Link Box Installation Guidance Document - for Independent Connection Providers and Independent Network Operators

When is a link box required?

It is the policy of Northern Powergrid that we require a link box, or other suitable point of isolation as specified within IMP/001/010 (Code of Practice – for Standard Arrangements for Customer Connections) to be installed for all Independent Distribution Network Operators (IDNO) connections to our existing distribution system for the purpose of isolation between our low voltage network and that of the IDNO.

Who will fund the cost of the link box?

The party that requests a link box will fund and therefore own the link box. Paragraph 4.14.1 of the Competition in Connections Code of Practice states the following;

- Where the link box is requested by the ICP or the IDNO, the link box will become the property of the IDNO;
- Where the link box is requested by the DNO, the link box will become the property of the DNO; and
- the cost of providing the link box will be funded by the party that is to own the link box (as described above)".

How does an IDNO/ICP inform Northern Powergrid which party requires the link box?

As part of Northern Powergrids Design Approval/Submission process, the design submission application form requires the ICP/IDNO to specify the proposed link box ownership details, extract provided below for reference;

NORTHERN POWERGRID

DESIGN APPROVAL

APPLICATION FORM

SECTION 6

LINK BOX DETAILS

6a. in accordance with Paragraph 4.14.1 of the Competition in Connections Code of Practice, please choose one of the following options*;

1. IDNO/ICP requires a Link Box (link box will become the property of the IDNO)
2. IDNO/ICP does not require a Link Box (link box will become the property of the DNO)
3. Not applicable as the design is not for a IDNO low voltage connection

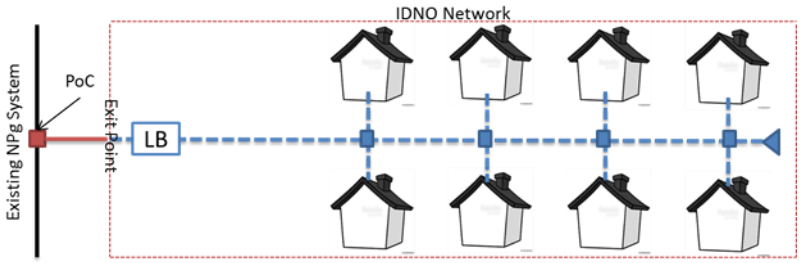
PLEASE NOTE: failure to select one of the above options may delay your design submission and or final connection.

In addition, as part of our minimum requirements for design submission, the scaled approval drawing must indicate the proposed ownership details. Where this information is not provided, this may result in a design submission being rejected.

What happens if an IDNO/ICP requires a link box?

In instances where the IDNO or ICP request a link box to be installed, the ICP/IDNO will then fund, install, own and operate the link box.

This scenario allows the IDNO/ICP to operate the link box, either for Energisation of the IDNO network in accordance with its own LV control procedures where applicable or for ongoing maintenance and of its embedded network. Figure 1 below details this arrangement;



Northern Powergrid will have the right for operational access of the ICP/IDNO owned link box under emergency situations and for the purpose of isolating a fault on the IDNO network which may be disrupting Northern Powergrid customers in accordance with Engineering Recommendation G88/2.

What happens if an IDNO/ICP does not require a link box?

In instances where the IDNO/ICP advises Northern Powergrid that it does not require a link box to be installed, Northern Powergrid will fund the cost of the link box for its sole use, as such it can only be operated and maintained by Northern Powergrid and not the IDNO/ICP.

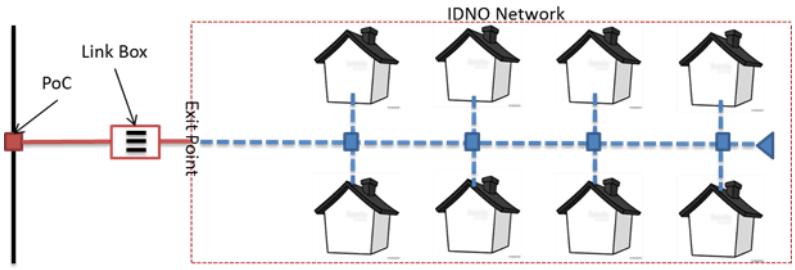
The following options are available to the ICP/IDNO in this scenario;

1. Source a link box to Northern Powergrid specification (ENA-TS 09-23 Link Boxes) and undertake the installation on our behalf to receive a payment of £1425 exclusive of VAT.

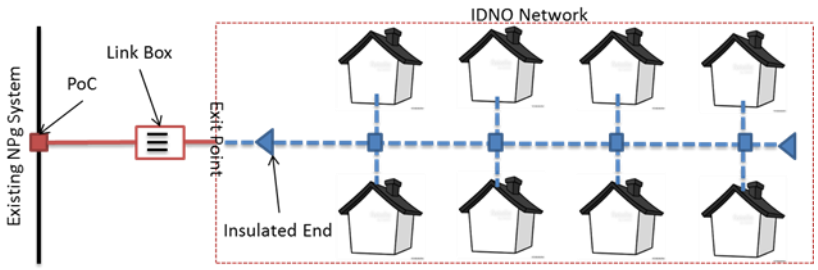
2. Collect a free issue link box from manned Northern Powergrid stores sites and install it on our behalf receiving a payment of £1200 exclusive of VAT

3. Northern Powergrid provides and installs a link box

For options 1 & 2 above, the IDNO/ICP should install the IDNO LV network and Northern Powergrid owned link box with fuses inserted dead, then where accredited to do so, make the final connection (self-connect) to our existing distribution system energising both the new Northern Powergrid network up to a nominal exit point downstream of the link box along with the new IDNO LV network. Figure 2 below details this arrangement;



Where an ICP/IDNO is not able to insert fuses dead in accordance with figure 1 above, then IDNO/ICP must still install the fuses dead but then fit an insulated end at the boundary of the IDNO site before making the live final closing joint to the existing Northern Powergrid network, figure 3 sets details this arrangement;



In instances where an ICP/IDNO requires fuses inserting/removing from a Northern Powergrid owned link box, it must request the relevant Northern Powergrid project engineer to attend site and

carry out this activity. The IDNO/ICP will have the right for operational access of the Northern Powergrid owned link box under emergency situations only in accordance with Engineering Recommendation G88/2.

Where is the exit point or Point of Supply?

The link box or feeder pillar is not considered as the point of Supply (PoS) to an embedded IDNO network.

Where the link box is owned by Northern Powergrid then the PoS will be on the IDNO side of the link box, at the nearby straight joint where applicable or, at a nominal position on the cable usually between 2 to 5 meters downstream of the link box as set out in figure 1 above.

Where the link box or feeder pillar is owned by the IDNO then the PoS will be on the Northern Powergrid side of the link box or feeder pillar at a nominal position on the cable usually between 2 to 5 meters upstream of the link box as set out in figure 2 above.

This exit point, along with ownership and operation details will also be stipulated within the Bi-lateral Connection Agreement issued to the IDNO prior to Energisation.

How does the process work?

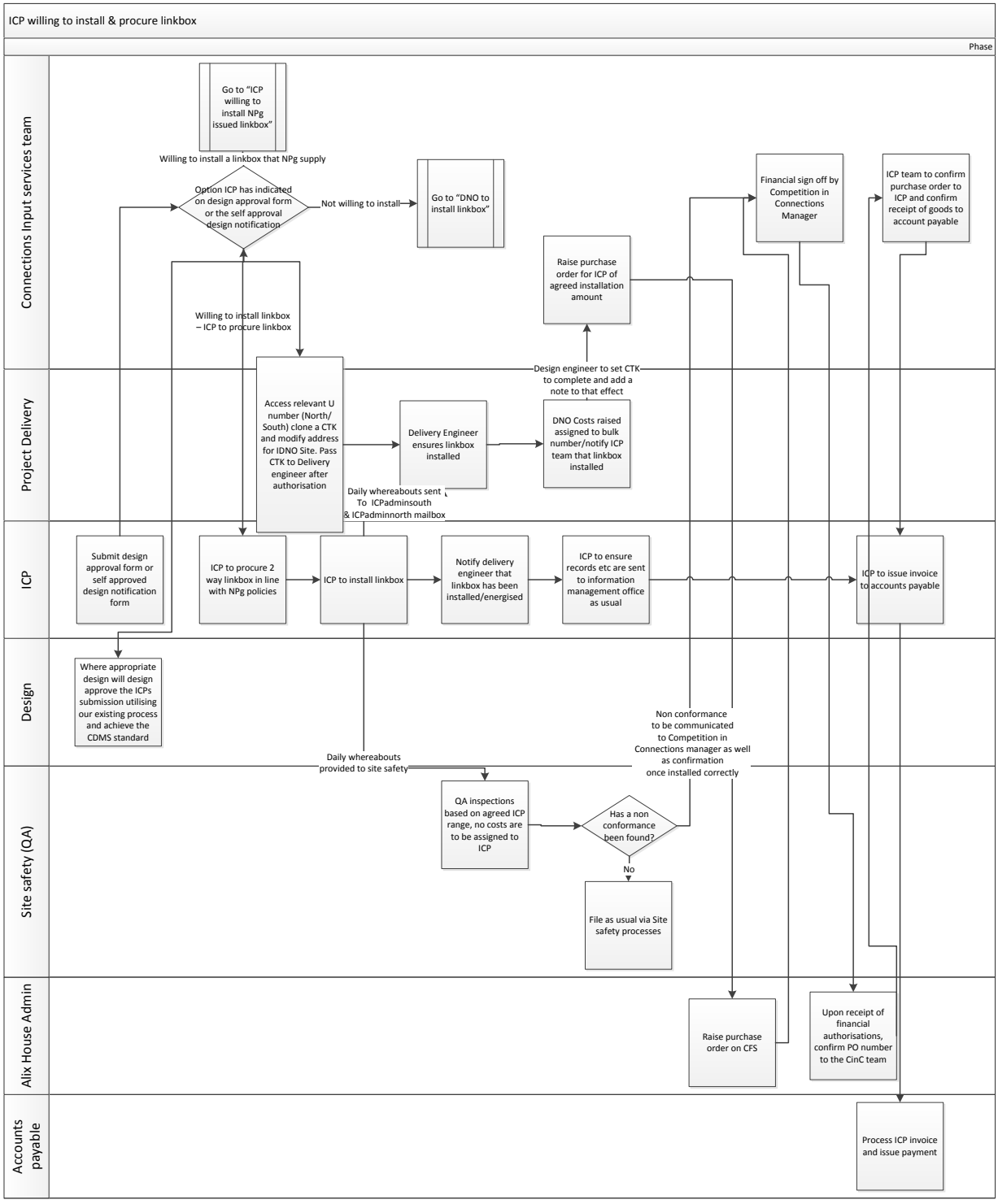
Please refer to Appendices 1 – 3 at the rear of this guidance which detail the process of each available option as set out above.

How do we contact if we have any questions?

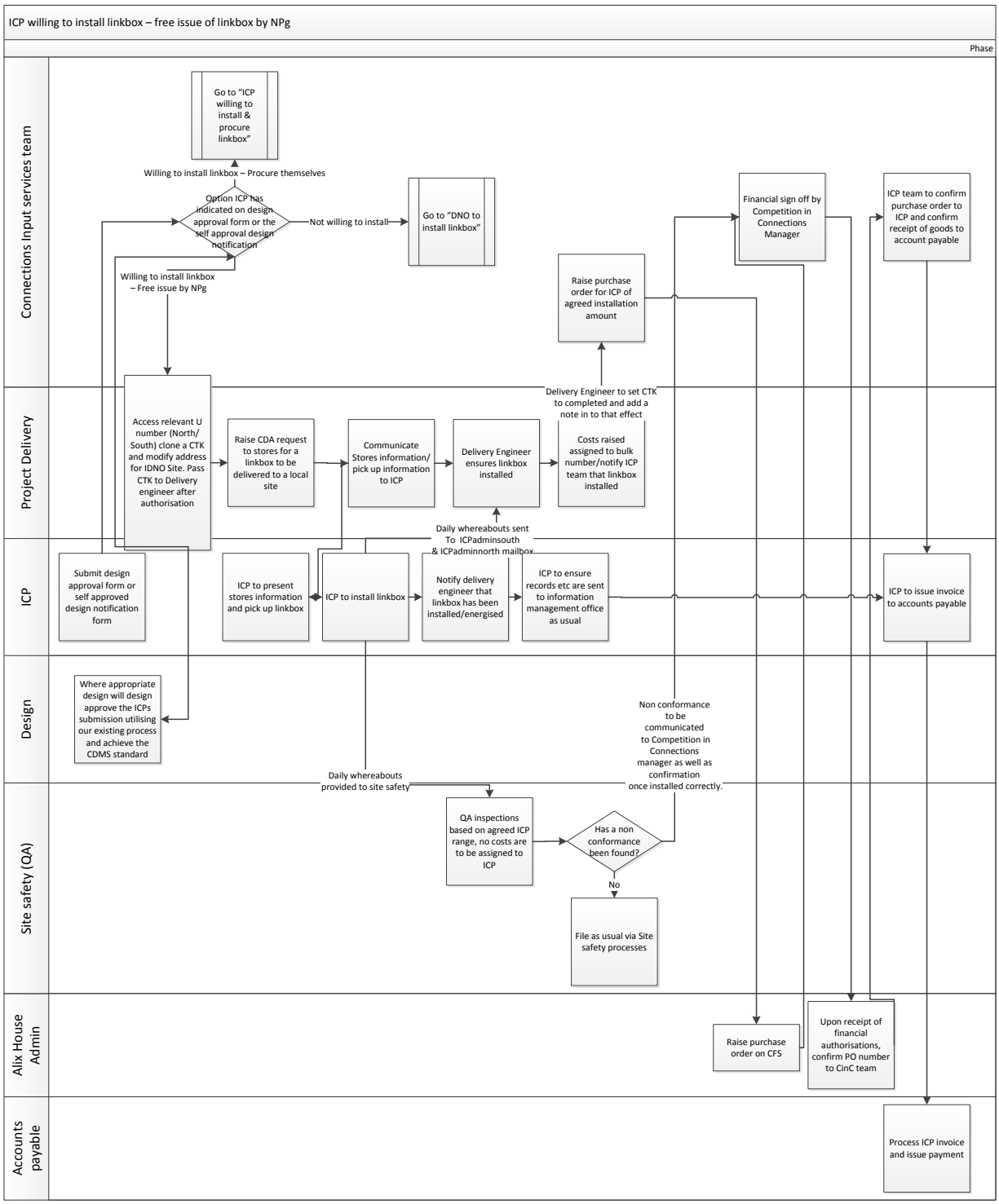
Our dedicated Connections Input Services Team can be contacted by phone on **0113 2415235** or by email to **CinC.Connections@northernpowergrid.com.**

Alternatively, you can also contact the allocated Northern Powergrid designer or project engineer for further guidance.

Appendix 1 – ICP/IDNO procures and installs the Northern Powergrid owned link box on behalf of Northern Powergrid



Appendix 2 – ICP/IDNO collects a free issue Northern Powergrid owned link box and installs on behalf of Northern Powergrid



Appendix 3 – Northern Powergrid installs the Northern Powergrid owned Link Box