



open eir ¹

Duct Access

Technical & Operational Manual

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Version Control

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This document follows change control procedure:

Proposed is defined as a document status when the approved document is uploaded to Proposals Section of open eir Website.

Final is defined as a document status when the approved document is uploaded to the relevant section of the open eir Website following the publication period.

For information:

- Historical Document History Table located at end of Document.
- Publish means the action of uploading a document to the relevant section of the open eir website be it the Proposal section or appropriate product section.
- If there are changes to the document between 'Proposed' and 'Final', change control operates.

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1. Introduction

This Technical & Operational Manual contains a set of technical and mandatory operational procedures to be followed by Operators when accessing or installing cable in specified open eir duct.

1.1 Scope

The scope of this document is limited to statements of technical and mandatory operational procedures to be followed by Operators when accessing or installing fibre cable in specified open eir sub-duct.

Definitions:

Fibre Cable	Optical Fibre cable, open eir recommend that the diameter should not exceed 7.5mm (for 14/10mm sub-duct) and must conform to the International Telecommunications Unions (ITU) recommendations. Smaller diameter fibre cable is required where smaller diameter sub-duct is deployed.
Operators	All Operators signed up to ARO
Escorted Access	Procedure whereby open eir staff member escorts the Operator’s contractor to operate on open eir plant.
CoW	Clerk of Works, an open eir representative required for access to open eir infrastructure
PoC	Point of Contact – the open eir Product Manager
SRN	Survey Reference Number
Fleeting	Where a fibre cable is required to be laid out so that the cable may be blown in 2 directions to reduce the need for splicing.
Interconnect Chamber	An operator owned chamber that is connected to the open eir network for ingress and egress purposes.
Splicing Chamber	An operator owned chamber used to splice the operators fibre cable.

1.2 Standards

All equipment and plant deployed as part of the implementation of the service shall comply with the relevant national and international standards, as appropriate.

6 months notice will be given for any technical changes to these standards.

1.3 Guidance for Operators

A document will be made available to Operators titled ‘Guidance to operators implementing duct access’.

1.4 Cabling

Operators are permitted to install fibre cable in specified open eir sub duct
Open eir cannot guarantee the blowing distance of fibre cables.

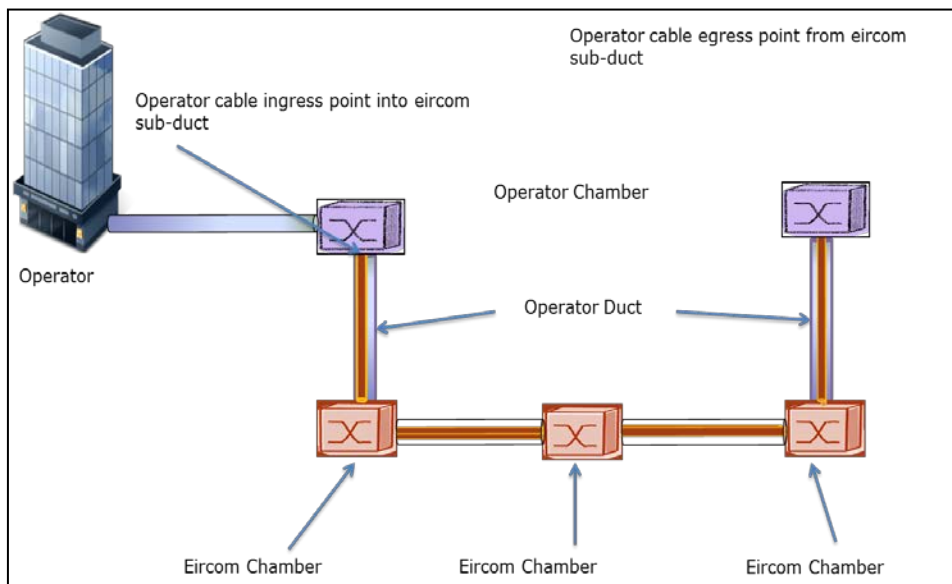
2. Duct Environment

2.1 Physical Elements

The duct arrangement will consist of

- A route of open eir duct containing a sub duct
- Interconnect chambers
- Interconnect duct sections (installed by the Operator).
- Continuous cable installed between Operator chambers. No splicing (or equipment) is permitted in open eir chambers.

The following diagram provides an overview of a typical duct arrangement



2.2 Duct Sealing

Operator ducts entering open eir chambers must be sealed to form a barrier against moisture, gas and rodents. These ducts must be sealed, to open eir standard, at both ends - at the entry point to the open eir chamber and at the entry point to Operator chamber. In instances where open eir deploy sub-duct into an Operators chamber, each individual unused sub-duct must be capped and sealed.

The current open eir standard for sealing is:

- Raychem TDUX for sealing empty and occupied ducts. This can be used in cable chamber and outer end. See Manufacturers Instructions for installation.
- Duct Sealing Bung, for sealing an empty duct

2.3 Fleeting (mid-point blow)

When it is not possible to install cable in the sub-duct from end-to-end in a single operation, fleeting may be carried out. The process of laying out cable in a figure-of-eight configuration is referred to a “fleeting”. Fleeting may also be carried out with a purpose-built fleeting machine, and (in certain circumstances) by use of a cable drum. Some or all three methods (layout out in figure-of-8; fleeting machine & cable drum) may also be used in combination, depending on circumstance.

Open eir supervision is required for access into open eir chambers when operators require to fleet their cable.

2.4 Splicing chamber

Should an operator need to splice their fibre cable for technical reasons (eg very long fibre run), then a splicing chamber may be required. open eir will assist the operator in choosing the location of this chamber which can be used by the Operator to splice cables.

3. Access Arrangements

3.1 Planned Work

Planned work is defined as planned maintenance or installation.

Where open eir will provide a Clerk of Works the Operator shall notify open eir, at least one week in advance, of its intention to access open eir infrastructure by emailing open eir PoC with a Supervised Access Request Form containing the following details:

- Site Location Description
- S.R.N. Reference number
- Map highlighting duct access (in format .dgn or .dwg or .dxf)
- X-Y Co-ordinates (start, end locations)
- Description of the proposed work
- Method Statement including Health & Site Specific Safety Risk Assessment
- Accredited Contractor Name & Accreditation Reference
- Contact On Site
- Contractor Contact Number
- Proposed start/finish date & time
- Demonstrate compliance with SHWWA 2005, associated Regulations and any other applicable Health & Safety Legislation.
- Implement safe system of work during installation stage and ensuring the site is left in a safe condition afterwards

Where no open eir CoW is required but open eir should be notified of work to be carried out then the above details should be sent by email to the open eir PoC.

open eir will refer to the agreement in place and cross-reference the drawing received with the drawing office files and survey request

Following a review of all documentation, the following is a list of the possible outcomes:

- Reject Application - Information Incomplete
- Reject Application - Operator not licensed to access infrastructure at location(s)
- Accept Application - subject to open eir 'Escorted Access' Procedure

3.2 Emergency Work

'Emergencies' are defined when an Operator has to respond to a major fault on their fibre cable

Where open eir will provide a Clerk of Works the Operator shall notify open eir PoC that it wishes to access open eir infrastructure by emailing open eir with the following details:

- Site Location Description
- T.E. Reference number (if applicable)
- Map highlighting duct access (in format .dgn or .dwg or .dxf)
- X-Y Co-ordinates (start, end locations)
- Description of the emergency work
- Accredited Contractor Name & Accreditation Reference
- Contact On Site
- Proposed start/finish date & time

Where no open eir CoW is required but open eir should be notified of work to be carried out then the above details should be sent by email to the open eir PoC.

Open eir will refer to the licence in place and cross-reference the drawing received with the information contained on open eir record system

Following a review of all documentation, the following is a list of the possible outcomes.

- Reject Notification - Information Incomplete
- Reject Application - Operator not licensed to access infrastructure at location(s)
- endeavour to send a CoW to site ASAP to assist with access to open eir infrastructure

3.3 Access Request Cancellation

The Operator shall give at least one day notice by email for a cancellation or change request for planned requests.

The Operator shall give one hour notice by phone and email for a cancel and change request for emergency access.

4. Health & Safety Documentation

All health & safety and accreditation/site safety induction requirements are addressed in the 'eir Contractor / Other Operator Health & Safety Management Requirements' document.

5.0 Plant Condition Reporting Process

5.1 Notification of Damaged /Defective Plant

- The Operator must notify (written report) open eir of any damaged or defective that may be encountered during the course of any cabling operation or any task relating to such an operation.
- The Operator must notify (written report) open eir of any detected flammable gas or oxygen deficiency encounter and the control measures implemented in accordance with open eir APG Ref: Section 01/11

Version Control History

Version	Status	Update	Effective Date
1.0		Rebranding	06/10/2015
V2.0	Final	This document is based on V1.0 Implementation of Standardised Change Control.	19/06/2017