	The number of connections comprise only of connections energised by NGED between 01/04/21 and 31/03/22 on the enquiries for which inspections were completed.
ICPs	3882	46%	2404	The number of connections comprise only of adopted connections and IDNO exit points energised between 01/04/21 and 31/03/22 on the enquiries for which inspections were

				completed. It excludes connections downstream of an IDNO exit point.
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7.2 Land Rights

7.2.1 The DNO will publish criteria which trigger the need for Land Rights relating to assets they will adopt or require access to, which shall be no more onerous than those it would seek for its own Connections activities.

NGED has updated its website and “Legal permissions and consents” webpage.

<https://connections.nationalgrid.co.uk/legal-permissions-and-consents>

The page now includes drop downs to include descriptions, documents and advice on;

- legal permissions and consents
- How long does it take to complete the legal permissions and consents processes
- Technical information for ICP's and IDNO's
- Contact details for legal permissions and consent

The page now includes published guidance for landowners and ICPs to explain the process relating to Land Rights relating to assets adopted from ICPs.

This includes a typical process for completing NGED land owner legal permissions (where the ICP has agreed routes and terms with the landowners and is producing the legal plan).

Whether a customer seeks a direct quote from NGED or appoints an ICP, the main types of consents for connection needed are:-

- ☐ Landowner permissions
- ☐ Planning Permission or Development Consent
- ☐ Consents from other statutory bodies (e.g. environmental consents)

NGED will need land rights agreements in place prior to adopting the installed equipment and to cover future access and maintenance on the land. The NGED agreement would normally be one a NGED standard wayleaves or easements and would take effect once NGED adopts the works.

ICPs also need their own agreement with the landowner to carry out the works. The ICP agreement would be the contract between the ICP and the landowner for the installation stage and NGED are not normally party to that agreement.

NGED's Technical Information website has a section on Legal Permissions and Consents which contains the relevant NGED Policies and Standard Techniques.

7.2.2 Subject to and in accordance with the terms of the agreed and applicable incorporated process, the IDNO will be able to negotiate on behalf of the DNO where IDNO and DNO dual use land right agreements are required so that they can secure the rights required for the connection and extension of the network.

NGED has adopted a process agreed with IDNOs to enable IDNOs to negotiate dual land use agreements, on behalf of the DNO.

The preferred method of securing land rights is by transferring the freehold from the developer or landowner but a long leasehold or sub-lease may sometimes be more appropriate. Where the IDNO is the majority asset holder they will be responsible for the accommodation and hold site duties under the ESQC Regulations. Under this scenario, for LV and 11kV sites, the IDNO will normally want to secure the rights for the substation under a bilateral lease/transfer agreement between themselves and the landowner. NGED's assets on the site and cables will be included in this agreement. NGED agreed a process with IDNO's to allow IDNO's to liaise directly with the land owner over the land transfer and to have control over the legal process for 11kV and low voltage connections only. This process was agreed by all parties and is set out within NGED's Standard Technique NC6A.

Connections at 33kV and above will be the subject of a tri party agreement under guidance from the NGED Consents and Wayleaves team. The IDNO will acquire rights from the landowner by securing either a lease or transfer in respect of the substation and cabling, with NGED relying on the Contracts (Rights of Third Parties Act) 1999 to enforce the rights set out in the direct agreement between the IDNO and the landowner. The process to be adopted by the parties is based on one agreed with a major IDNO. This is detailed within NC6A.

See Appendix H – NC6A

7.2.3 DNOs shall provide model standard Land Rights documentation for use by ICPs. The ICP may prepare the legal documentation for the Land Rights for the signature or authorisation of the DNO.

Information on Legal Permissions and Consents is published on NGED's website at <https://connections.nationalgrid.co.uk/legal-permissions-and-consents>

This includes sample document templates for common NGED Deeds, Wayleaves and Lease agreements. Other specimen example documents can be provided on request.

NGED's Technical Information microsite section on Legal Permissions and Consents contains the relevant NGED Policies and Standard Techniques.

7.4 Adoption

7.4.2 The ICP will provide the DNO all as-laid drawings and test certificates as specified by the DNO. This information should be no more onerous than the information provided by the DNO's own Connections' activities.

The provision of records of the installed assets has been published on the NGED website under G81. The requirements are also set out in NGED's Standard Technique DO6A_4 which, alongside G81, is available on the technical information section of our website.

ICPs are required to be signatories to a Framework Network Access and Adoption Agreement (FNA&AA). Before adopting the assets NGED must be satisfied that the commissioning tests have been carried out satisfactorily and the ICP has provided a Notice of Completion.

Where the ICP is undertaking self-inspection they are required to submit an Audit Pack (see ICP Operating Manual page 15) which will include:

- Test results
- Schematic drawings

The ICPs are required to provide plans and recordings indicating the adopted assets which will be retained by the NGED Mapping Centre.

NGED will then issue a Completion Certificate acknowledging adoption of the assets, or a NGED Rejection Notice may be emailed to the ICP's nominated contact for any of the reasons specified in the ICP Operating Manual.

For NGED connections work, commissioning certificates and test results will be held locally. Schematic drawings and cable records will be retained by the NGED Mapping Centre.

See Appendix N – DO6A

10. Dispute Resolution

10.1. The DNO's complaints process will be used where any party considers that a DNO is not meeting their obligations under this code of practice. The complaints process will include appropriate levels of escalation within the DNO organisation. Each DNO shall publish their complaints resolution process on their website.

A CIC Connections complaints procedure has been published on the NGED website at <https://connections.nationalgrid.co.uk/icp-complaints-procedure>

This is specifically for use by any party who considers that NGED is not meeting its obligations under the CIC COP. It follows a similar internal escalation procedure to normal complaints. An online complaint request form is also provided.

