



# **Wholesale Ethernet Access**

## **Inter-Operator Process Manual**

### **Issue 4.0**

Effective from 5/03/10



<b>Revision history</b>			
<b>Version</b>	<b>Date</b>	<b>Revised by</b>	<b>Revision details</b>
Version 1.0	May 2009	Eircom Ltd	
Version 1.1	July 2009	Eircom Ltd	Extended to include the options to order •100 Mbit/s Ethernet over SDH at AS site •100 Mbit/s Ethernet over SDH on in span fibre Aggregated handoff
Version 2.0	September 2009	Eircom Ltd	Updated to reflect Uncontended options.
Version 3.0	October 2009	Eircom Ltd	Updated to include contended IBH handoff
Version 4.0	March 2010	Eircom Ltd	Updated to include reference to fibre IBH handoff.

  

<b>Associated documents</b>	
<b>Title</b>	<b>Location</b>
	<a href="http://www.eircomwholesale.ie">www.eircomwholesale.ie</a>



## Table of Contents

<b>1. INTRODUCTION</b>	<b>5</b>
<b>2. FORECASTING PROCESS</b>	<b>5</b>
<b>3. ORDERING PROCESS</b>	<b>5</b>
3.1 INTRODUCTION	5
3.2 ORDER TYPES	5
3.3 ORDER FORMAT	6
3.3.1 Orders for Customer Sited Handover Ethernet Aggregation Link (Contended/UnContended)	6
3.3.2 Orders for In-Span Handover Ethernet Aggregation Link Contended/ UnContended)	6
3.3.3 Orders for In-Building Handover Ethernet Aggregation Link (Contended / UnContended)	6
3.3.4 Orders for CSH (Customer Sited Handover) Ethernet Aggregation Link over PPC TL Contended/ UnContended	7
3.3.5 Orders for ISH (In-Span Handover) Ethernet Aggregation Link over PPC TL Contended/ UnContended	7
3.3.6 Orders for Ethernet Access Circuits	8
3.3.7 Orders for VLAN	8
3.4 PROVISIONING PROCESS POINTS DEFINITIONS	8
3.4.1 Customer Delay Process	9
3.5 DELIVERY REJECTION PROCESS	9
3.6 CHANGE OF SERVICE (RE-ARRANGEMENT) ORDERS	10
3.7 CHANGE OF SERVICE UPGRADE / DOWNGRADE ORDERS	10
3.7.1 Ethernet Access Circuits upgrade and downgrade Orders	10
3.7.2 Virtual Local Access Network (VLAN)	10
3.8 CESSATION PROCESS	10
3.8.1 Ethernet Aggregation Link	11
<b>4. FAULT MANAGEMENT PROCESS</b>	<b>11</b>
4.1 INTRODUCTION	11
4.2 FAULT DEFINITIONS	11
4.3 FAULT PROCESS	12
4.3.1 Fault Reporting	12
4.3.2 Fault Response	12
4.3.3 Fault Resolution	12
4.4 PARKED TIME	12
4.5 OUT OF HOURS CHARGING PRINCIPLES	13
4.6 FAULT MANAGEMENT ESCALATION PROCEDURES	13
4.6.1 Wholesale Ethernet Access Escalations:	13



**5. MAINTENANCE ..... 14**

5.1 INTRODUCTION ..... 14

5.2 MAINTENANCE DEFINITIONS ..... 14

    5.2.1 *Planned Maintenance* ..... 14

    5.2.2 *Notification Process and Timescale for Planned Maintenance* ..... 15

    5.2.3 *Notification and Escalation Process* ..... 15

5.3 UNPLANNED MAINTENANCE ..... 15

    5.3.1 *Notification Process and Timescale for Unplanned Maintenance* ..... 15

**APPENDIX 1 - FORECAST FORM FOR AGGREGATION LINKS ..... 16**

**APPENDIX 2 - EXCHANGE LIST ..... 18**

**APPENDIX 3 - NOTIFICATION OF PLANNED MAINTENANCE FORM ..... 19**

## List of Tables

**TABLE 1: ESCALATIONS POINTS OF CONTACT – DETAILS TO BE PROVIDED ON A PEER TO PEER BASIS WITH EACH OPERATOR..... 14**

**TABLE 2: PREFERRED PLANNED MAINTENANCE WINDOW..... 14**



## 1. Introduction

---

The purpose of this Inter-Operator Process Manual is to define the procedures relating to Wholesale Ethernet Access between eircom and Other Authorised Operators (OAO's) ensuring that both Parties have an appropriate understanding of their roles and responsibilities.

The Wholesale Ethernet Access service includes the provision Ethernet Aggregation Links and Ethernet Access Circuits (including VLANS) between eircom and the Operator ordering the services. The prevailing version of this document will always be available on [www.eircomwholesale.ie](http://www.eircomwholesale.ie)

## 2. Forecasting Process

---

This section outlines the industry processes to support the forecasting for Wholesale Ethernet Aggregation Links.

It is recommended that Operator's forecast their requirements for Ethernet Aggregation Links.

Forecasting for Customer Sited (CSH), In-Span (ISH) and In-Building (IBH) Ethernet Aggregation Links are submitted by the Operator on the form proposed in Appendix 1.

The form should be submitted as per the guidelines in Appendix 1 by the Operator through a bi-lateral process detailing the number of Ethernet Aggregation CSH, ISH and IBH Links required by the eircom exchange.

The forecasting process is for capital forecasting and network build-out only and is disassociated from the Provisioning process or the associated SLA.

## 3. Ordering Process

---

### 3.1 Introduction

---

This section outlines the industry processes to support the ordering of Wholesale Ethernet Access.

### 3.2 Order Types

---

Only one Wholesale Ethernet Access component can be ordered per order form but multiple forms can be issued at the same time.

The order types are:

- 100 Mbit/s Fast Ethernet at Operator site (Contended or Uncontended)
- 100 Mbit/s Ethernet on in span fibre (Contended or Uncontended)
- 100 Mbit/s Ethernet In Building (Contended or Uncontended)
- 100 Mbit/s Ethernet over PPC CSH TL (Customer Sited Handover Partial Private Circuit Transponet Link) (Contended or Uncontended)
- 100 Mbit/s Ethernet over PPC ISH TL (In-Span Handover Partial Private Circuit Transponet Link) (Contended or Uncontended)
- Access Circuit 512kb\s
- Access Circuit 1Mb\s
- Access Circuit 2Mb\s
- Access Circuit 4Mb\s



- Access Circuit 6Mb\s
- Access Circuit 8Mb\s
- Access Circuit 10Mb\s
- Virtual Local Area Network (here-after known as VLAN)

Note: A minimum of one VLAN must be ordered with the initial Access Circuit order and thereafter VLANS can be ordered separately using the order form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie)

### 3.3 Order Format

---

All orders for new or additional Wholesale Ethernet components will be placed via an order form and all relevant sections of the order form must be completed.

Orders will be accepted by e-mail. Orders submitted by e-mail must be sent to [wholesale@eircom.ie](mailto:wholesale@eircom.ie).

#### 3.3.1 Orders for Customer Sited Handover Ethernet Aggregation Link (Contended/ UnContended)

---

The A-end of an Ethernet Aggregation Link will be the eircom exchange serving the Operator point of presence (here-after known as POP). The B-end of an Ethernet Aggregation Link will be the eircom equipment sited at the Operator POP.

When an order is accepted by eircom the Ethernet Aggregation Link is assigned a reference number and the Operator advised accordingly.

CSH Ethernet Aggregation Links can be ordered by the Operator using the order form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie)

Ethernet Aggregation Links can only be ordered from an exchange listed in Appendix 2.

#### 3.3.2 Orders for In-Span Handover Ethernet Aggregation Link Contended/ UnContended)

---

The A-end of an Ethernet Aggregation Link will be the nominated eircom exchange serving the Operator POP.

The B-end of an Ethernet Aggregation Link will be the eircom equipment sited at the interface chamber. The physical location POP may be in an underground manhole or in a street cabinet, and is provided by the Operator. It should be located not more than 100 meters from the curtilage of the eircom serving exchange. The closure to be used in either event is the Raychem, FOSC 400 Xcon closure, which is an Optical Distribution Frame (here after known as an ODF) type closure for 12 fibre to 12 fibre.

eircom will terminate its fibres on one side of the ODF, and the Operator will terminate its fibres on the other side. The fibres will be connected using the Operator-provided patch cord.

When an order is accepted by eircom the Ethernet Aggregation Link is assigned a reference number and the Operator advised accordingly. ISH Ethernet Aggregation Links can be ordered by the Operator using the order form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie)

Ethernet Aggregation Links can only be ordered from an exchange listed in Appendix 2.

#### 3.3.3 Orders for In-Building Handover Ethernet Aggregation Link (Contended /UnContended)

---

The A-end of an Ethernet Aggregation Link will be the nominated eircom exchange that the Operator has a co-location presence.



The B-end of an Ethernet Aggregation Link will be the Operator equipment located in the eircom exchange. The physical location POP will be within the Operator footprint in the exchange, and is provided by the Operator.

In the case of copper handoff eircom will run a CAT 5 cable to the Operator co-location space. The total length of cable between the eircom Ethernet port and the Operator Ethernet port (i.e. eircom cable + Operator cable) must be less than 100m.

In the case of fibre handoff eircom will run a fibre cable to the Operator co-location space from the eircom Ethernet port via an ODF. See product description for further details. When an order is accepted by eircom, the Ethernet Aggregation Link is assigned a reference number and the Operator advised accordingly. IBH Ethernet Aggregation Links, with Copper or Fibre handoff, can be ordered by the Operator using the order form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie)

IBH Ethernet Aggregation Links can only be ordered from an exchange listed in Appendix 2 and for which the Operator has a current, valid Licence Agreement for that Site.

Orders for Physical Co-location are separate to this process.

#### 3.3.4 Orders for CSH (Customer Sited Handover) Ethernet Aggregation Link over PPC TL Contended/UnContended

---

A Customer Sited Ethernet Aggregation Link is an eircom provided connection between the eircom network and the Operator network which utilises a spare STM-1 with in an existing or yet to be provided CSH STM-4 / STM-16 PPC TL.

A 100 Mbit/s path will be built through the eircom SDH network and through the PPC CSH TL to the handover point.

Ethernet Aggregation Links utilising a spare STM-1 with in an existing or yet to be provided CSH STM-4 / STM-16 PPC TL can be ordered by the Operator using the order form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie).

When an order is accepted by eircom the Ethernet Aggregation Link is assigned a reference number and the Operator advised accordingly. Ethernet Aggregation Links can only be ordered from an exchange listed in Appendix 2.

#### 3.3.5 Orders for ISH (In-Span Handover) Ethernet Aggregation Link over PPC TL Contended/UnContended

---

An in Span Ethernet Aggregation Link is an eircom provided connection between the eircom network and the Operator network which utilises a spare STM-1 with in an existing or yet to be provided ISH STM-4 / STM-16 PPC TL.

A 100 Mbit/s path will be built through the eircom SDH network and through the PPC ISH TL to the handover point.

Ethernet Aggregation Links utilising a spare STM-1 with in an existing or yet to be provided ISH STM-4 / STM-16 PPC TL can be ordered by the Operator using the order form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie)

When an order is accepted by eircom the Ethernet Aggregation Link is assigned a reference number and the Operator advised accordingly.

Ethernet Aggregation Links can only be ordered from an exchange listed in Appendix 2.



### 3.3.6 Orders for Ethernet Access Circuits

---

The A-end of an Ethernet Access circuit will be an Operator nominated Ethernet Aggregation link. The B-end will be an End User Premises, which may be an end user's premises or the premises of the Operator in whose name the Ethernet Access Circuit is ordered.

Ethernet Access Circuits must be ordered to a nominated Ethernet Aggregation Link. If it is a new Ethernet Aggregation Link, once it has been allocated a circuit reference, at the acknowledgement stage, then the Ethernet Access Circuit can be ordered quoting the appropriate Ethernet Aggregation Link circuit reference on the order form.

Where the A-end of the Ethernet Access Circuit does not have a valid and complete circuit reference the order will be rejected.

Ethernet Access Circuits can be ordered by the Operator using the order form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie).

### 3.3.7 Orders for VLAN

---

VLAN's can be ordered by an Operator using the order form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie).

A minimum of one VLAN must be ordered with the initial Access Circuit order. Where more than one VLAN is ordered with an Access Circuit VLAN, tagging will be used. eircom will allocate a VLAN ID when the VLAN is provisioned and provide this ID to the Operator.

The Access Circuit capacity is shared by the number of VLANS ordered. Where an additional VLAN is being ordered on an existing Access Circuit and the Access Circuit is not referenced on the order, the order will be rejected.

## 3.4 Provisioning Process Points Definitions

---

- Order Receipt (OR): the forwarding of a valid order to eircom on a standard order form. The SLA "clock" begins when the order form is received by eircom.
- Order Acknowledgement (OA): the acceptance of an order form by eircom and acknowledgement to the Operator that the order has been received, the order form is correctly filled in and is being processed.
- Order Validation (OV): confirmation, or otherwise, that an order is deliverable by eircom within the standards set down in the SLA. Standard order delivery time is in accordance with the delivery times listed in Table 1. The appropriate dates will be given at Order Validation.

Where appropriate, this step shall include a site survey. At the end of the Order Validation Step three events are allowable:

- The order is determined to be within the definition of a "standard" order and a delivery date is set in accordance with the appropriate SLA;
  - The order is determined to be a "non-standard" order under the allowable exceptional circumstances set out in Appendix 1 of the published SLA.
  - Should a customer request a circuit to be delivered on a date after the calculated Delivery Due Date (Standard or non-standard) then this date shall become the due delivery date and shall be taken as the standard delivery date for the purposes of SLA compliance calculations.
- 
- Order Forecast (OF): Notification to the Operator of a delivery date of an order that is validated as "non-standard". This delivery date shall be taken as the "standard" date for the purposes of SLA compliance calculations.





- Delivery Confirmation (DC): prior to the delivery date eircom shall confirm in writing to the Operator as to whether the delivery date will be met. This will enable Operator's to better manage their customers' expectations. In the event that the Delivery Confirmation advises that the Delivery will not be met, eircom must advise the Operator of the revised Delivery Date (RDF) within three (3) Working Days of the original due delivery date. Should the new delivery date be in excess of ten (10) Working Days of the previous Due Delivery Date, then the Delivery Confirmation process begins again.
- The Delivery Confirmation/Reconfirmation shall be considered a single process for penalty calculation purposes.
- Delivery of Service: the provision of the purchased service by eircom.
- Delivery Notification (DN): date of issuance of a Completion Notice by eircom to the Operator.
- Completion of order: An order is deemed to be completed on dispatch of Delivery Notification (DN) and working service by the Operator. The Operator has two (2) Working Days to accept the circuit as completed as specified. During this period the service delivery "clock" is stopped. If the Operator cannot accept the circuit because it is faulty, the "clock" starts again until such time as the circuit is accepted. If the Operator does not inform eircom of its acceptance or otherwise of the circuit, it will be deemed to be accepted by the Operator for the purposes of any SLA penalty calculation.
- If the fault is subsequently found to be in the Operator network or no fault is found, the original date of the completion notice shall apply to the order. eircom's standard terms and conditions regarding recovery of costs for reported faults found not to be in the eircom network shall apply.
- Service Provision: the activation by eircom of the ordered service.
- Working Day: 09:00 – 17:00 Monday to Friday excluding public or bank holidays in Ireland.

#### 3.4.1 Customer Delay Process

---

In the event that an Operator delays installation of the Wholesale Ethernet Access for any of the reasons detailed within Appendix 1 of the SLA, published on [www.eircomwholesale.ie](http://www.eircomwholesale.ie), this will constitute Customer Delay, stopping the SLA "clock".

Should the Customer Delay exceed five (5) Working Days, the SLA "clock" shall be restarted at a mutually agreed date, to reflect the requirement for eircom to reschedule its work for this delivery.

Customer Delay Notification will be dispatched to the email address provided with the original order form.

#### 3.5 Delivery Rejection Process

---

An order is deemed to be completed on receipt of a correct completion notice and working service by the Operator. The Operator has 2 working days to accept the circuit as completed as specified. The reasons for rejection should be provided by the Operator who should ensure that CPE dependency checks are done before corrective action is taken by eircom, i.e., power to the modem, CPE cable securely connected, the CPE configured and working correctly, etc.

During this period the service delivery "clock" is stopped. If the OAO cannot accept the circuit because it is faulty, the "clock" starts again until such time as the circuit is accepted. eircom will credit rental for the period between the dates of the Delivery Notification and the fault resolution. If the Operator does not inform eircom of its acceptance or otherwise of the circuit, it will be deemed to be accepted by the Operator for the purposes of any SLA penalty calculation.

If the fault is subsequently found to be in the Operator network or no fault is found, the original date of the completion notice shall apply to the order. eircom's standard terms and conditions regarding recovery of costs for reported faults that are found not to be in the eircom network shall apply.



### 3.6 Change of Service (Re-arrangement) Orders

---

Change of service for both the Aggregation Link and Access Circuit are treated as a cease and provide order.

### 3.7 Change of service upgrade / downgrade orders

---

All bandwidth changes will be treated as a cease and provide order. These order forms can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie)

#### 3.7.1 Ethernet Access Circuits upgrade and downgrade Orders

---

The Order Process will involve a cross-referenced cease and provide order and is dependent on available capacity on an order by order basis.

Operators should use the change order provided in on the order form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie) to submit upgrade and downgrade orders.

#### 3.7.2 Virtual Local Access Network (VLAN)

---

The Operator forwards an order form to eircom requesting an increase or decrease in the number of VLAN's utilised within the Access Circuit. At a minimum the Operator must order one VLAN at the same time when ordering an Access Circuit. This is an Ethernet VLAN between the Ethernet interface on an NTU and a POP connection to the Operator. It is built over an Ethernet Access Circuit.

One or more VLANs may be provisioned on the same Ethernet Access Circuit. The bandwidth of the Access Circuit is shared between all VLANs provisioned on it.

### 3.8 Cessation process

---

These processes relate to the mechanism for the cessation of the various Wholesale Ethernet Access Services using the processes described below.

The cessation of Wholesale Ethernet Access Services includes the decommissioning of the service and the recovery of eircom equipment from the end user premises and/or POP.

This describes a situation where the Operator wishes to cease an Ethernet Aggregation Link or Ethernet Access Circuit. For the purpose of supporting the Ethernet Access product, the following processes are proposed.

The Wholesale Ethernet access process is as follows:

The Operator will complete and send the relevant Cease Order Form which can be found on [www.eircomwholesale.ie](http://www.eircomwholesale.ie) to the eircom Order Contact Point. eircom will check the form for completeness, and if the Cease Order is complete and valid, eircom will assign the order a reference number and provide a Cessation Order Acknowledgement within 2 working days of receipt by the Order Contact Point. If required by an individual Operator, eircom will supply a Customer Order reference number along with eircom's circuit ID's.

For the purposes of identifying the Cease ordered service in all subsequent communications, both parties will use the eircom customer order reference number.

If the order form is incomplete it will be returned to the Operator Order Contact Point with the reason for incompleteness stated. The Operator may revise or amend the order and re-submit it to eircom.

After the order has entered the Cessation process eircom will carry out such activities as are necessary to recover the service. These eircom activities may require multiple site visits and



these will be co-ordinated via the Order specific Operator contact point specified on the order form.

Circuits to be ceased should be requested on the eircom Wholesale Ethernet Access order form.

Operators are required to give eircom a minimum one-calendar months' notice of the date of cessation.

eircom will discontinue service on a date following the end of the notice period.

### 3.8.1 Ethernet Aggregation Link

---

Save where the order is submitted as part of an agreed project between eircom and the Operator, a cease order for an Ethernet Aggregation Link will proceed independently. An Ethernet Aggregation Link cannot be ceased until all Ethernet Access Circuits have been ceased first.

The management of the cessation of any Ethernet Access Circuit served by that Link is the responsibility of the Operator.

## 4. Fault Management Process

---

### 4.1 Introduction

---

This section outlines the processes to support the fault management of Wholesale Ethernet Access.

It is designed as the optimal process for the fault management of Wholesale Ethernet Access Services access using existing processes where possible.

The period of non-availability will commence at the time a fault is accepted by eircom. The period of non-availability shall end at the time logged by eircom that the service is available to the end-customer, as marked "confirmed clear permanent".

Service shall be deemed to have been restored when the fault condition is resolved on the eircom network and service availability restored to the end-customer.

If the fault is found to be in the Operator network (including its CPE) eircom's standard terms and conditions regarding recovery of costs for reported faults found not to be in the eircom network shall apply.

### 4.2 Fault Definitions

---

**Single Point of Contact:** The Single Point of Contact, (SPOC) who is available 24 hours a day, 7 days a week.

**Wholesale Ethernet Access Faults:** A fault is the inability to transfer data across at its nominal capacity for the particular circuit.

**Non-Availability:** The period of non-availability will commence at the time a fault is first reported to eircom in accordance with the fault reporting procedures. The period of non-availability shall end from the time logged by eircom that the service is available to the end-customer, notification will be provided to eircom via the Operator.

**Unconfirmed Clear:** Is where eircom has resolved the fault and the clock are stopped until the fault clear is either accepted by the end user or 1 hour from the unconfirmed clear customer notification time has elapsed.

**Confirmed Clear Permanent:** Is where eircom has resolved the fault and the fault clearance is accepted by the end user the fault ticket is permanently closed.



**Repair Time:** The duration between the time a fault is first accepted by eircom in accordance with the fault reporting procedures and the time marked by eircom as a "Confirmed Clear Permanent".

### 4.3 Fault Process

---

#### 4.3.1 Fault Reporting

---

Fault reports can be logged by calling 1800-656 656 or by e-mailing the fault to "wtm@eircom.ie".

A fault shall be deemed to be reported, when a fault is discovered by either Party, and proven out of its own network, and a Trouble Ticket is raised and submitted to a Single Point of Contact for each Party, (SPoC). The SPoC will be agreed by eircom and the Operator.

#### 4.3.2 Fault Response

---

When a fault has been correctly logged and acknowledged, eircom will undertake preliminary testing and fault localisation. Following this, fault clearance will be instigated. The results of preliminary eircom testing and fault localisation are provided to the Operator.

The maximum response time is T + 3 SLA hours where T is the time that the fault has been logged by eircom.

#### 4.3.3 Fault Resolution

---

Service shall be deemed to have been restored when the fault condition is resolved on the eircom network and service availability restored to the end-customer, notification will be provided to eircom via the Operator. eircom reserves the right to put in place 'Temporary Patching' to restore service (e.g., fibre/radio link re-route) while repairs to a network fault are undertaken. Restoration may also mean that service is restored through diverse routing until the network fault is fully cleared.

On completion of repair, a fault ticket is given an "Unconfirmed Clear" status and that ticket is parked.

If the fault has either been accepted by the end user or 1 hour has elapsed from "Unconfirmed Clear" customer notification, the fault ticket is un-parked and given a "Confirmed Clear Permanent" status together with an associated final clear code and the fault ticket is permanently closed.

If the end user responds with a rejection of repair the ticket is un-parked, the clock is re-started and repair work recommences. The SLA clock for the purpose of escalation continues from the time the ticket was parked. (Leased line example: ticket is un-parked at NT (7 SLA hours.), first escalation is NT + 4). On completion of repair, the "Unconfirmed Clear" status is applied again, the end user is notified and the fault is parked and the process above is repeated.

### 4.4 Parked Time

---

Where circumstances arise which are outside the control of eircom that impede the ability of eircom to begin or continue with repair of a fault, this will result in the fault ticket being parked for the affected period. This parked time will be removed from the out of service time used in calculating service availability.

Specifically:

Requested access to the end user premises not available to eircom.



Waiting for requested information from an Operator, required by eircom to progress fault clear.

Awaiting decision from Operator regarding "call out charges", due to the changing nature of the "call out charges". The charges details can be found on [www.eircom.ie](http://www.eircom.ie).

If the customer doesn't accept the "call out charges" within one hour, the fault is "Parked" until 9am the next working day.

The WTM desk will provide a phone call to the Operator once the status of the ticket has changed to "Unconfirmed Clear".

#### 4.5 Out of Hours Charging Principles

---

If Operators request action (outside of SLA coverage hours) specific to their service then this work is chargeable.

If eircom initiate specific work to repair network faults which also affect multiple circuits, this work is not chargeable to the Operator.

All specific requests will be subject to the availability of resources. If resource is unavailable when requested then the fault will remain open for the purposes of calculating % circuit downtime.

#### 4.6 Fault Management Escalation Procedures

---

The purpose of escalating a fault should be to inject some urgency or expediency into the resolution of a fault. The escalation process needs to be standardised and regulated so that escalations are effective and produce results. Escalations should always take place at a "peer to peer" level i.e., the designated escalation level P.O.C. The Operator should only escalate to his or her corresponding designated escalation level P.O.C. in eircom and vice-versa.

##### 4.6.1 Wholesale Ethernet Access Escalations:

---

The escalation of Wholesale Ethernet Access Faults may take place at two levels:

- If the maximum Response time of T + 3 SLA hours has not been met the Operator may escalate to Level 1 in eircom. Subsequent levels of escalation may be made for every 4 SLA hours after this time that a Response has not been made. (Escalations levels are detailed below).
- For the purpose of escalations, since there is no maximum Repair time, a "notional target", NT, Repair time of 8 SLA hours should be adopted. Subsequently, in order to introduce the notion of "jeopardy management" the escalation at first level may take place 7 SLA hours after the fault is first logged by eircom. Subsequent levels of escalation may be made at 4 SLA hour intervals after the first escalation. The eircom Points of Contact for escalations are set out in the table below (Table: 1 – Escalations Points of Contact).
- If escalation is made and a voicemail left by the Operator "escalator", the eircom "escalatee" has 30 minutes to respond to the Operator "escalator". If a return call is not received by the Operator "escalator", they may escalate to the next level themselves.



Escalation Level	Title	Contact Number	Escalate after:
1	WTM Team Leader	1800 656 656	7 SLA hrs (=NT)
2	WTM Manager	1800 656 656	"NT" + 4
3	Head of Wholesale Operations		"NT" + 8
4	Director of Wholesale		"NT" + 12

**Table 1: Escalations Points of Contact – details to be provided on a peer to peer basis with each Operator.**

- Note: Escalations for all Products within the SLA must be "accepted" by eircom and vice-versa. If the relevant previous escalations have not been made, or if the time intervals have not been observed, the escalation may be rejected by eircom.

## 5. Maintenance

### 5.1 Introduction

This section outlines the processes to support the maintenance management of Wholesale Ethernet Access.

It is designed as the optimal process for the maintenance management of Wholesale Ethernet Access Services access using existing processes where possible.

The service assurance processes describe the mechanisms for dealing with the operational issues i.e., maintenance management

### 5.2 Maintenance Definitions

Maintenance is defined as the act of maintaining or the state of being maintained, reducing the occurrence of fault conditions.

Maintenance Notification is the notice to withdraw plant from service will be given to the Operator's Network Management Centre (The Operator NMC)

#### 5.2.1 Planned Maintenance

Planned maintenance is the procedure designed to minimise the occurrence of faults, essential maintenance or alteration or improvement to the Wholesale Ethernet Access Network, whereby services are temporarily suspended in a planned manner. eircom will give the Operator notice prior to such suspension and eircom will restore service as soon as possible after such suspension. The preferred window for the conduct of planned maintenance is set out in Table 1 below.

Preferred Hours	CATEGORY A	CATEGORY B
ALL DAYS	00:01-04:00	00:01-06:00

**Table 2: Preferred Planned Maintenance Window**

The Categories of planned maintenance shall be defined as follows:



**Category A:** 20 % or more of the Wholesale Ethernet Access Service capacity is between the Operator's network and the eircom network; or

**Category B:** 50 % or more of the Wholesale Ethernet Access Service capacity is lost between the Operator's network and the eircom network. Please note: any planned maintenance on an Aggregation Link will be treated as a Category A.

### 5.2.2 Notification Process and Timescale for Planned Maintenance

---

If either Party intends to carry out any planned work which may affect the Wholesale Ethernet Access Service then the originating Party must notify the other Party of the planned work by e-mail and / or faxed to the contact point. using the "Notification of Planned Maintenance" form - see Appendix 3.

The minimum advance notification that is required for service outages due to Planned Maintenance is 10 working days for Category A and 5 working days for Category B.

Having been notified of planned maintenance the receiving Party must review and respond to the proposal within 3 working days of receipt.

On completion of the planned maintenance work the originating Party must notify the other Party that the work was completed as planned within 1 working day of the planned completion time, by facsimile transmission of the completed "Notification for Planned Maintenance" form.

A reduction of notification timescale will be allowed only under exceptional circumstances. Each occurrence will be treated as urgent planned work and the reason for the urgency should be stated.

### 5.2.3 Notification and Escalation Process

---

If the date or timing of the planned maintenance work is unsuitable then the receiving Party must contact the relevant inter-company escalation point so that a suitable date and time can be agreed. In the case of an Operator this is the Operator NMC, and in the case of eircom this is the Manager, eircom/NNCC. If the planned maintenance work is critical and essential to the operation of either party's network then one party cannot veto the other party's work.

A reduction of notification time-scale will be allowed only under exceptional circumstances. Each occurrence will be treated as urgent planned work and the reason for the urgency should be stated.

## 5.3 Unplanned Maintenance

---

Unplanned maintenance is the procedure designed to minimise the effect of faults on the Wholesale Ethernet Access Network essential maintenance or alteration or improvement to the Wholesale Ethernet Access Network, whereby services are temporarily suspended in an unplanned manner. Where possible eircom will give the Customer notice prior to such suspension and eircom will restore service as soon as possible after such suspension.

### 5.3.1 Notification Process and Timescale for Unplanned Maintenance

---

While endeavouring to keep the unplanned maintenance to a minimum, when they do occur eircom will make the best endeavour to supply an Operator with as much notification prior to the work commencing.



## **Appendix 1 - Forecast Form for Aggregation Links**

---

Guidelines to completing the forecast form

- Section 1.** This section contains Operator contact information
- Section 2.** Please select the product type that you require. The forecast should differentiate between CSH, ISH and IBH Ethernet Aggregation Links.
- Section 3.** This section requests the forecast figures for the Ethernet Aggregation Link, by quarter and by the eircom exchange.
- Section 4.** Operator Declaration and Signature



**Wholesale Ethernet Services Forecast Form**

<b>OAO Company Name:</b>	
<b>OAO Contact Name:</b>	
<b>OAO Contact Phone:</b>	
<b>OAO Contact email:</b>	
<b>OAO Contact Billing Address:</b>	

<b>Product List</b>	<b>tick req</b>
Aggregation Link CSH	
Aggregation Link ISH	
Aggregation Link IBH	
Aggregation Link CSH over SDH	
Aggregation Link ISH over SDH	
Aggregation Link CSH (Contended)	
Aggregation Link ISH (Contended)	
Aggregation Link IBH (Contended)	
Aggregation Link CSH over SDH (Contended)	
Aggregation Link ISH over SDH (Contended)	

<b>Year :</b>	
---------------	--

<b>Exchange Name</b>	<b>Qtr 1</b>	<b>Qtr 2</b>	<b>Qtr 3</b>	<b>Qtr 4</b>	<b>Next Year</b>
Beggars Bush					
Blanchardstown					
Castlebar					
Crown Alley					
Dublin Airport					
Dundalk					
Kilkenny					
Limerick					
Letterkenny					
Merrion					
Mervue					
Naas					
North Main					
Portlaoise					
Quaker Road					
Roslevin					
Sandyford					
Shannon Airport					
Sligo HPO					
Tallaght					
Tralee					
Waterford					
<b>Total</b>	0	0	0	0	0

<b>Operator Declaration and Signature</b>
---

<b>Signed for and on behalf of the OAO by:</b>	
<b>Position in Company:</b>	
<b>Date:</b>	
<b>Registered Office Address of OAO:</b>	



## Appendix 2 - Exchange List

Exchange	
Beggars Bush	Naas
Castlebar	North Main
Crown Alley	Portlaoise
Blanchardstown	Quaker Road
Dublin Airport	Roslevin
Dundalk	Sandyford
Kilkenny	Shannon Airport
Limerick	Sligo HPO
Letterkenny	Tallaght
Merrion	Tralee
Mervue	Waterford



## Appendix 3 - Notification of Planned Maintenance Form

### Notification of Outage

eircom Date of Issue

eircom Reference

Time of Outage

Details of Outage

---

---

---

---

---