Scottish & Southern Electricity Networks

PR-NET-ENG- 015

Operational Technology

Communications (Access to Infrastructure) Regulations 2016

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1 Introduction

1.1 This document provides guidance on compliance with the Communications (Access to Infrastructure) Regulations 2016 (the Regulations).

1.2 The Regulations came into effect on 31 July 2016. They are designed to facilitate the roll-out of high speed broadband throughout the UK. In the Regulations, Scottish and Southern Electricity Networks (SSEN) is defined as an "Infrastructure operator" (an undertaking providing physical infrastructure intended to provide a service of transmission or distribution of electricity). The Regulations require all infrastructure operators to allow "Network Providers" access to their infrastructure for the purposes of carrying communications equipment. Network Providers are companies that provide a public communications network.

1.3 Network Providers may request access to our infrastructure to support or host a "Network Element". In this context examples of Network Elements may be a telecommunications mast in a corner of a substation, a microwave dish on a transmission tower or a building, mobile 'phone antennae on poles or using our infrastructure to support fibre optic cables.

2 Enquiries

2.1 General

2.1.1 Any enquiries received under the Regulations must be in writing. Enquiries should be directed to the Operational Technology team at operationaltechnology@sse.com or to Operational Technology, Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ.

2.1.2 The Operational Technology team shall ensure that all requests are competent within the definitions of the Regulations or are in the interests of SSEN.

2.1.3 The Operational Technology team shall provide a point of contact for all further liaison between the Network Provider and SSEN.

2.2 Information Requests

2.2.1 SSEN must respond to all requests for information about our infrastructure within two months. Network Providers can request information about the location, route, type and current use of our infrastructure.

2.2.2 Network Providers can also request information about any planned civil works that we may be undertaking; in particular cable trench excavations. SSEN must respond to all requests for information about our civil works within two weeks. Network Providers can request information about the location, route, type and start date of our works.

2.2.3 Information must be provided unless we have specific grounds for refusing the request. Acceptable grounds include the protection of a third party's intellectual property.

2.3 Survey Requests

2.3.1 SSEN must accept all requests for a Network Provider to undertake surveys within one month unless we have specific grounds for refusing the request. Acceptable grounds for refusing requests are the protection of a third party's intellectual property, health and safety or the integrity of the network.

2.3.2 If survey requests are to be refused then we must specify the grounds of refusal unless we have a valid reason not to.

2.3.3 The Operational Technology team will record all such requests, inform the appropriate Regional Support Manager or Transmission Operations Manager and will issue appropriate safety guidelines. In the event that the survey requires access to operational areas, a request shall be made to the Regional Support Manager. The Network Provider will be requested to meet our fair and reasonable costs.

2.3.4 Wherever possible, the Operational Technology team shall assess alternative options and shall coordinate requests in the same locality. (For example if two Network Providers request access to the same infrastructure.)

2.4 Access Requests

2.4.1 The Operational Technology team will undertake the following assessments before responding to requests

1. Check for existing telecommunications equipment which could be shared.
2. Coordinate a technical assessment of the proposed installation
3. Assess our future plans to ensure the communications Network Element will not be unreasonably restrictive
4. Review whether the proposed Network Element could benefit SSEN
5. Seek comment and support cost estimate from the Regional Support Manager, or Transmission Operations Manager as appropriate. The support costs shall be our reasonable costs to supervise the construction of the Network Element in accordance with the Operational Safety Rules.

2.4.2 As with surveys, requests to use our infrastructure to support communications networks elements can only be refused on specific grounds. It is acceptable to refuse requests for access to civil works if acceptance would result in unacceptable delays or if SSEN would face increased costs.

2.4.3 Where an access request is granted, the Operational Technology team shall prepare an Access Agreement and shall manage the design approval process.

3 Guidelines for Agreements

3.1 General

3.1.1 The following principles shall be followed when preparing all agreements for hosting Network Elements.

1. The Network Provider retains ownership of the Network Element and is responsible for all asset management.
2. The Network Provider shall pay the full costs of the design and construction of the Network Element; including all costs incurred by SSEN.
3. The design of the Network Element shall be subject to approval by SSEN to ensure that substation security is maintained, there is no additional risk to the electrical system and risks associated with rise of earth potential are assessed and managed.
4. The Network Provider shall pay an annual rental charge to SSEN for the use of our infrastructure. This charge shall be reflective of actual cost including a reasonable rental cost for the locality. Actual cost shall include an estimate of any additional cost to SSEN for supporting the Network Element. A full breakdown of the costs shall be provided.
5. The Network Provider shall indemnify SSEN against any claims which may arise following the loss of or failure of the Network Element or claims which may arise as a consequence of installing the Network Element.
6. An Operational Maintenance agreement shall be agreed and signed by both parties. This shall define details associated with ownership, access, maintenance obligations, safety rules.

3.2 Substations

3.2.1 The following principles shall be followed when preparing an agreement for hosting Network Elements in our substations.

1. It shall be possible to access the Network Element without entering a High Voltage Zone. An exception to this rule applies where Network Elements are installed on an Overhead Line Support which itself lies within a High Voltage Zone.
2. The Network Provider is responsible for requesting any required power supplies through normal channels.
3. The Network Provider shall not be permitted to share any substation facilities such as welfare facilities, telecommunications or ac or dc power supplies.

3.3 Overhead Line Supports

3.3.1 The following principles shall be followed when preparing an agreement for hosting Network Elements on our overhead line supports.

1. The Network Element shall not unreasonably impede our access to the tower or pole.
2. Electrical clearances shall be maintained.
3. The Network Element shall be appropriately earthed.
4. The additional wind loading shall be fully checked.
5. The Network Provider shall be responsible for providing skilled and authorised staff to install and maintain the Network Element.

3.4 Fibre Optic

3.4.1 As yet, the Regulations are unclear on whether or not we are obliged to facilitate requests to support fibre optic cables directly on our conductors. We are obliged to allow our poles and towers to support fibre optics where they are suitable.

3.4.2 The following principles shall be followed when preparing an agreement for hosting fibre optic cables on our overhead lines.

1. SSEN shall retain ownership of fibre optic cables wrapped on, or embedded in, our conductors or cables.
2. SSEN shall offer an Indefeasible Right of Use (IRU) to a Network Provider who requests access for a fibre optic cable. The IRU shall cover the number of fibres requested by the Network Provider, provided that sufficient fibres remain for SSEN's own use. The IRU shall have a fixed duration of the lesser of 25 years, or the estimated remaining life of the conductor or cable. SSEN shall enter into an Operating Agreement for the maintenance and repair of the fibre optic cable.
3. The Network Provider shall obtain all required wayleaves for commercial operation of the fibre optic cable. The wayleaves shall be in a standard format provided by SSEN.
4. The Network Provider shall pay SSEN for the IRU based on a capital cost and annual rental. Where a new fibre optic cable is required, the capital cost shall generally be the full cost of the installation and the annual rental shall reflect actual cost based on the proportion of fibres for which an IRU is sought. Where an existing fibre optic cable is used, the capital cost shall be zero and the annual rental shall reflect actual cost including asset depreciation based on the proportion of fibres for which an IRU is sought.
5. A Network Provider may retain ownership of a fibre optic cable suspended from overhead line supports. Such provision may exclude SSEN from undertaking a similar installation in the future. All such agreements shall therefore include for the Network Provider to grant an IRU to SSEN for a requested number of fibres.

3.4.3 The following principles shall be followed when preparing an agreement for hosting fibre optic cables with our underground cables.

1. On existing installations, SSEN shall retain ownership of existing fibre optic cables or existing duct systems.
2. SSEN may offer an Indefeasible Right of Use (IRU) to a Network Provider who requests access to an existing fibre optic cable. The IRU shall cover the number of fibres requested by the Network Provider, provided that sufficient fibres remain for SSEN's own use. The IRU shall have a fixed duration of the lesser of 25 years, or the estimated remaining life of the cable. SSEN shall enter into an Operating Agreement for the maintenance and repair of the fibre optic cable.
3. The Network Provider shall obtain all required wayleaves and access agreements for commercial operation of the fibre optic cable. The wayleaves shall be in a standard format provided by SSEN.
4. The Network Provider shall pay SSEN for the IRU based on a capital cost and annual rental. Where a new fibre optic cable is required, the capital cost shall generally be the full cost of the installation and the annual rental shall reflect actual cost based on the proportion of fibre pairs for which an IRU is sought. Where an existing fibre optic cable is used, the capital cost shall be zero and the annual rental shall reflect actual cost including asset depreciation based on the proportion of fibres for which an IRU is sought.
5. A Network Provider may retain ownership of a fibre optic cable pulled through SSEN ducts or sub-ducts. Such provision may exclude SSEN from undertaking a similar installation in the future. All such agreements shall therefore include for the Network Provider to grant an IRU to SSEN for a requested number of fibre pairs. SSEN shall enter into an Operating Agreement for the maintenance and repair of the fibre optic cable which shall consider the physical location of the duct in relation to the power cable circuit(s).
6. In a new installation, a Network Provider may retain ownership of the cable duct(s) and the fibre optic cable(s). In such cases, the cable duct shall be located above the cable marker tiles/tape, and at least 100mm to the side of the centre line of the power cables. The Network Provider shall pay the full incremental capital cost of additional duct installation along with a proportional share of the site establishment and site management costs. No Operating Agreement shall be required.

4 Revision History

No	Overview of Amendment and Text affected	Previous Document	Revision	Authorisation
01	New Document Created	N/A	1.00	Andrew Roper
02	Section 3.4.2 added to cover underground fibre	Revision 1.00	2.00	Andrew Roper
03	Review of contents. Minor changes	2.00	2.01	Andrew Robertson

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