

Building Network Operators

January 2021



Scottish & Southern
Electricity Networks

Why are we changing our approach?

We (SSEN) have recently decided that we will align our process with other UK DNOs by no longer offering to quote and install distribution networks and cables to buildings and homes of multiple occupancy.

We have recognised that there are difficulties in gaining access to these cables when required for maintenance and inspection purposes, or for fault repairs and these are often integral to the framework infrastructures within the building.

The challenges and risk involved by not being able to access these cables contributed to our decision to no longer offer this service.

Our new process will make clear the boundary between our network and the Building Network Operator's so that there is certainty for customers on the responsibilities between our network and the BNO's.

- There is no change to our maintenance and repair processes for our existing distribution service cables.
- The change will only apply to new projects registered **on or after the 18th of January 2021** that require a connection to multiple occupancy buildings

What is a BNO?

What is a Building Network Operator?

A BNO is the organisation that owns or operates the electricity distribution network within a multiple occupancy building, between the intake position and the customers' installations. A BNO may be a building owner, landlord, developer or similar function in control of a building infrastructure at that given time.

- The Electricity Networks Association has published a document ENA ER G87* that provides additional guidance for these type of connections.
- A BNO may or may not have an Electricity licence. Distribution Network Operators (DNOs) and Independent Distribution Network Operators (IDNOs) hold an electricity licence but a BNO may not require a licence if they fulfil the exemption criteria defined in the Electricity (Class exemption from the requirement for a licence) order 2001.

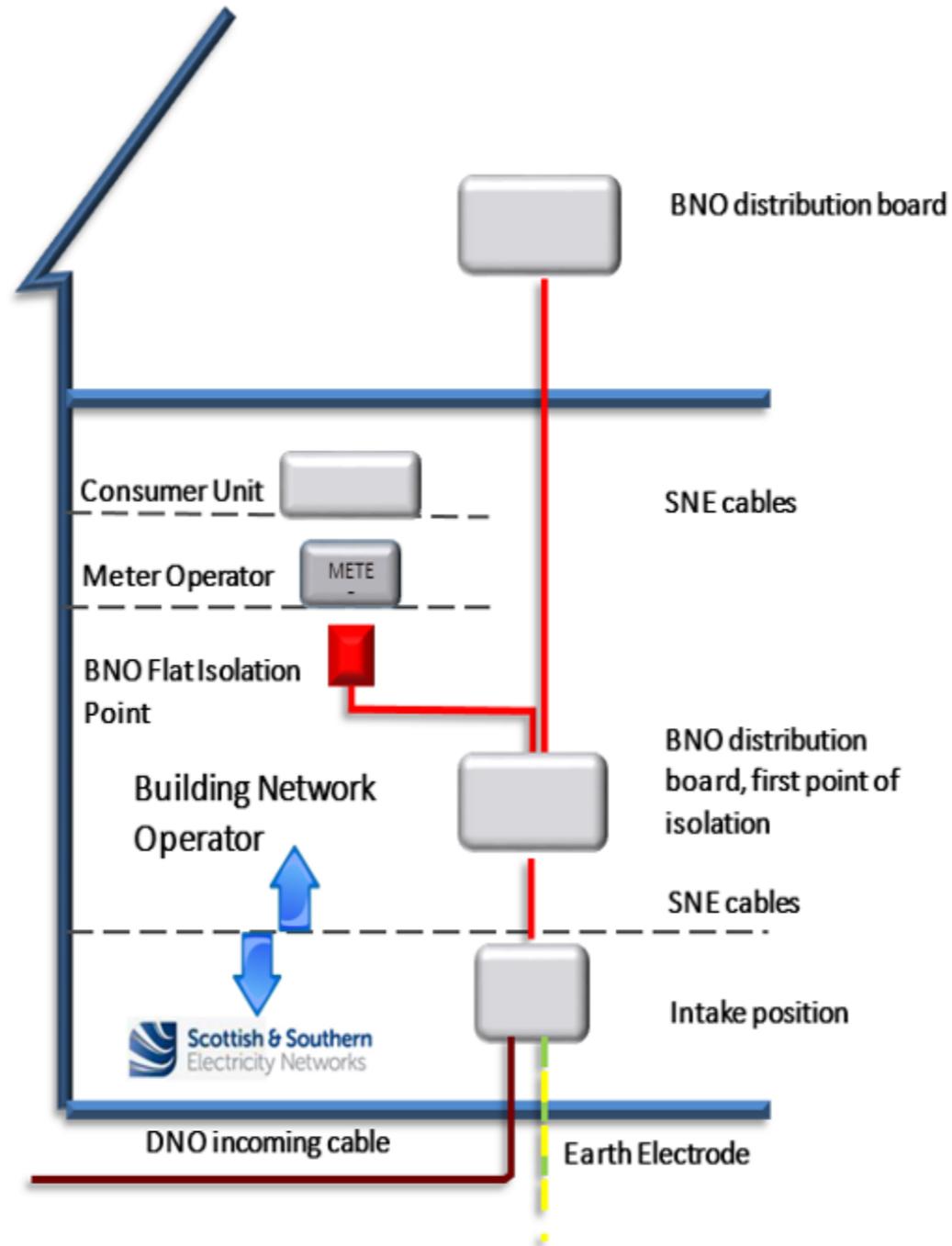
* <http://www.ena-eng.org/ENA-Docs/>

What is a Multiple Occupancy Building?

A Multiple Occupancy Building is any single building that has been sub-divided into more than one premises, for example flats (including conversions) or factories that have been broken up into smaller industrial units. It includes any communal areas.

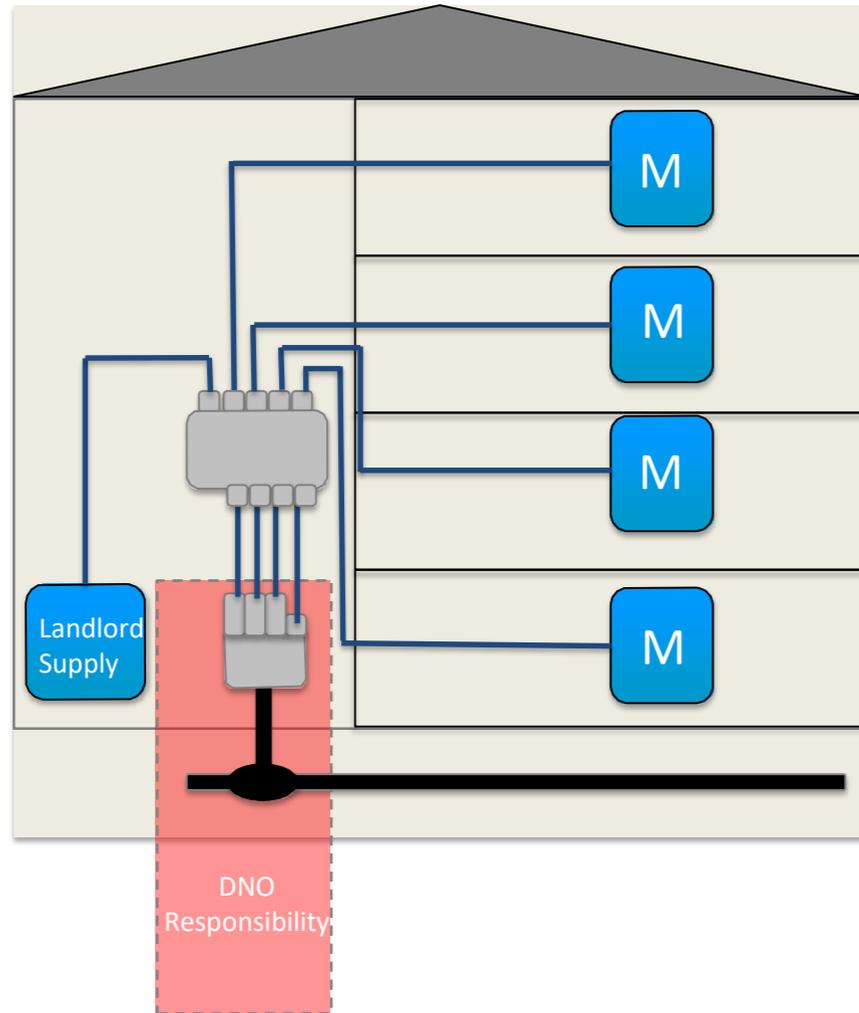
- Building Networks are governed by British Standards BS7671 therefore SSEN will not be able to provide any approval on the design of your electrical network within the multiple occupancy building.
- The BNO will need to consider the ongoing safety of both the occupants and meter readers from hazards as listed in ENA ERG87 and in accordance with the Construction and Design Management Regulations (CDM) 2015

Example of a typical BNO arrangement



*SNE = Separate Neutral Earth

Example - Conversion of single use to multiple use



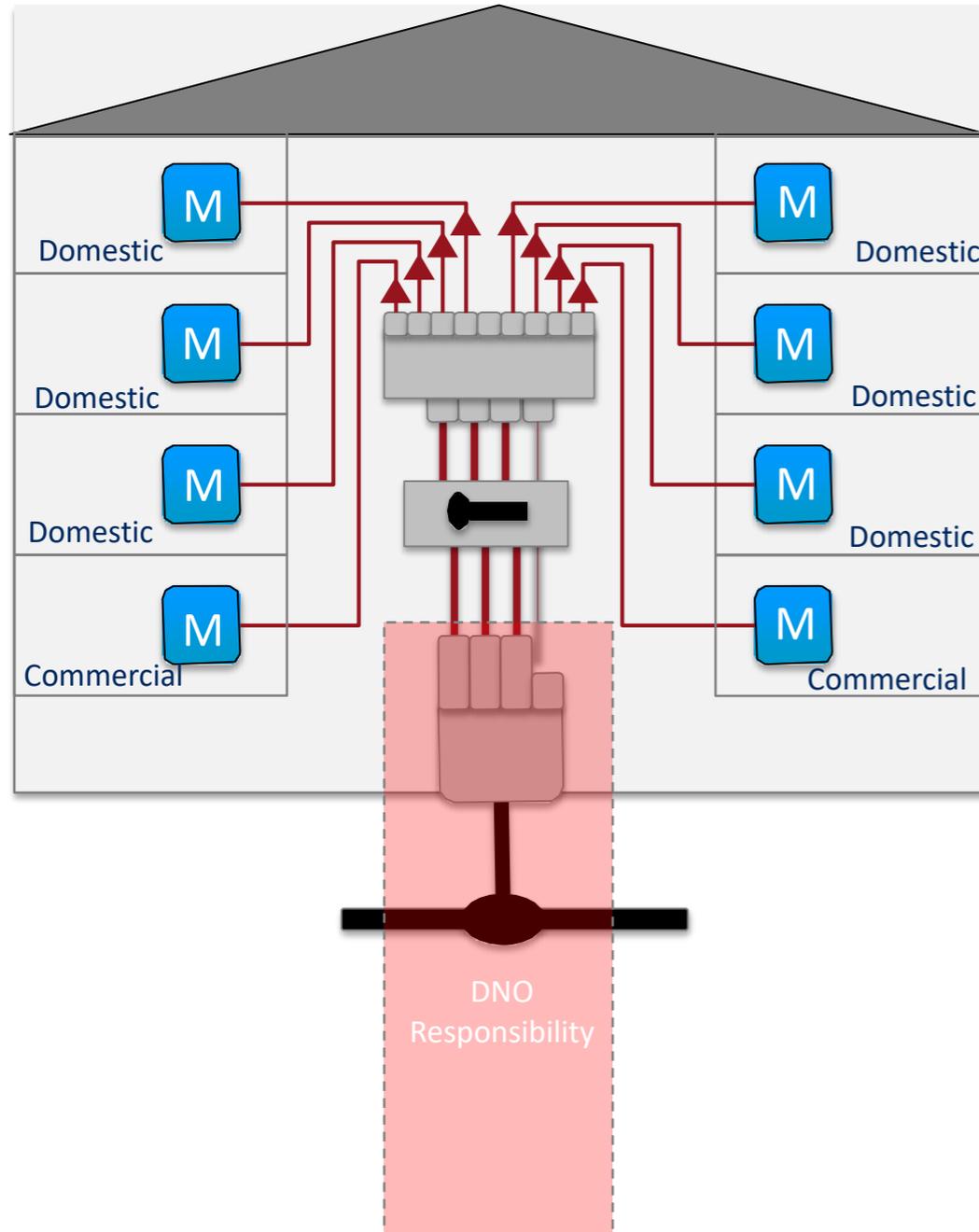
When a building is converted from single use to multiple use, the customer will often use the supply for a temporary builder's supply; please note that an RCD (residual current device) will be required, connected to the customer's earth stake for the temporary builder's supply: it will provide a TT (earth) supply.

The building (house or industrial unit) is then converted into flats.

The Building Network will need to be designed and installed by the Customers accredited electrician, in accordance with BS 7671.

SSEN or an accredited ICP may upgrade the service if required.

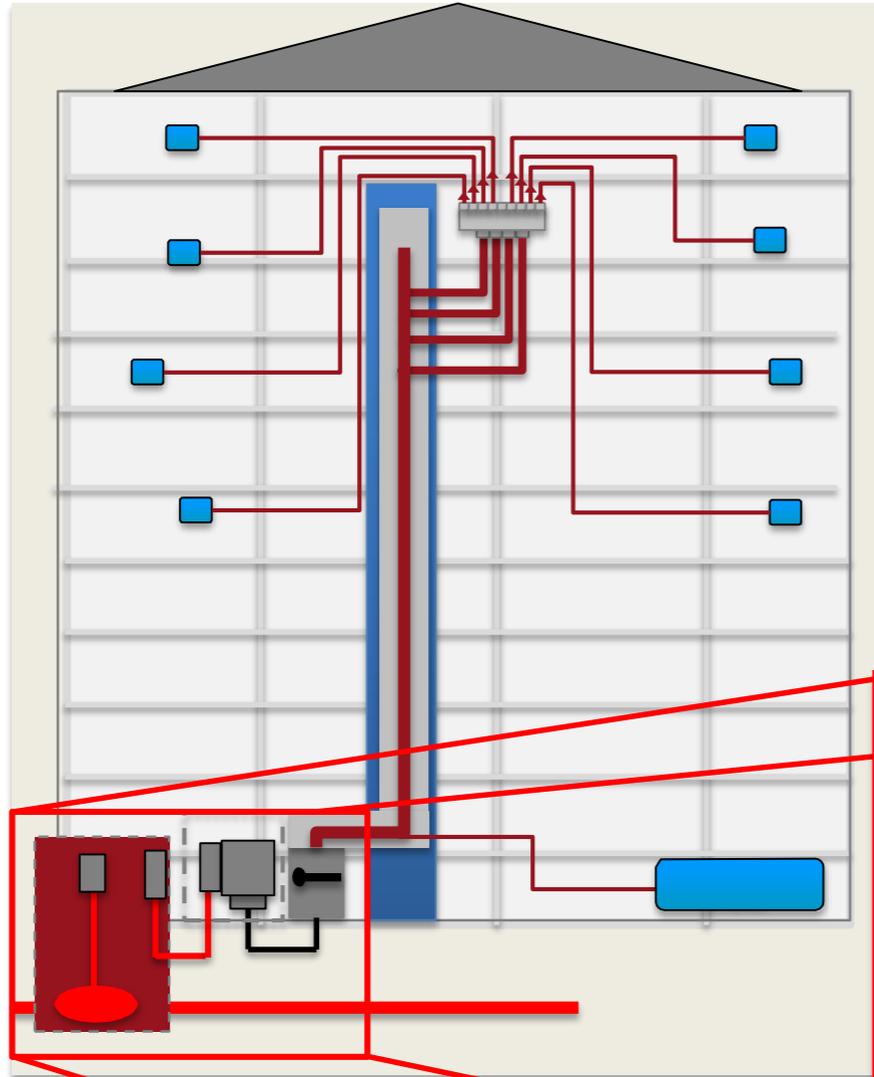
Example – New Build



The BNO installs the building network to BS 7671 standards
A distribution board may need to be installed by the customer. This piece of equipment divides up the main supply and provides isolation for each dwelling. There are a number of manufacturers of distribution boards. Distribution boards may be referred to as:
Ryefield Unit
MDSB

The customer's supplier installs meters via the chosen meter operator. If the meters are located in each flat, then a point of isolation adjacent to the meter will be needed to allow the meter to be fitted. This will often take the form of a solid withdrawable link called a "Red head".

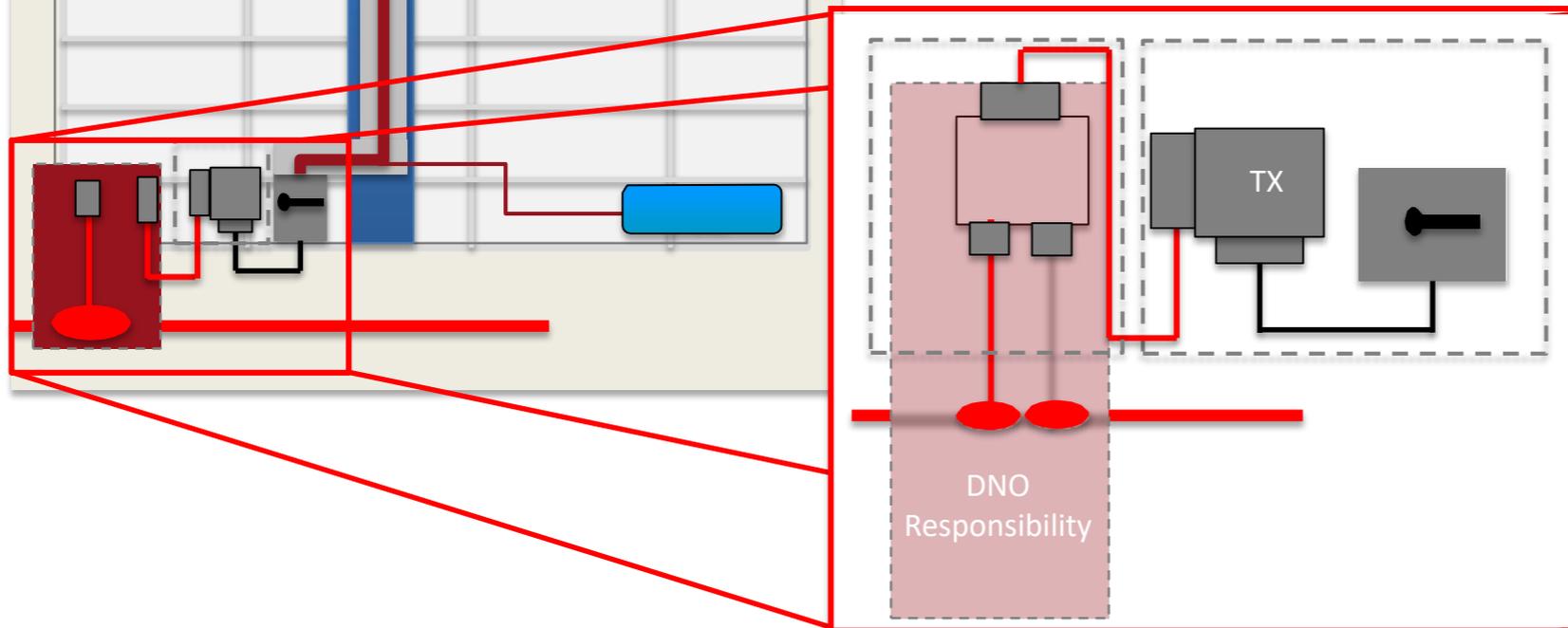
Example – 11kV supply to High Rise



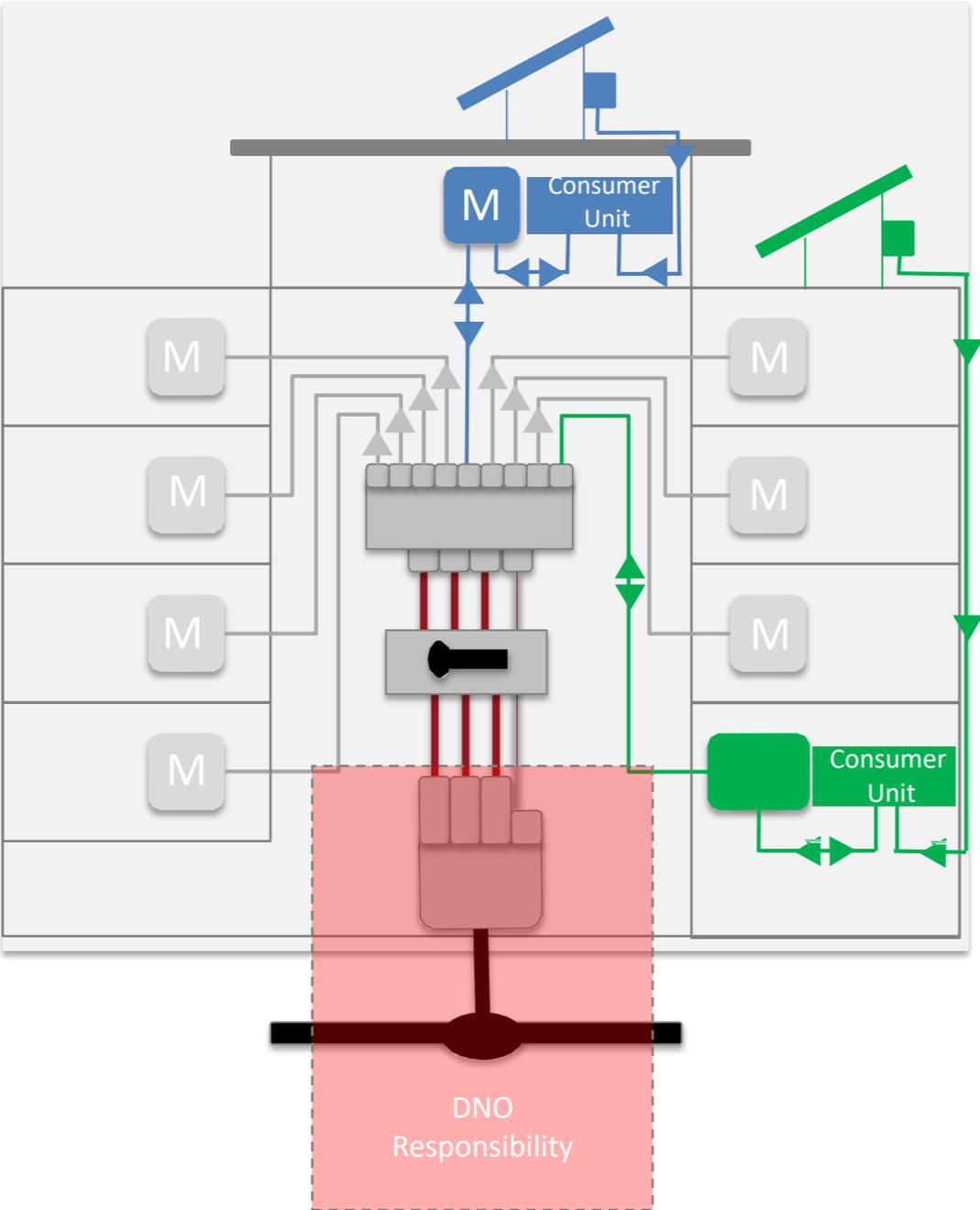
This is essentially the same as an LV Network configuration with the difference being at the intake position. SSEN or an ICP will install a metered ring main unit and the customer will install the 11kV cable to the private transformer and all low voltage plant and cable beyond this.

A second customer owned switch room will need to house the private transformer. The customer will not have access to the SSEN substation.

An accredited independent distribution network operator will be required to construct, and / or manage (e.g. SAP Services), customer owned 11kV installations.



Example – New Build with Distributed Generation



— Individual/BNO
— BNO

If any individual or landlord/BNO looks to connect Distributed Generation (DG) below 16A/3.6kW per phase the ENA ER G98 process will be followed. The DG can be connected with SSEN notified of the connection within 28 days of installation.

If any individual or landlord/BNO looks to connect DG above 16A/3.6kW per phase up to a maximum of 50kW the simple ENA ER G99 process will be followed. An application to SSEN will be made by the BNO and the affect on the network assessed. A quotation will be provided as required. The G99 relays will be assessed and permission given for energization.

If any individual or landlord/BNO looks to connect DG above 50kW the full G99 process will be followed. An application to SSEN will be made by the BNO and the affect on the network assessed. A quotation will be provided for any alteration as required. The G99 relays will be assessed via a witness test before permission given for energization.

Frequently Asked Questions

When is this process due to be implemented?

- Our new approach will start on the 18th January for any new applications received or guaranteed standards clock started on or after this date.

What if I want to install distributed generation to my building?

- Depending on the size of the generation you wish to install, the relevant G98 or G99 process will require to be followed. Further guidance on generation can be found at: <https://www.ssen.co.uk/GenerationConnectionsHome/>

How do I get an MPAN?

If you are an unlicensed BNO then we will register the MPANs beyond the intake position. The following information must be submitted by you for us to raise the MPANs:

- BNO name (company / building owner)
- the locations of the supplies including postal address
- number of properties
- emergency contact details

Please speak with your assigned project manager for your project to discuss your MPAN requirements.

Are licenced BNOs responsible for providing the MPAN?

- Yes licenced BNOs will issue the MPANS

I'm an ICP – will my designs be approved/adopted?

For a connection application that is received or clock started on or after 18th January 2021 we will not adopt any designs where internal laterals are designed/installed into a multiple occupancy building.

If I make changes to my accepted project after the 18th January, how will my project proceed?

If the changes require a new quotation to be issued then the new process will apply.

Are there any forms that I require to complete?

Yes, you will need to complete and sign the BNO connection agreement before the supply can be energised. This will be issued to you with your quotation.

Who can I contact to be my BNO?

- A BNO may be a building owner, landlord, developer or similar function in control of a building infrastructure at that given time. They can be licensed or unlicensed. A licensed BNO holds a distribution licence as outlined in the Electricity Act 1989. These licensed BNOs are called IDNOs (Independent Network Operators) and they may be able to provide you with a connection. Where you engage the services of an IDNO we will issue a BCA (bilateral connection agreement) to the IDNO. For a list of licensed electricity companies please see
- <https://www.ofgem.gov.uk/publications-and-updates/list-all-electricity-licensees-including-suppliers>

Where can I find information relating to the internal wiring of my installation and the meter positions

- The relevant material can be found in the BS 7671 IET Wiring Regulations 18th edition 2018 amended February 2020*

* Further information can be found here <https://electrical.theiet.org/bs-7671/>

Will you need to see my completion certificate before you connect my supply?

- Yes we will require a copy of the BS7671 completion certificate prior to energisation. This form is signed by a competent and qualified electrical tradesman that confirms the building meets the required BS7671 standard in design and passes the necessary electrical tests.

References

Energy Networks Association Engineering Recommendations (ENA ER) G98, G99 and G87 are available from the Energy Networks Association at

- <http://www.ena-eng.org/ENA-Docs/>

**For any further queries relating to BNO connections
please contact**

connections.policy@sse.com