

***eircom* Service Level Agreement**

Ethernet Access Circuits

Issue 2.0

Effective from 11/11/09

Revision History

<i>Version</i>	<i>Date</i>	<i>Revised by</i>	<i>Revision details</i>
1.0	31 May 2009	eircom	Version 1.0
2.0	16 October 2009	Eircom	Updated to include WDEA & WREA circuits.

Associated Documents

Title	Location
Service Level Agreement for Ethernet Aggregation Links	www.eircomwholesale.ie

1 Introduction

This document sets out the service levels for Ethernet Access Circuits. Ethernet Access Circuits are ordered pursuant to a Leased Line Agreement between eircom and the Operator.

The Ethernet Access Circuits covered:

- Wholesale Ethernet Access (WEA)
- Wholesale Dublin Ethernet Access (WDEA)
- Wholesale Regional Ethernet Access (WREA)

Each Order for Ethernet Access Circuits is considered on its own merits and effort is made to ensure that, save where legitimate network constraints exist, each application falls within the ambit of this SLA.

The services described in the SLA are also subject to an inter-operator process manual which defines the detailed operational process associated with the provision of Ethernet Access Circuits. The process manual represents how the SLA parameters are supported in practice and should be read in conjunction with this document. The other documents supporting this offering and service level agreement are the Leased Line Agreement and the Service Level Agreement for Ethernet Aggregation Links.

A penalty regime for failure to meet the offered service levels against these attributes is also set out in the document.

This document may be updated and republished as agreed with the National Regulator.

2 Ethernet Access Circuits

This section sets out the service levels with regard to the provision and maintenance of Ethernet Access Circuits.

Each application for an Ethernet Access Circuit is considered on its own merits and effort is made to ensure that save in exceptional circumstances each application falls within the ambit of this SLA. Examples of such exceptional circumstances are set out by way of example in Appendix 1 (Definitions and Exclusions). Ethernet Access Circuits are at all times provided subject to eircom's standard terms and conditions for this product as set out in the Leased Line Agreement.

2.1 Provisioning Process Points Definitions

- Order Receipt (OR): the forwarding of a valid order to eircom on an 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;
 - Should a customer requests 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 Operators 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 purpose 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 to be in not 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.

2.3 eircom Service Level Summary for Sales Process Points & Provision Parameters

Table 1: Sales Process Points & Provision Parameters

<i>Ethernet Access Circuit Type</i>	<i>OR</i>	<i>OA</i>	<i>OV</i>	<i>OF</i>	<i>DDD</i>	<i>DC</i>	<i>DN</i>	<i>RDF</i>	<i>DRC</i>
<2mb	T	T+2	T+10	T+19	T+22	DD-1	DDD	DD+3	RDF-1
≥2mb – 10mb*	T	T+2	T+13	T+22	T+26	DD-1	DDD	DD+3	RDF-1
≥10Mb**	T	T+2	T+13	T+ 32	Date at forecast	DD-1	DDD	DD+3	RDF-1

* Applicable to 10Mb WEA

** Applicable to 10Mb WDEA & WREA

Note:

T = order is received by eircom

DDD = Due Delivery Date

Numbers in table (but for those describing the products) are in Working Days

2.4 Cancellation of Services

2.4.1 Cancellation Fees where due Delivery date is Missed

If an order is not going to be fulfilled on or before the Due Delivery Date (DDD) provided at validation, then eircom must notify operators at the Delivery Confirmation stage. eircom must then provide operators with a Revised Forecast Date (RFD) either at the Confirmation Stage or within three (3) Working Days from the original DDD.

If the RFD provided extends beyond ten (10) Working Days from the original Due Date (DDD) for standard Orders and twenty (20) Working Days from original Due Date (DDD) for non-standard orders, the customer has the option of cancelling the order without incurring any cancellation fee.

The customer must cancel the order within three (3) full Working Days of receipt of the Revised Forecast Date (RFD).

However, if the customer accepts the RFD then the full cancellation fee applies until the RFD is reached when the above rules will be applied again.

2.4.2 Cancellation Fees at Order Forecast

eircom will waive fifty percent 50% of the cancellation fee for any non-standard order for which the due delivery date provided at order forecast is more than sixty (60) days from the day of validation. This waiver will apply provided the Operator cancels the order within two (2) full Working Days of receipt of the forecast date.

2.5 Repair Definitions

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

On completion of repair, a fault ticket is given an " *Unconfirmed Clear* " status and that ticket is parked i.e. the clock is stopped until the fault clear is either accepted by the customer or one (1) hour from the unconfirmed clear customer notification time has elapsed.

If the fault has either been accepted by the customer or one (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 customer responds with a rejection of repair the ticket is un-parked, the clock is restarted and repair work recommences. On completion of repair, the " *Unconfirmed Clear* " status is applied again, customer is notified and the fault is parked and the process above is repeated.

- **Fault:** A fault is the inability to transfer data across the Ethernet Access Circuit at its nominal capacity in conformance with the relevant ITU recommendations.
- **Service Availability.** Is the annualised in service time of a circuit expressed in percentage terms. It is measured by $[\text{Total Number of Hours in the Year}] - [\text{Total Number of Hours Out of Service}] / [\text{Total Number of Hours in the Year}]$.

Response Time:

- The fault has been correctly logged and acknowledged.
- Preliminary testing and fault localisation has occurred.
- Fault clearance has been instigated.
- Results of preliminary eircom testing and fault localisation provided to Operator.

Parked Time: The times during which the SLA clock is stopped which include; -

- a) time not covered by the relevant SLA
- b) or during out of hours periods where resources being made available on a reasonable endeavours basis are unavailable
- c) or circumstances as outlined in Appendix 1

2.6 Service Level Summary for Repair Parameters

Table 2: Service Level Repair Parameters

SLA Attribute	
Maximum Response Time	T+3 working hours. T = time fault is logged by eircom following receipt of fault report from Operator.
Annualised Service Availability	99.825%

Note: service availability applies to the Ethernet Access Circuits and will include faults reported on Ethernet Access Circuits where the fault is subsequently found on the Aggregation Links.

2.6.1 Responding to Faults

The response time is measured from when the fault has been correctly logged and acknowledged, preliminary testing and fault localisation has occurred, fault clearance has been instigated and the results of preliminary eircom testing and fault localisation made available to the Operator.

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

2.6.2 Measuring Service Availability

The reporting frequency for service availability is quarterly and will apply to all Ethernet Access Circuit faults on a retrospective basis.

The Measurement Period is the previous year (4 quarters), rolling.

Service availability will be measured on a 7 x 24 hour basis using the formula

$$\frac{8766 - (\text{out of service time})}{8766}$$

Total valid out of service hours is the elapsed time between the time faults are logged and the last Unconfirmed Clear Permanent, less Parked Time.

The Measurement Period for service availability is the previous year (4 quarters), rolling

Out of service time relates only to the eircom network

For faults logged outside of product SLA hours of cover, standard callout charges will apply, with customer option to request out of hours repair whereby the fault remains open during the out of hours period.

It is the Clear Code associated with the "*Confirmed Clear Permanent*" that determines the inclusion or exclusion of the fault ticket when measuring availability.

To safeguard against spurious rejection of repair, in cases where the fault rejection results in eircom determining the rejection to be caused by factors outside of the eircom network, the final

clear code will reflect this and the associated fault ticket will be excluded from availability calculations.

Circumstances outside the control of eircom and /or delay resulting from customer related issues which impede the ability of eircom to begin or continue with repair of a fault will result in the fault ticket being parked for the affected period and notification of same to the customer. This parked time will be removed from the out of service time used in calculating service availability.

A circuit can only be subject to one penalty in a Measurement Period i.e. a circuit subject for a penalty in one quarter will not be subject to a penalty again in the next quarter. Should a new fault occur in a new quarter the calculations will be done afresh on that fault.

For example:

In a given measurement period, if a circuit has three outages in that twelve (12) month period, the sum of these will constitute the "out of service time" for that period. If this brings it into penalty, these three outages will be tagged. Any of these tagged outages for that particular circuit falling into all subsequent measurement periods will be excluded from the "out of service time" calculation for that circuit which will automatically include any new outage for that circuit. On the other hand, if the sum of the three (3) outages does not incur a penalty, none of the outages are tagged and any outage falling into subsequent measurement periods will be included in penalty calculations

2.7 SLA Penalties for Non-Compliance

The SLA penalty regime for non-compliance is made up of process and delivery penalties for service provision. These are detailed in the following two sub paragraphs. Penalty regimes are subsequently detailed for repair services and service availability.

2.7.1 Service Provision: Process Penalties

Service Provision Process penalties apply when conditions to predefined process points are not met in the specified time frame. The table below specifies the penalties relating to these processes.

Table 3: Service Provisioning Process Penalties for Non-Compliance

SLA Delivery Process Attributes	Service	Individual Process Point Penalty	Maximum Process penalty per order
Order Acknowledgement	Sub 2Mbit Ethernet Access Circuit	€170	€10
Order Validation, Order Forecast, Delivery Confirmation	Equal to or greater than 2Mbit Ethernete Access Circuit	€250	€750

- Failure to meet Delivery Confirmation on one or subsequent occasions will be deemed to fail one Delivery Confirmation process point.

2.7.2 Service Provision: Delivery Penalties

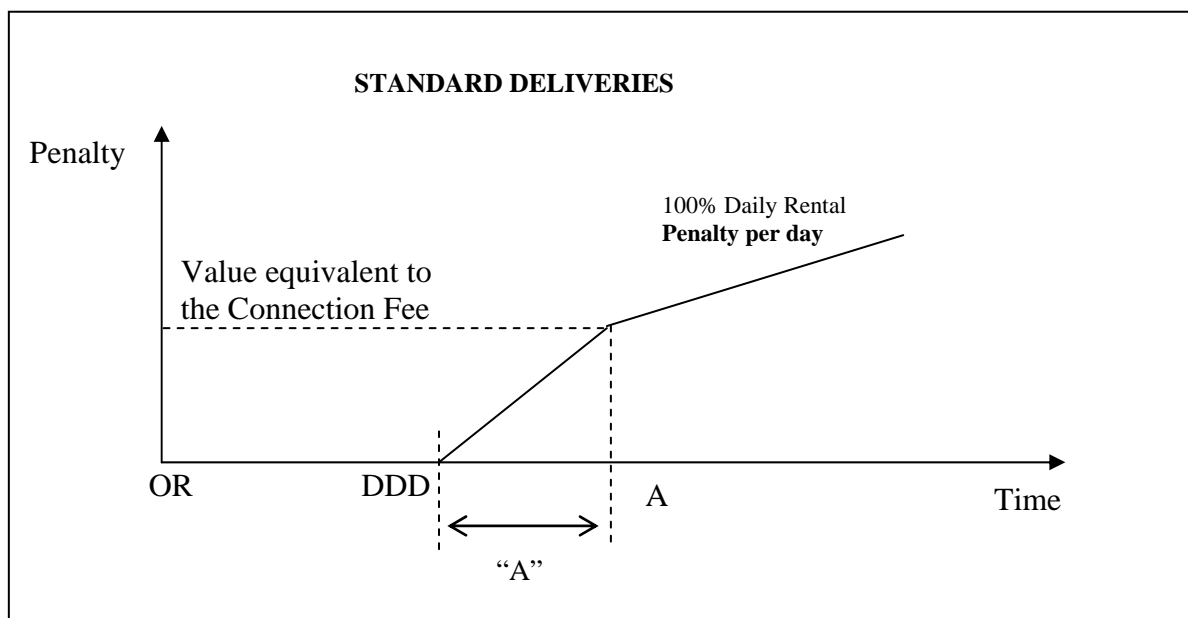
The following mechanism to calculate eircom’s penalty liability differs for standard and non-standard orders.

Service Provision Penalty Mechanism for a “standard” delivery

The Service Provision penalty mechanism for standard orders is made up out a linear repayment of the connection fee which takes place for the period between the due delivery date (DDD) and date A. (See Graphic 2 below). This period is referred to as the “A” days.

After repayment of the connection fee a further linear payment related to the rental per day is due. This payment is to the value x% of the payable rental per day, where x is 140%.

Graphic 2: Standard Delivery Provision Penalty Mechanism



Note:

OR = Order Receipt

DDD = Due Delivery Date

The value for “A” days is set in the table below.

Table 4: Delivery Penalty - "A" Days Summary

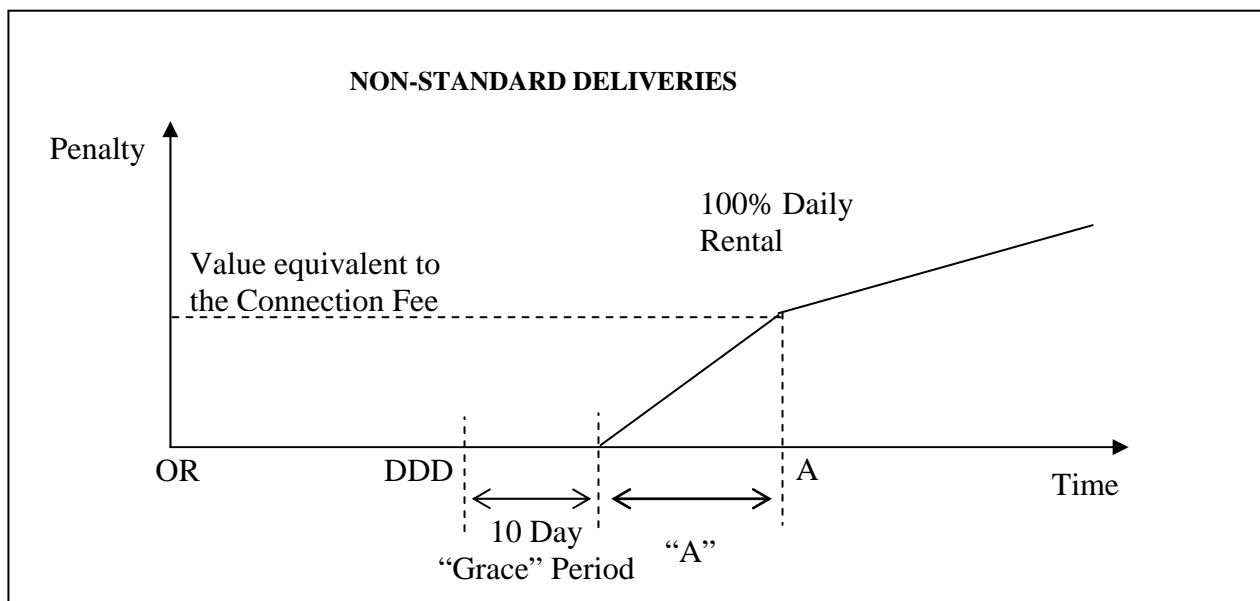
Service	Standard provisioning Time Scale	“A” days after delivery date (DD)
Sub 2MB Ethernet Access Circuits	22 Working Days	21 Working Days
Equal to or greater than 2 MB Ethernet Access Circuit	26 Working Days	22 Working Days

Service Provisioning Penalty Mechanism for a “non-standard” delivery

For “non-standard” deliveries the same regime shall apply, with the exception that an additional “grace” period of ten (10) Working Days shall be inserted after the due date to arrive at the date from when penalties are due.

An example is shown below:

Graphic 3: Non-Standard Delivery Provision Penalty Mechanism



Note:

OR = Order Receipt

DDD = Due Delivery Date

2.7.3 Repair services

Penalties will apply (as set in the table below) when eircom fail to achieve the maximum response time

Table 5: Maximum Response Time Penalty (MRT)

Product	Penalty Applicable
Sub 2MB Ethernet Access Circuit	€250 per failure to achieve maximum response time
Equal to or greater than 2 MB Ethernet Access Circuit	€250 per failure to achieve maximum response time.

2.7.4 Service Availability

Penalties will apply (as set in the table below) when eircom fail to achieve the minimum level of service availability as set in the paragraph on repair parameters.

Table 6: Service Availability

Product	Penalty Applicable
Sub 2MB Ethernet Access Circuit	50% of one month rental shall apply for each failure to achieve a minimum level of service availability in a particular quarter to a maximum of 2 months' rental in any 12 month period
Equal to or greater than 2 MB Ethernet Access Circuit	50% of one month rental shall apply for each failure to achieve a minimum level of service availability in a particular quarter to a maximum of 2 months' rental in any 12 month period

2.8 Penalty Exemption

eircom performance will be assessed against delivery of all orders across the portfolio of products covered by this SLA with a due date in the quarter under review, subject to a minimum order volume of twenty (20) due date circuits during the period.

In the event that order volume for an individual Operator did not reach twenty (20) in the quarter under review, any penalties due will be paid in the reporting period. However the order volume will be rolled over to the next quarter and should the Operator reach the assessment threshold in the second quarter then payments for the previous quarter to the Operator will be adjusted accordingly.

The SLA exemption applies in the event that eircom is successful in delivering 95% of orders to an individual Operator within the SLA performance metrics. SLA exemption also applies to each individual process point metric where eircom achieves 95% adherence to the SLA performance metrics for each individual Operator. The exemption applies separately to each reporting period.

2.9 Reports

eircom will publish due date delivery performance figures on a monthly basis. The figures will include actual figures on the percentage split between standard and non-standard orders delivered. These reports to be available two weeks after the month end.

eircom will publish on a monthly basis an aged analysis of pending orders along with statistics in relation to eircom's compliance with the SLA process points.

The reports will be published on the eircom website. www.eircomwholesale.ie.

Appendix 1: Definitions & Exclusions Ethernet Access Circuits

1 General

Services will be provided within the standard delivery timescales subject to the following definitions and exclusions in addition to *eircom*'s general terms and conditions for the relevant service:

2 Customer Responsibilities

2.1 General Customer Obligations

The customer shall inform eircom of any internal Customer changes to its network which are likely to affect the performance of the eircom supplied elements of the network and subsequently eircom's ability to comply with this Agreement.

2.2 Orders

Where an order is acknowledged, any requests for material modifications, as set out in the process manual, to the order details may only be effected by cancelling the original order and submitting a revised order. In this case eircom's standard terms relating to cancellation of orders will apply.

3 Definitions & Exclusions for Delivery Attributes.

3.1 Definitions

Ethernet Access Circuit quarterly rental means the quarterly charge payable by the Customer to eircom as appears on the initial bill for the leased line orders relating to the penalty calculation

Ethernet Access Circuit monthly rental means a sum equivalent to 1/3 the quarterly rental defined above.

Daily rental means the monthly rental as defined above divided by 30.5

Connection Fee : means the connection fee payable as appears on the initial bill for the order(s) relating to the penalty calculation.

3.2 Exclusions for Delivery Attributes.

The SLA will not apply where the order is non-standard. Where orders are non-standard, a Due Delivery Date shall be agreed with the Customer and the SLA shall apply to that agreed date and to the order thereafter subject to these terms and conditions. The order shall be deemed to be non-standard where there are impediments to eircom delivering the order. The impediments include the circumstances listed below.

- Following survey eircom is required to build new network components (either core or access and including but not limited to SDH components). If this exclusion applies it will be advised to customers at the point of order validation.
- The customer end of the Ethernet Access Circuit or the OAO end of the Ethernet Aggregation Link is more than 3km from the nearest eircom data network node.

- Where the order for the Ethernet Access Circuit is issued pending the delivery of its related Ethernet Aggregation Link.
- In instances where eircom's ability to deliver is constrained by a force majeure event.
- The customer end of the Ethernet Access Circuit is not accessible to eircom cable network.

- Customer premises related circumstances preventing/constraining delivery of the order:
 - Transmission equipment extension required
 - Transmission equipment upgrade required
 - New or upgraded transmission path required
 - Line upgrade / conditioning required.

- Circumstances relating to Wiring infrastructure.
 - New Digital Distribution Frame required.
 - New Optical Distribution Frame required.
 - New Main Distribution Frame required.

- Circumstances relating to Core Transmission Network
 - New core transmission capacity required
 - New core transmission node extension required.
 - Major core transmission node modification/upgrade required.
 - Where a customer's premises (Installation Site) is more than three kilometres from the local exchange or managed leased line network node.

- Where the volume of orders is such that it requires infrastructure build over and above that normally associated with the provision of the Ethernet Access Circuits in a particular area. - This applies both to single batches of multiple orders and orders for smaller quantities to the same address placed over a 5 working day period. This clause shall only apply to non-Operator premises.

- Where the order is treated as a project delivery, including the following
 - Where customers orders more than four (4) Ethernet Access Circuits with at least one common B-end, the order being placed either at the same time or on a planned basis at regular intervals over a period of time or as part of a upgrade to an existing network or as roll-out of a new network
 - Where customer request that service be provided without interruption to existing services which are delivered over the same network plant or NTE, or specify that such interruption be scheduled for outside of working hours.
 - Where the order is issued pending the delivery of its related Ethernet Aggregation Link.

4 Ordering Levels

- For each operator a “normal” daily average ordering level will be calculated on a monthly basis. If the volume of orders received in a day exceeds this “normal” average then orders, which are in excess of the average will be deemed to have been received on the next Working Day and Ethernet Access Circuit SLA attributes shall apply on this basis. The counting of the orders shall be based on the sequence that they are received by eircom.
- The “normal” average will be calculated using a three (3) month look back. This look back will calculate the actual number of orders placed for Ethernet Access Circuits covered by the Ethernet Access Circuits SLA for each month. This figure will be divided by the actual number of Working Days in the month to give an actual daily average order level for that month. Using the three data points a best fit straight line will be generated using the least squares method and this will be extrapolated forward to give a projection of the daily ordering rate for the upcoming month. The “normal” average will be this projected daily ordering rate plus 20% rounded up to the nearest integer. In the event that this gives a figure less than 5 then the “normal” average will be set to 5.

5 Definitions & Exclusions for Repair Attributes

5.1 Definitions

Fault Definition: A fault is the inability to transfer data across the Ethernet Access Circuit at its nominal capacity in conformance with the relevant ITU recommendations.

Service Restoration Definition:

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

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 customer.

In the event of any dispute between the parties in respect of service availability or otherwise, eircom reserves the right to determine the period of availability for the purposes of the credit rebates payable.

eircom reserves the right to implement scheduled outages. These will be used to carry out essential network maintenance or alteration procedures, for instance upgrading network management software. These will be excluded from availability calculations. Save in the case of emergency eircom shall provide no less than ten (10) days written notice to the customer of such outages.

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

5.2 Exclusions

The circuit will be deemed available to the customer and is therefore excluded for the purposes of SLA calculations if the non-availability arises from or is otherwise caused or contributed to by the following circumstances:

- Where continuous access to the Operator's or end user's premises is not available to eircom on request from the time the fault is reported.
- Where the fault is caused by third party activities such as cable damage. Third party activities do not constitute activities by eircom's agents.
- Where the fault is caused by severe weather conditions such as storms, flooding or lightning
- Where a fault occurrence is due to changes in Customer provided apparatus
- Where the fault is not in the eircom network
- Where the Operator or its agents are not available to eircom, at reasonable notice, for the purpose of conducting diagnostic tests between the eircom network and the relevant demarcation point.
- Where a fault is reported and no fault is detected when the service is tested from end to end.
- Any period of scheduled outages notified to the Operator in accordance with the planned works procedure
- A failure of the Operator or end user to allow access to premises or equipment when requested
- The Operator failing to operate the Service in accordance with eircom terms and conditions for the provision of the Service
- A failure of the Operator to report the fault in accordance with the fault reporting procedures specified under "Fault Reporting"
- Faults relating to the use of non-type approved or CE certified equipment by the Operator or end user.

6 Parked Time

Circumstances whereby a fault cannot be progressed on behalf of an Operator, and the fault is parked are outlined as follows; -

- eircom cannot get co-operation from the Operator with testing the line
- When a fault ticket receives an Unconfirmed Clear status, it will be parked.
- Where an engineer is dispatched and cannot get access to the end user premises
- Where to proceed would result in a health and safety risk, avoidance of which could not have been realistically predicted by eircom.
- If it is requested by the Operator and/or end user
- Where a third party, other than eircom contracted entities, restricts eircom from working on resolution of the fault.
- Force Majeure