

SCOTTISH MINISTERS' REQUIREMENTS

SCHEDULE 4 PART 3

ROADSIDE ELECTRICAL APPARATUS AND POWER SUPPLIES

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1. ROADSIDE ELECTRICAL APPARATUS AND POWER SUPPLIES

1.1 Introduction

- 1.1.1 This Part gives information relating to the roadside electrical apparatus which includes electrical equipment, lighting, luminaires and associated control apparatus, power supplies, associated infrastructure, Structures and other supporting arrangements to be managed and maintained by the Operating Company, either as a whole or in joint responsibility with others. Paragraph 1.1.3 of this Part together with LDS8023 09 *Electrical Maintenance Guidelines* provide the scope of the roadside electrical apparatus to be managed and maintained.
- 1.1.2 Associated infrastructure includes power supply cabinets, distribution enclosures, protection devices, cabling, associated ducting and chambers.
- 1.1.3 The roadside electrical apparatus to be managed and maintained by the Operating Company comprises:
- (i) road lighting, flood lighting, underpass lighting, architectural lighting, power supply arrangements for festive lighting, road side services lighting, bus shelter lighting and maintenance lighting within Structures,
 - (ii) illuminated traffic signs,
 - (iii) illuminated bollards,
 - (iv) power supply and downstream distribution network cabinets for roadside electrical apparatus,
 - (v) power, communication and signal cabling,
 - (vi) electrically operated apparatus for maintenance access to structures,
 - (vii) electrical ancillary drainage items,
 - (viii) swing bridge, raising bridge and other moveable bridge equipment,
 - (ix) electrically operated traffic control barriers,
 - (x) inclement weather signs and snow gates,
 - (xi) public conveniences and other roadside services,
 - (xii) school crossing signs,
 - (xiii) marine and air navigation lights,
 - (xiv) marine navigational aids,
 - (xv) wildlife counters,
 - (xvi) cathodic protection equipment,
 - (xvii) power supply arrangements to roadside electrical apparatus for third party use that is accessible from the Unit,
 - (xviii) remotely controlled 20mph zone warning signs,

- (xix) weather stations (road sensors) and other apparatus for weather monitoring,
 - (xx) vehicle activated signs,
 - (xxi) gantry mounted illuminated signs without Traffic Scotland equipment, and
 - (xxii) traffic signals.
- 1.1.4 The Operating Companies' role will not include the installation and maintenance of Transport Scotland's electronic systems. These are maintained under a separate Traffic Scotland maintenance contract, which includes:
- (i) gantry mounted illuminated signs with Traffic Scotland Equipment,
 - (ii) hazard warning signals,
 - (iii) variable message signs,
 - (iv) closed circuit television,
 - (v) automatic number plate recognition cameras,
 - (vi) emergency telephones,
 - (vii) matrix signals,
 - (viii) detector loops and road sensors for vehicle detection, and
 - (ix) communications cabinets.
- 1.1.5 Roadside electrical apparatus associated with items in paragraph 1.1.3 of this Part shall be managed and maintained in accordance with Schedule 7 Part 1.

2. ROADSIDE ELECTRICAL APPARATUS INVENTORY

2.1 The Inventory, Energy Inventory and Lighting Management Function of the Integrated Roads Information System

- 2.1.1 The Integrated Roads Information System made available for the Operating Company will include a facility to access the following:
- (i) an inventory of the Roadside Electrical Apparatus listed in paragraph 1.1.3. using attributes as described in the *Transport Scotland Trunk Road Inventory Manual*,
 - (ii) an energy inventory which is a sub-set of the inventory as described in paragraph 2.1.1 (i) of this Part. This subset has attributes that relate to the energy consumption aspects of the inventory – these attributes are listed in paragraph 2.3.2 of this Part,
 - (iii) a lighting management function which forms an integral part of the routine maintenance and management function of the Integrated Roads Information System.
- 2.1.2 The Operating Company shall comply with requirements of the *Transport Scotland Trunk Road Inventory Manual*.
- 2.1.3 Subject to an Order, the Operating Company shall provide such assistance as required by the Director in order to develop integrated routine maintenance and management and lighting management functions of the Integrated Roads Information System.

2.2 Updating and Maintenance of Inventory and Lighting Management Function of the Integrated Roads Information System

- 2.2.1 The Operating Company shall maintain an accurate inventory of roadside electrical apparatus. This shall include the energy consumption aspects of the inventory and information relating to the lighting management function of the Integrated Roads Information System.
- 2.2.2 The Operating Company shall provide its collected information in a format agreed with the Director.
- 2.2.3 During the 26 weeks after the Commencement of Service Date, the Operating Company shall review the inventory provided and update as necessary to meet the requirements of the Integrated Roads Information System and the Director.
- 2.2.4 Following the review and update referred to in paragraph 2.2.3 of this Part, the Operating Company shall continuously appraise and produce an updated inventory and lighting management system. An energy inventory shall be submitted to the Director on a monthly basis. The Operating Company shall notify the Director of any differences found during these updates.
- 2.2.5 The Operating Company shall ensure that the inventory of roadside electrical apparatus is updated with all newly installed additional, decommissioned, modified and replaced roadside electrical apparatus on the Unit and any changes to the Unit. Any such updates shall be introduced into the inventory within seven Working Days after the introduction of the change.
- 2.2.6 The Operating Company shall, within seven Working Days of notification, amend the existing inventory or supply an updated inventory in the event of any anomalies, inaccuracies or recommendations identified by the Director or meter administrator.

2.3 Attributes for Energy Inventory

- 2.3.1 The Operating Company shall maintain the inventory of un-metered roadside electrical supply equipment to comply with the requirements of the *Balancing and Settlement Code of Practice (BSCP) 520* issued by ELEXON.
- 2.3.2 For Trunk Road un-metered roadside electrical apparatus, the Operating Company shall populate the inventory with the following minimum attributes:
- (i) National Street Gazetteer road reference, Trunk Road number or other agreed unique road reference,
 - (ii) name of town or the district,
 - (iii) name of the road,
 - (iv) Ordnance Survey grid reference,
 - (v) unit type,
 - (vi) identity code shown on unit,
 - (vii) *BSCP520* charge code,
 - (viii) rated wattage,
 - (ix) circuit wattage,
 - (x) burning hours per annum,

- (xi) number of items of this charge code at this location,
- (xii) switching regime with appropriate *BSCP520* code,
- (xiii) number of photo electric control units or time switches on the item,
- (xiv) control charge code with appropriate *BSCP520* code for the control device,
- (xv) Ordnance Survey Grid reference 'Easting' or longitude,
- (xvi) Ordnance Survey Grid reference 'Northing' or latitude,
- (xvii) exit point – Y if yes, N if no, U if unknown, and
- (xviii) annual energy usage (kWhr).

2.3.3 Traffic Scotland Equipment is maintained and operated by others on behalf of the Scottish Ministers. The Operating Company shall collect the necessary information and update the Integrated Roads Information System inventory as outlined in paragraph 2.1.1 (i) of this Part. This information is not required for the energy inventory or lighting management function of the Integrated Roads Information System.

2.4 Arrangement and Reporting of the Energy Inventory

2.4.1 The Operating Company shall prepare and submit the energy inventory report as required by the Director.

2.4.2 The items of roadside electrical apparatus in the report shall be grouped by Route and shall be listed by starting at the beginning of a Route and moving sequentially to the end. Any significant groups of items such as lighting through a built up area shall be sub-groups of the Route.

2.4.3 The report shall include the information itemised in paragraph 2.3 of this Part within which shall be identified clearly and separately the energy consumption per annum for un-metered supplies, in accordance with the requirements of *Balancing and Settlement Code of Practice (BSCP) 520* issued by ELEXON, for each sub-group within a Route, each Route within the Unit, the whole Unit, each item code within each Route and each item code for the whole Unit.

3. ELECTRICAL SUPPLIES TO ROADSIDE ELECTRICAL APPARATUS

3.1 Requirements

3.1.1 Subject to an Order, the Operating Company shall procure new electrical supplies from the appropriate distribution network operator to provide electrical supply to roadside electrical apparatus. Such supplies shall be provided in accordance with the Transport Scotland's guidance document LDS8006_09 – *Requirements for Electricity Supply to Roadside Electrical Apparatus and Lighting*.

3.1.2 The Operating Company shall manage all electrical supplies to roadside electrical apparatus. This shall include the following:

- (i) reporting to the appropriate distribution network operator any loss of supply, managing any consequences arising and ensuring restoration of supply,
- (ii) undertaking any defect repair of the downstream distribution network,
- (iii) the detailed inspection and maintenance of downstream distribution network in accordance with Schedule 7 Part 1, and

- (iv) notifying any third party of loss of supply to its apparatus supplied from the Trunk Road distribution network.

4. PAYMENT FOR ELECTRICAL ENERGY

4.1 Un-metered Supplies

- 4.1.1 The Operating Company shall provide such assistance as the Director may require in resolving any matter relating to the roadside electrical apparatus inventory necessary to enable the Director to obtain the un-metered supply certificate.
- 4.1.2 The Director will make arrangements for the direct payment of un-metered roadside electrical energy used within the Unit.

4.2 Metered Supplies

- 4.2.1 The Operating Company shall obtain electricity meter readings for supplies to roadside electrical apparatus within the Unit on a monthly basis and shall provide the information to the Director in the format and detail agreed.
- 4.2.2 The Director will make arrangements for the direct payment of any metered roadside electrical energy used within the Unit.