energetics

Design | Build | Connect

Building Network Operator (BNO)

Roles and Responsibilities of a Building Network Operator

- Helping to meet your needs

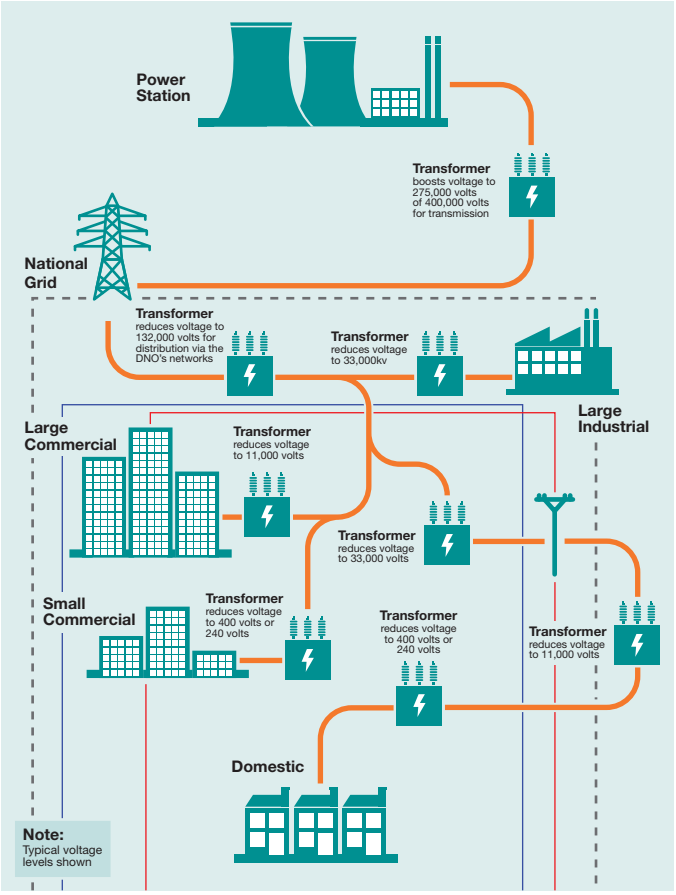
www.energetics-uk.com

Introduction

The need for a safe, reliable and efficient energy supply is an essential part of any new building development. However, understanding what you are required to do, who is responsible for what, and options available to you, can be challenging - particularly when taking into account the Building Network Operator (BNO) Design Standard legislation for electricity infrastructure contained within multi-occupancy buildings.

At Energetics we recognise this process can be daunting if you do not have the necessary regulatory and technical expertise. We have the energy connections experience and know-how to provide Building Network Operator (BNO) services and meet your needs whilst enabling us to grow our market share.

This leaflet gives the facts about your BNO responsibilities, options and Energetics' support to deliver a successful electricity connections service to meet your project requirements.



Delivering Electricity to Multi-Occupancy Buildings

The illustration shows electricity supply being delivered to multi occupancy buildings and focus on DNO's, IDNO's and BNO responsibilities:

Distribution Network Operator (DNO)

Licensed distribution network operators in Great Britain are responsible for regional distribution service areas that transports electricity from the high voltage national grid system and reduce it to lower voltage levels for industrial, commercial and domestic use.

Independent Distribution Network Operator (IDNO)

A small number of smaller networks located within DNO service areas are owned and operated by Independent Network Operators (IDNOs). DNO/IDNO's are responsible for providing electricity up to the building intake point.

Building Network Operator (BNO)

Own all electricity installations located between the building intake point and electrical installations located throughout the building - except any meters that are embedded within the BNO network or attached to the DNO.

Electricity Supplier

Owns and operates the meters embedded within the BNO network.

Energetics is a licensed IDNO and can also operate as a BNO to meet building utility requirements - contact us for your 'one-stop-shop' electricity connections needs.

Legend

DNO IDNO BNO

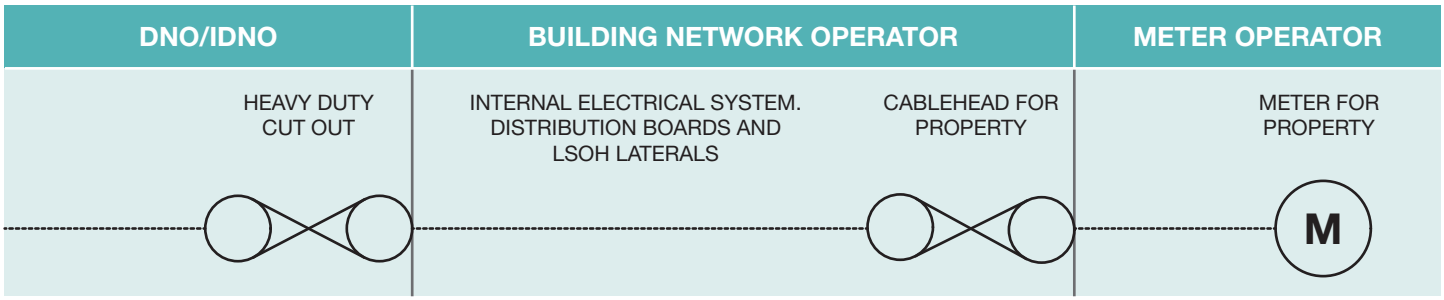
Building Network Operator (BNO)

A Building Network Operator (BNO) is defined as an organisation that owns or operates the electricity distribution network located between the electricity intake and the electrical installations within a multi-occupancy building - including any single building or factory that has been sub-divided into flats or smaller industrial units. It is responsible for the installation of the distribution board that divides up the main supply and provides isolation to each part of the building.

The Electricity Act place a duty on DNO's/IDNO's to offer to make a connection between their distribution system and the building. The BNO is responsible for the design, installation and maintenance of the building electricity distribution network and must meet the requirements of the Building Regulations British Standard 7671 (IET Wiring Regulations), British Standard 8313 (code of practice for the accommodation of building services in ducts) and British Standard 9999 (code of practice for fire safety in the design, management and use of buildings). It is also responsible for the quality of the customer supply terminals in accordance with the Electrical Safety, Quality and Continuity Regulations 2002 and must comply with ENA G87.

The BNO may be the DNO, IDNO or a third-party exempt from an electricity distribution license (such as a facilities management company). Alternatively, the BNO may be the building owner, landlord or developer, property manager or electrical contractor and they can appoint a third-party to act as BNO on their behalf.

Responsibilities for BNO Design



Change in Legislation

- BNO Design Standard

A change in legislation has led to introduction of the BNO design standard which covers all newly built multi occupancy buildings. It also extends to building refurbishments and renovations in existing multi-occupied properties where electricity installation changes are required.

It applies to the electricity distribution network located between the electricity intake and the electrical installations and is now the responsibility of the BNO to comply with all relevant safety, building and utility standards.

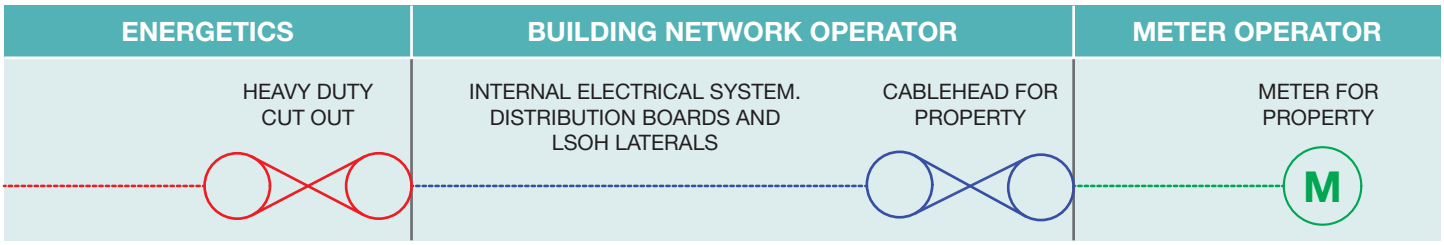
It is a legal and regulatory requirement to comply with the new BNO Design Standard. Where a building does not meet the standard, this may result in the electricity supplier refusing to install meters and may lead to electricity supply delays, project disruption and risk of financial penalties for late project delivery. Future developments may also incur additional costs that otherwise could have been built into the initial BNO network installation stage.

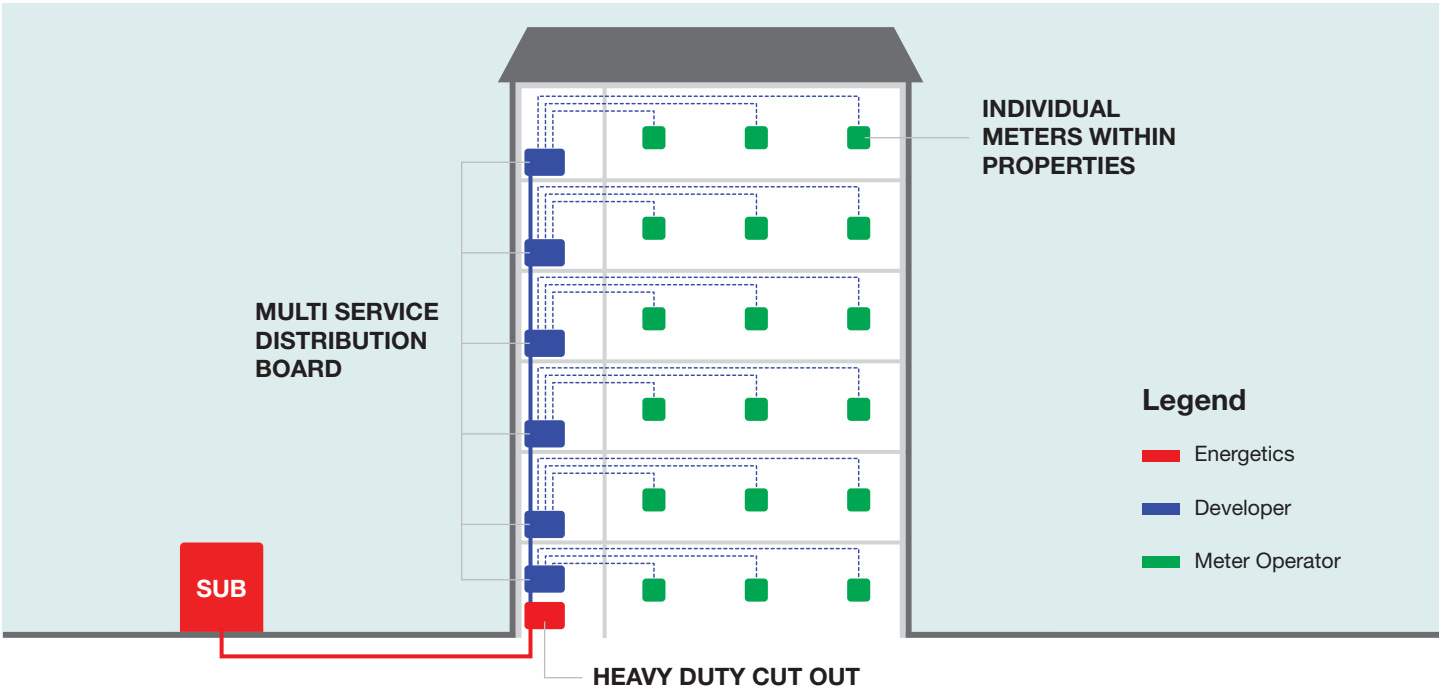
Housebuilders, electrical contractors, developers and property managers need to be fully aware of this change in legislation and take into account the added BNO responsibilities, risks and costs for their building development.

BNO Options Available

Responsibilities for BNO design can be managed by the BNO with limited Energetics' involvement or assigning full responsibility to Energetics:

Developer Assumes Responsibility as BNO





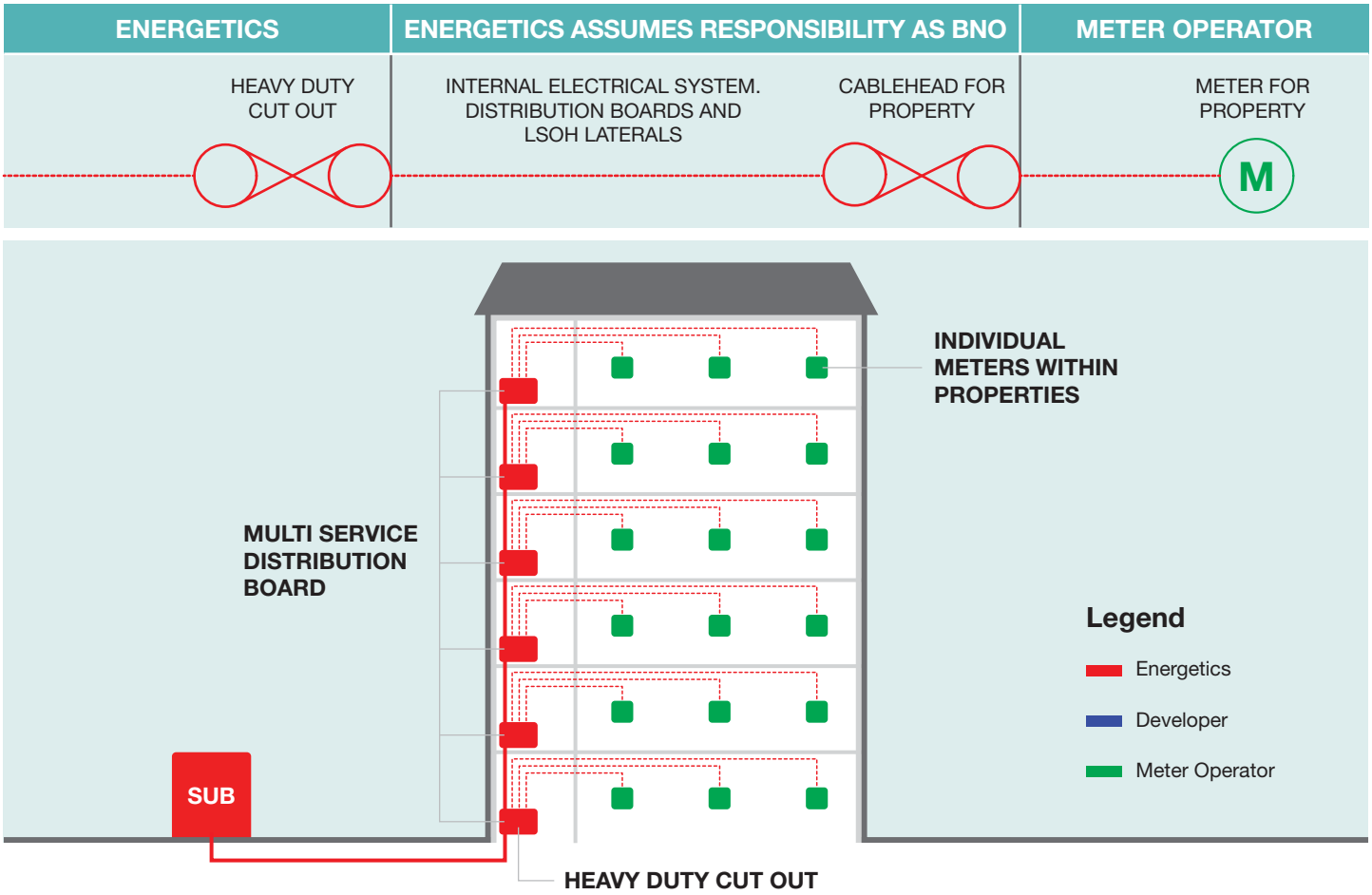
Benefits

- Client can assign their own BNO operator and co-ordinate the combined services installation in their "riser space".
- Client keeps demarcation between contractor services "clean" with Energetics finishing at the "heavy duty cut outs" and client's BNO provider installing all services to the cable head.
- Energetics would facilitate meters located within the apartments or other designated area by client and issue a unique 13-digit Metering Point Administration Number (MPAN) to process the sales and purchase of energy from customers known as 'Settlement'.
- Energetics would give an asset value for each MPAN - asset value would be the same irrespective of BNO management option taken.

Considerations

- Client has to manage all operational, financial and customer risks associated with owning the BNO onsite.
- Client needs to plan and manage any failure of supply on 'their network'. Compensation and restoration times and all other customer service issues associated with non-supply.
- Client needs to co-ordinate termination points between contractor service provision and ensure 'all works complete', are in place to enable the building electricity supply to be re-connected.

Energetics Assumes Responsibility as BNO



Benefits

- Energetics would extend 'their network' to take ownership and liability to termination at the cable head within each apartment, connection and meter point.
- All client's electrical distribution liabilities would remain with Energetics under their electricity license.
- All BNO installations would be installed by National Electricity Registration Scheme (NERS) accredited contractors to Energetics, with all adoptable standards managed by Energetics.
- Energetics would facilitate meters located within the apartments or other designated area by client and issue a unique 13-digit Metering Point Administration Number (MPAN) to process the sales and purchase of energy from customers known as 'Settlement'.
- Energetics would give an asset value for each MPAN - the value would remain the same irrespective of BNO management option taken.

Considerations

- Client would need to programme onsite works to allow sufficient time for relevant parties to undertake their scope of works without impedance.

About Energetics

Energetics is one of the leading utility connection companies in the UK. We work with many of the major construction firms and developers to provide a 'one-stop shop' connections service.

We offer a forward-thinking and can-do approach and our ability to operate effectively in the competitive utilities and construction sectors is based on our being knowledgeable, flexible, adapting to changing market conditions and keeping the customer at the centre of everything we do. This approach keeps our costs down, provides innovative ways of working to meet our customers' needs and ensures we remain competitive in the utilities connections sector.

For more information:
www.energetics-uk.com

Energetics Design and Build Limited.
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How Energetics can help you

Energetics can provide a range of services to meet your electricity connections needs at all stages of your development - from design to installation and management. We have deep-rooted regulatory knowledge and technical expertise in the design and build of utility networks and connection services and are one of only a handful of Ofgem licensed Independent Distribution Network Operators (IDNO's) for electricity.

We are on hand with the energy connections experience and know-how to provide Building Network Operator (BNO) services and meet your need whilst enabling us to grow our market share.

For further information on BNO Design Standard:

Electricity and Gas (Internal Markets) Regulations 2011:

www.legislation.gov.uk/uksi/2011/2704/schedule/2/made

Guidance for the Electricity Order 2001:

www.gov.uk/electricity-licence-exemption

Electricity Network Association ENA ER G87

www.energynetworks.org