

# Product Description

## Physical Co-location

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## 1. Introduction

- 1.1. This document defines the industry agreed Product Description to support 'Physical Co-location'.
- 1.2. The process and technical details supporting the implementation of the service are outlined in the Inter Operator Process Manual and Technical Manual for Physical Co-location.
- 1.3. All equipment and plant deployed as part of the implementation of the service shall comply with the relevant national and international standards, as appropriate. All installation procedures must conform to standard industry practice.
- 1.4. The various product elements and their relationships are diagrammatically represented in the Technical Manual for Physical Co-location.

## 2. Product Description

For Physical Co-location, eircom will provide a Serviced Exchange Footprint(s) where available.

Footprints will be provided in Co-location suites in preference to mixed suites where possible.

The Access Seeker will choose the equipment, supply, install, operate and maintain it within the Serviced Exchange Footprint.

The Access Seeker's equipment will connect to the customer's two wire metallic path via eircom's MDF room and the Access Seeker's tie cable(s).

The Access Seeker will connect their equipment, installed in eircoms Serviced Exchange Footprint(s) to an Access Seeker's Distribution Frame also located within the Serviced Exchange Footprint within eircoms premises. The details and method of connection will be determined within the Process and Technical Manuals for Physical Co-location.

### 2.1. Product Elements.

#### 2.1.1. Access to the Access Seeker's network

2.1.1.1. To ensure that an Access Seeker's equipment, located in eircom's Serviced Exchange Footprint, can be connected to the Access Seeker's network, the following is proposed:

2.1.1.1.1. eircom will nominate and agree a manhole with the Access Seeker close to the eircom exchange and where possible eircom will nominate and agree two manholes on either side of the exchange to facilitate Access Seeker access. The agreed manholes will where possible be common to those nominated for the provision of In-Span Interconnect Service.

- 2.1.1.1.2. The Access Seeker will construct or agree to utilise an existing Access Seeker constructed manhole within a reasonable distance of the eircom agreed manhole. The Access Seeker will build a duct between the two manholes and eircom will provide a point of entry for the Access Seeker's ducts to the eircom manhole. eircom will run the Access Seeker's fibre optic cable from the eircom manhole to the Access Seeker's ODF in the eircom exchange.
- 2.1.1.1.3. The Access Seeker will then provide and install a fibre optic cable from the Access Seeker constructed manhole, utilising their own ducts, to their own network..

## **2.1.2. MDF Room**

- 2.1.2.1. The Access Seeker's equipment will be connected to the customer's two wire metallic path via eircom's MDF in order to utilise other eircom products e.g. Unbundled Local Metallic Path and Line Sharing. Any requirements specified in the appropriate product descriptions will also apply.

## **2.1.3. Exchange Floor Cable Runways.**

- 2.1.3.1. By agreement with eircom, the Access Seeker will utilise existing cable trays, and cable baskets, where available, whether overhead or under floor, which will be segregated for telecom/ signalling and electrical power cables.
- 2.1.3.2. Where cable runways are not available, new cable trays will be designed and provided under the Site Preparation Fee. All installation procedures must conform to best industry practice.

## **2.1.4. Equipment Footprint**

- 2.1.4.1 The conforming footprint is 400mm in depth; 600mm in width and 2.2metres in height. Dual footprints will be permitted i.e. back to back installations of 800mm in depth; 600mm in width and 2.2 metres in height.

## **2.1.5. Aisle Space**

- 2.1.5.1. Distance requirements are as follows:
  - 2.1.5.1.1. Free standing racks will be positioned a minimum of one metre from any wall.
  - 2.1.5.1.2. A minimum of 900mm is required between suites.

## **2.1.6. D.C. Power**

2.1.6.1. Each Access Seeker will be provided with access to a dual-fed minus 48 volt DC distribution point. Each will be capable of providing up to 60 amps total. Each distribution point will constitute one shelf on a distribution rack. eircom will supply, install and commission each distribution point subject to all information requested on the appropriate forms being provided by the Access Seeker, including the ratings (capacity and type) of circuit breakers required, as new facilities will have to be provided. eircom will be responsible for monitoring and maintenance of the DC power supply to but not including the Access Seeker circuit breaker (provided and installed by the eircom) within the distribution point. The Access Seeker will be responsible for the provision, installation and maintenance of all power and earth cabling and ancillary equipment, excluding installation of cable trays – from the distribution point to their equipment. This DC power does not presume the availability of AC power from the utility company. The offering of DC power is subject to Site conditions, which may vary. Note: Distribution Point refers to the “best fit” Miniature Current Circuit Breaker (MCCB) or fuse position at the site at eircom’s discretion.

2.1.6.2. An isolation switch will be provided in the Access Seekers DC power distribution cabinet, which will enable the distribution to be electrically isolated in the event of an emergency or accident.

## **2.1.7. AC Power**

2.1.7.1. Existing AC power will be available for use within the exchange areas, for test equipment only.

2.1.7.2. eircom will nominate an existing 13 AMP socket per suite for Access Seeker use.

## **2.1.8. Lighting**

2.1.8.1. All lighting will conform to a minimum of 500 lux when measured at working level.

## **2.1.9. Rack Fixing**

2.1.9.1. All fixing of racks must conform to existing standards within each exchange building.

### **2.1.10. Installation of Access Seeker equipment and associated cabling**

2.1.10.1 The equipment will conform to the relevant ITU / ETSI appropriate standards and specifications and the installation and maintenance in accordance with industry best practice.

### **2.1.11. Welfare Facilities**

2.1.11.1. The Access Seeker will be permitted to use all existing toilet facilities.

### **2.1.12. Air Conditioning**

2.1.12.1. Adequate air conditioning is generally provided by eircom at each large exchange facility; however the provision of air conditioning for a particular Access Seeker at any exchange will be dependent on the Access Seeker providing details of its equipment's heat dissipation ratings, as new facilities may have to be provided.

### **2.1.13. Security**

2.1.13.1. The Access Seeker will conform to all on site Security Requirements, as reasonably requested by eircom's exchange managers and specified in eircom's Access Agreement and Licence Agreement.

2.1.13.2. All access is escorted.

### **2.1.14. Health and Safety**

2.1.14.1 The Access Seeker will conform to all Health and Safety aspects as directed by eircom's health and safety officers and the General Health and Safety requirements as specified in the Access Agreement..

### **2.1.15. Earthing**

2.1.15.1. A common earth is provided in all eircom exchange buildings for telecommunications equipment. It will be the responsibility of the Access Seeker to ensure that all their equipment is earthed within the exchange floor and conforms to the practice within the particular exchange.

2.1.15.2. If it is necessary to undertake changes to the common exchange earth due to the installation of the Access Seeker's equipment, its associated cables and any new cable runways, the Access Seeker will be advised of this, following an exchange survey,

which will be undertaken by eircom.

#### **2.1.16. Floor Loading**

- 2.1.16.1. Where false floors are provided, they are capable of a loading up to 20 kn./m<sup>2</sup> max.
- 2.1.16.2. Determination of floor loading will be subject to Site conditions.

#### **2.1.17. Environmental Conditions**

- 2.1.17.1. The temperature of eircoms' exchanges is normally maintained between 18 and 22 degrees Celsius.
- 2.1.17.2. The temperature alarms in eircom's exchanges are monitored by the Network Management Centre (NMC).
- 2.1.17.3. Humidity levels vary between 20% and 80% and dehumidification is provided as part of the cooling process. Humidification is not provided due to the risk of water leaks.

#### **2.1.18. Telephone Service**

- 2.1.18.1. Upon request eircom will provision a telephone line for voice communication as part of this product; however, the provision of a telephone and any restrictive telephony services will be as per eircom's retail offerings. Procedure for ordering are as per the Inter Operator Process Manual for Physical Co-location.

#### **2.1.19. Fire and Smoke Detection Systems**

- 2.1.19.1. The detection systems for fire and smoke will vary depending on the size of exchange.
- 2.1.19.2. Large exchanges have automatic fire detection systems covering the exchange floor area.
- 2.1.19.3. In smaller exchanges, only manual fire alarms i.e. manual call points are available.

#### **2.1.20. Heat Dissipation**

- 2.1.20.1. The individual heat dissipation per footprint must not exceed 2 kW. Heat dissipation in excess of this may affect the operation of other exchange equipment and reduce the effect of the air conditioning plant.



- 2.1.20.2. The Access Seeker's equipment racks must have their own fans to draw in cool air once heat dissipation exceeds 1kW per footprint.
- 2.1.20.3. The Access Seeker must advise eircom of the heat dissipated per footprint.
- 2.1.20.4. Physical co-location may be refused if the heat dissipated per footprint is considered excessive (i.e. greater than 2 kW per footprint) by eircom and therefore likely to affect eircom or other Access Seekers' equipment.

### **3. Product Availability**

- 3.1. If the service cannot be provided on the grounds of feasibility or the need to maintain network integrity or lack of capacity because of the unavailability or unsuitability of an exchange floor space, the product will not be available.
- 3.2. At no time should this product be considered available throughout all of eircom's exchanges, as it will be dependent on individual exchange characteristics.

### **4. Service Responsibilities**

- 4.1. The appropriate responsibilities of each party are as outlined in the Site specific Licence Agreement.
- 4.2. At all times eircom will be responsible for the exchange building(s) and the eircom staff within them.
- 4.3. The Access Seeker will specify relevant equipment to be installed as per the Inter Operator Process Manual.
- 4.4. The Access Seeker will be responsible for identifying any faults that may occur on its equipment or service and localising any faults into eircom's network in line with the fault repair process as outlined in the Inter Operator Process Manual.
- 4.5. If the Access Seeker purchases equipment that cannot be installed utilising the facilities provided by eircom, the responsibility for the purchase is the Access Seeker's.

### **5. Services Management**

#### **5.1. Ordering**

- 5.1.1. The interface between the Access Seeker and eircom for the submission of orders is as per the Process Manual for Physical Co-location .

## **5.2. Service Provisioning**

- 5.2.1. Service provisioning will be as per the Process and Technical Manuals for Physical Co-location.

## **5.3. Network Operation and Maintenance**

- 5.3.1. Processes for network operation and maintenance will be as per the Process Manual for Physical Co-location.

## **5.4. Fault Repair**

- 5.4.1. Processes for fault repair will be as per the Process Manual for Physical Co-location

## **5.5. Service Levels**

- 5.5.1. Specific service levels are outlined in the Service Level Section at Annex A Section A to the Access Agreement.