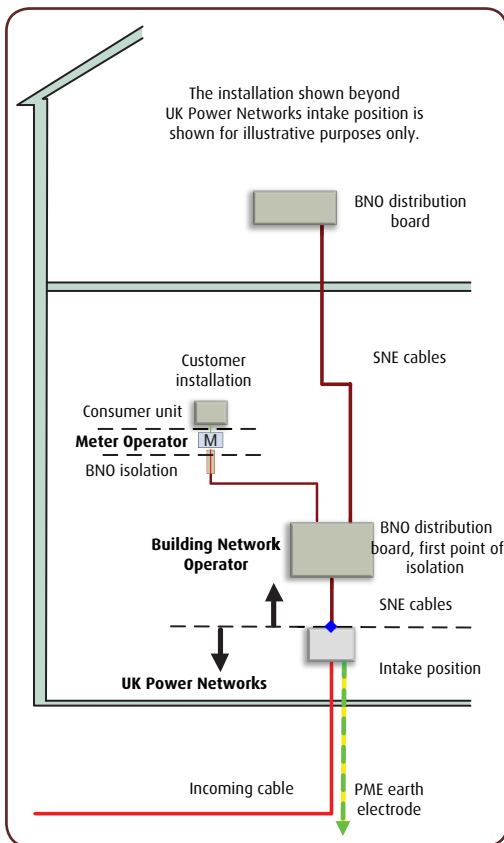


What is a Building Network Operator (BNO)?



SNE – Separate neutral earth
 PME - Protective multiple earthing
 ◆ - UK Power Networks termination point

Conductor size	Cable size
70 - 300mm ²	Sector stranded conductor
95 - 300mm ²	Sector solid conductor
50 - 300mm ²	Round stranded conductor
100 - 300mm ²	Stranded conductor
70 - 240mm ²	Round solid conductor

The above table details the required cable specifications for terminating directly onto our cut-out (reference should be made to a qualified Electrician).

Meter Point Administration Numbers (MPANs) Getting an MPAN generated to get the meter fitted

Where the BNO is licensed, or an Independent Distribution Network Operator (IDNO), they shall raise and issue MPAN numbers for the customers' connections. If the BNO is not licensed, the relevant UK Power Networks team will raise MPAN's for the customer's connections within the BNO network and can advise on how to organise the connection of your distribution board/ first point of isolation if required.

What is a Building Network Operator (BNO)?

The term BNO is defined as an organisation that owns or operates the electricity distribution network within a multiple occupancy building between the intake position and the customer's installation.

The BNO may be an Independent Distribution Network Operator (IDNO) or a third party, exempt from holding an electricity distribution licence*, such as a facilities management company. They are responsible for the design, installation and maintenance of the building network and ensuring that this network meets the requirements of wiring Electricity Safety, Quality and Continuity (ESQC) and Institute of Electrical Engineers (IEE) wiring regulations. Once installed they are entitled to recover the costs of providing the service of conveying electricity through their network, which takes investment and operational expenditure to install, maintain, repair and replace. This is done under different regulations to a licensed electricity distributor. Further details of how this can be recovered can be made available through Ofgem.

How does a BNO affect my works?

Following the revision of our Engineering Design Standard 08-0118 supplies to multi-occupied buildings, which is based on ENA Engineering Recommendation (ER) G87, a number of questions have been raised regarding the role of a Building Network Operator (BNO). This document provides clear guidance on the role of a BNO.

UK Power Networks is no longer responsible for the installation of risers and laterals (sub mains) to multi-occupied buildings (flats), across its three distribution networks. The BNO manages the installation of the distribution board and the cables between that and the individual properties, as illustrated in the diagram.

UK Power Networks will provide a service cable from our LV distribution network to your intake position. We take responsibility for the termination of your wiring into the cut-out which will be undertaken by our approved contractor.

* BNOs can be licensed and if so comply with the ESQC regulations, or unlicensed and if so will need to satisfy the requirements of Buildings Regulations and BS7671 (IET Wiring Regulations). In accordance with The Electricity (Class Exemptions from the Requirement for a Licence) Order 2001, a BNO does not need to be licensed if he/she satisfies the relevant exemption class summarised below:

- (a) Class A (Small Distributor): The BNO does not at any time distribute more than 2.5MW to domestic consumers within the UK.
- (b) Class B (On-site Distribution): The BNO does not at any time distribute more than 1MW to domestic customers from a generating station embedded within his/her distribution system within the UK.
- (c) Class C (Distribution to Non-domestic Consumers): The BNO does not at any time distribute electrical power to domestic consumers within the UK.

Guidance notes for making building supplies live

1. It is your responsibility to ensure that the energy supplier is informed and meter operator is on hand to remove their equipment in the event of an existing supply being de-energised.
2. It is advisable that your electrical contractor is on site at the time of energisation of the incoming connection by UK Power Networks, but this remains at your discretion.
3. Point(s) of isolation within your electrical installation such as cut-outs, isolators, switches, switch-fuses or circuit breakers should be capable of being locked, sealed or secured in a locked or sealed housings. These devices may be standalone or integral to the load or supply side of distribution boards. It is good industry practice to clearly label what the distribution way feeds, with final addresses not plot numbers. Tri-rated cables are not accepted (see EDS 06-0136).
4. The installation must be safe and connections secured to the load-side terminals of the first section of the electrical installation before UK Power Networks will make live/energise the supply-side of the installation.
5. If you require UK Power Networks to make your electrical installation live up to more than one main isolator, such as up to the outgoing feeds of a distributor board or to multiple commonly coupled main isolators, then you should clearly state the number of isolation points to be made live in your requests for energisation.
6. Your electrical installation must be complete and safe up to and including the outgoing terminals of the first point(s) of isolation of your electrical installation, which should all be left open. You should be able to safely connect further wiring to the load side of those 'open' isolation points. If this is not the case you should consider the placement of further isolation equipment.
7. If the first section of electrical installation to be made live requires earthing and bonding of metalwork then you must do this in advance of the first section of your electrical installation being made live. Your installation earthing should be complete to BS7671 requirements so that the installation is safe when made live, given the building arrangements and your intended use. If the initial section of your electrical installation is double-insulated, for example a first section comprising only a double-insulated cabling connected to an open and double-insulated isolator, then earthing may not be required at that time.
8. Where scaffolding is attached to your premises exterior and your supply is to change from a temporary supply to a permanent PME supply, your installation shall comply with requirements of BS7671. No person can make simultaneous contact with any conductive parts bonded to the permanent supply's PME earth and any conductive parts exterior of your building. If this is not achievable, then you should not use the PME terminal. *Note - customer connections wired to a temporary supply will be left de-energised once a permanent supply making use of the PME earth has been energised; unless this installation is now to be powered from the permanent supply.*

For further information refer to our Engineering Design Standards library: <http://library.ukpowernetworks.co.uk/library/en/g81/>

There are two documents online that can provide you with detail on this subject:

Electricity and Gas (Internal Markets) Regulations 2011: <http://www.legislation.gov.uk>

Guidance for the Electricity Order 2001 can be found at: <https://www.gov.uk/electricity-licence-exemptions>